



Novo Nordisk –a focused healthcare company

Investor presentation
First six months of 2023

RAFAEL VALVERDE
Rafael lives with obesity
Mexico

Agenda

Progress on Strategic Aspirations 2025

Commercial execution

Innovation and therapeutic focus

Financials

Forward-looking statements

Novo Nordisk's reports filed with or furnished to the US Securities and Exchange Commission (SEC), including the statutory Annual Report 2022 and Form 20-F, which both were filed with the SEC in February 2023 in continuation of the publication of this Annual Report 2022, this presentation, and written information released, or oral statements made, to the public in the future by or on behalf of Novo Nordisk, may contain forward-looking statements. Words such as 'believe', 'expect', 'may', 'will', 'plan', 'strategy', 'prospect', 'foresee', 'estimate', 'project', 'anticipate', 'can', 'intend', 'target' and other words and terms of similar meaning in connection with any discussion of future operating or financial performance identify forward-looking statements. Examples of such forward-looking statements include, but are not limited to:

- Statements of targets, plans, objectives or goals for future operations, including those related to Novo Nordisk's products, product research, product development, product introductions and product approvals as well as cooperation in relation thereto,
- Statements containing projections of or targets for revenues, costs, income (or loss), earnings per share, capital expenditures, dividends, capital structure, net financials and other financial measures,
- Statements regarding future economic performance, future actions and outcome of contingencies such as legal proceedings, and
- Statements regarding the assumptions underlying or relating to such statements.

These statements are based on current plans, estimates and projections. By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific. Novo Nordisk cautions that a number of important factors, including those described in this presentation, could cause actual results to differ materially from those contemplated in any forward-looking statements.

Factors that may affect future results include, but are not limited to, global as well as local political and economic conditions, such as interest rate and currency exchange rate fluctuations, delay or failure of projects related to research and/or development, unplanned loss of patents, interruptions of supplies and production, including as a result of interruptions or delays affecting supply chains on which Novo Nordisk relies, shortages of supplies, including energy supplies, product recalls, unexpected contract breaches or terminations, government- mandated or market-driven price decreases for Novo Nordisk's products, introduction of competing products, reliance on information technology including the risk of cybersecurity breaches, Novo Nordisk's ability to successfully market current and new products, exposure to product liability and legal proceedings and investigations, changes in governmental laws and related interpretation thereof, including on reimbursement, intellectual property protection and regulatory controls on testing, approval, manufacturing and marketing, perceived or actual failure to adhere to ethical marketing practices, investments in and divestitures of domestic and foreign companies, unexpected growth in costs and expenses, strikes and other labour market dispute, failure to recruit and retain the right employees, failure to maintain a culture of compliance, and epidemics, pandemics or other public health crises, and the effects of domestic or international crises, civil unrest, war or other conflict.

For an overview of some, but not all, of the risks that could adversely affect Novo Nordisk's results or the accuracy of forward-looking statements in this Annual Report 2022, reference is made to the overview of risk factors in 'Risk management' of this Annual Report 2022.

Unless required by law, Novo Nordisk is under no duty and undertakes no obligation to update or revise any forward-looking statement after the distribution of this Annual Report 2022, whether as a result of new information, future events, or otherwise.

Important drug information

Victoza® and Ozempic® are approved for the management of type 2 diabetes only
Saxenda® and Wegovy® are approved for the treatment of obesity only

Strategic Aspirations 2025 | Highlights first six months of 2023

Light blue indicates developments in Q2 2023



Purpose and sustainability (ESG)

Progress towards zero environmental impact

- Carbon emissions decreased by 28% vs H1 2019¹

Adding value to society

- Medical treatment provided to 39.1 million people living with diabetes (net increase of 4 million people)
- Reaching more than 45,000 children in Changing Diabetes® in Children programme

Being recognised as a sustainable employer

- Share of women in senior leadership positions has increased to 40% from 38% at end of June 2022



Innovation and therapeutic focus

Further raise innovation bar for Diabetes treatment

- Regulatory submission of once-weekly insulin icodec
- Completion of phase 3 trial PIONEER PLUS

Develop superior treatment solutions for obesity

- Completion of phase 3 SELECT trial
- Completion of phase 3 trial OASIS 1
- Completion of phase 3 trial STEP HFpEF
- Acquisition of Inversago Pharma

Strengthen and progress Rare Disease pipeline

- Somapacitan approved in US, EU, JP for GHD in children

Establish presence in Other serious chronic diseases



Commercial execution

Diabetes value market share increased by 1.7%-points to 32.7%²

Obesity care sales of DKK 18.1 billion (+157% at CER)

Rare disease sales of DKK 8.7 billion (-18% at CER)



Financials

Sales growth of 30% (CER) and operating profit growth of 32% (CER)

Operational leverage reflecting sales growth

Free cash flow of DKK 45.5 billion and DKK 32.4 billion returned to shareholders

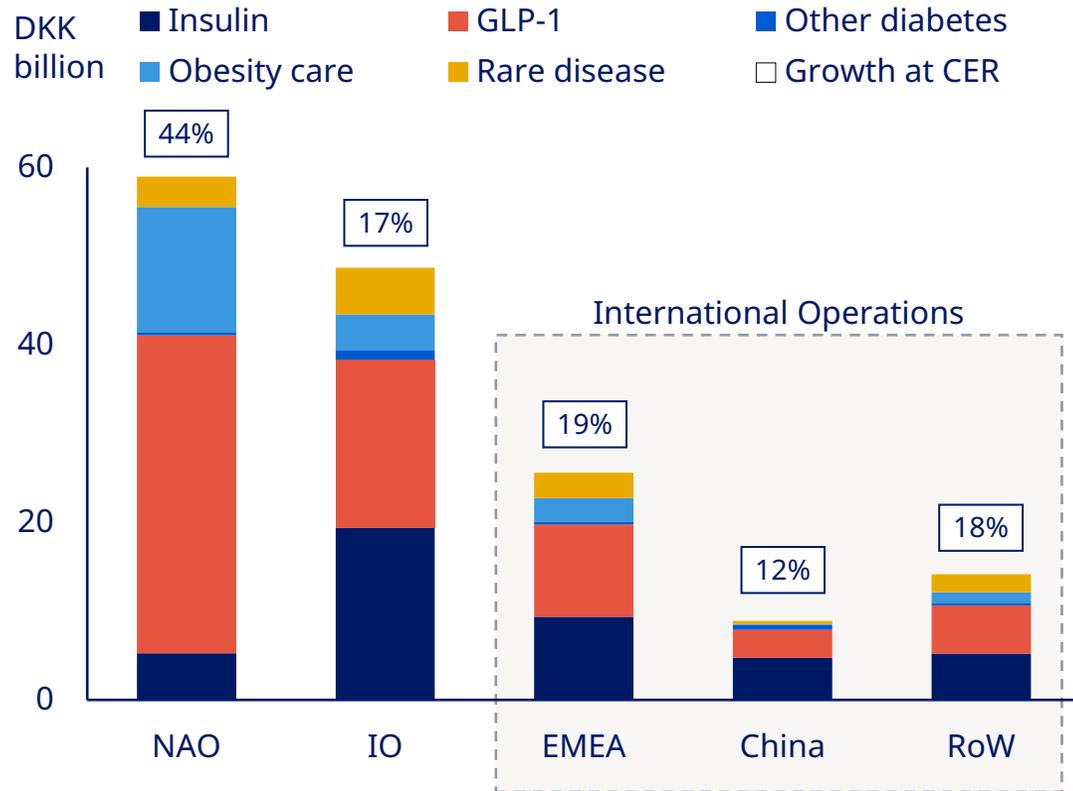
¹ Scope 1,2 and partial scope 3 limited to CO2 emissions from business flights and product distribution; ² MAT (Moving annual total) value market share

Note: The strategic aspirations are not a projection of Novo Nordisk's financial outlook or expected growth

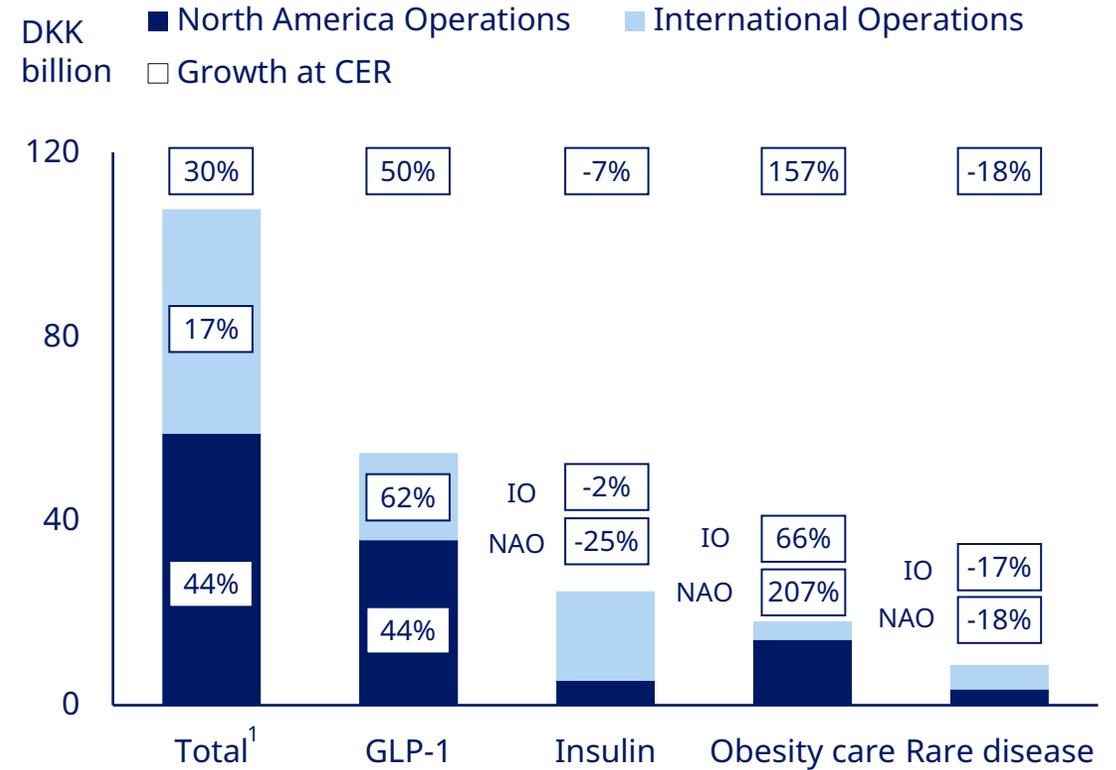
H1: First half; HFpEF: Heart Failure with preserved ejection fraction; US: United States; EU: Europe; JP: Japan; GHD: Growth Hormone Deficiency; CER: Constant exchange rates

Sales growth of 30% driven by both operating units

Reported geographic sales split for first half of 2023



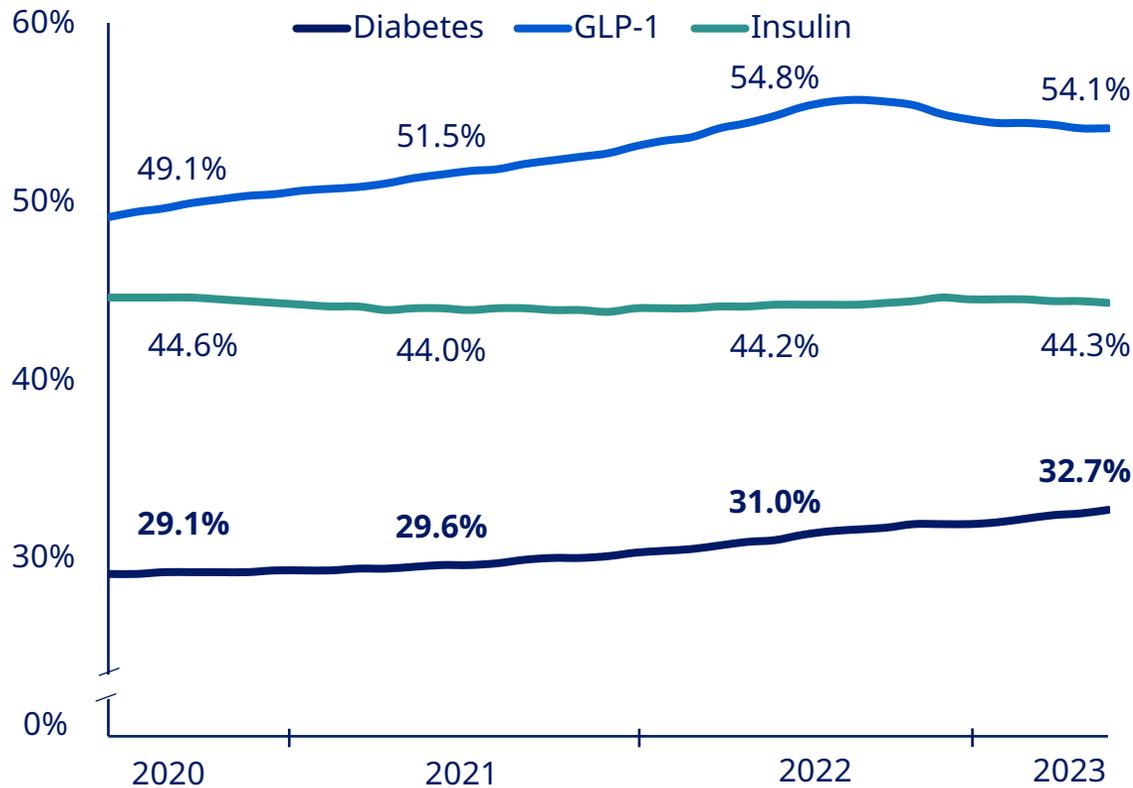
Reported therapy area sales and growth for first half of 2023



¹Other diabetes' is included in Total
 IO: International Operations; EMEA: Europe, Middle East and Africa; China: Mainland China, Hong Kong and Taiwan; RoW: Rest of World; NAO: North America Operations; CER: Constant exchange rates
 Note: Unless otherwise specified, sales growth rates are at CER

Diabetes value market leadership increased by 1.7%-points to 32.7%

Novo Nordisk global diabetes value market shares



Diabetes value market leadership expansion driven by the GLP-1 franchise

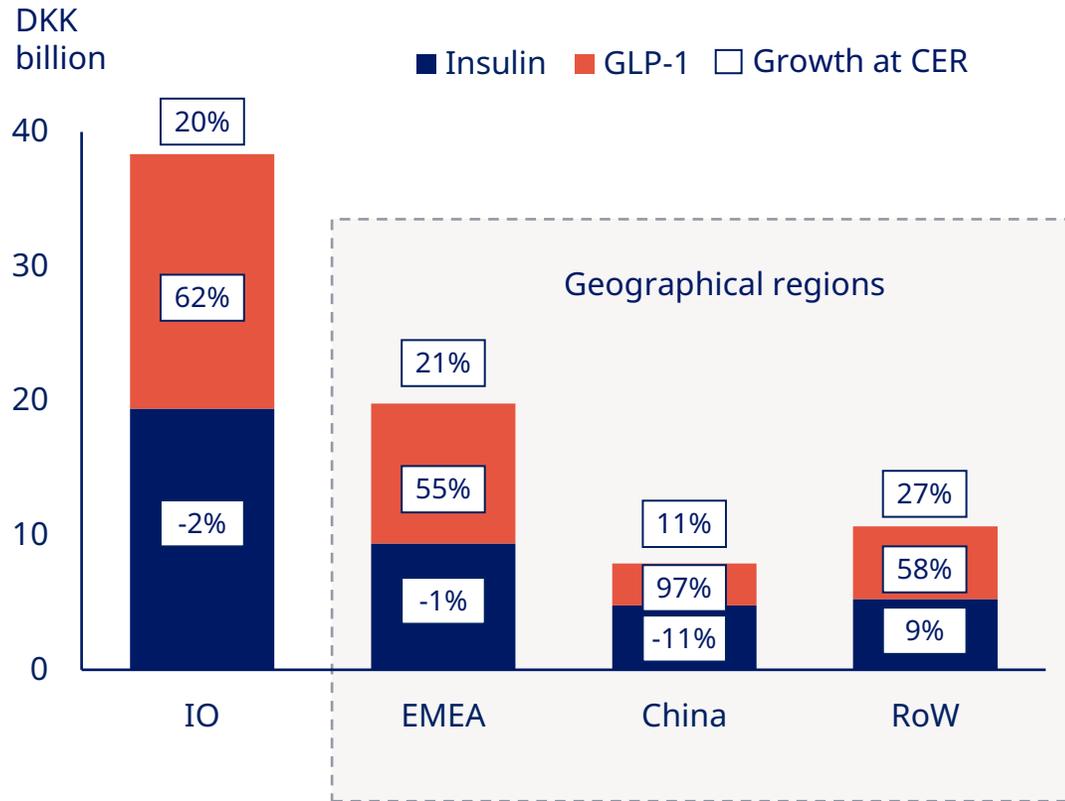
Diabetes care sales grew by 24% (CER) with global value market share increase driven by GLP-1 market share gains in both IO and NAO. Global diabetes care market volume growth was ~4%

- GLP-1 value market share has decreased by 0.7%-points in the last 12 months
- Estimated global GLP-1 share of total diabetes prescriptions is ~5%

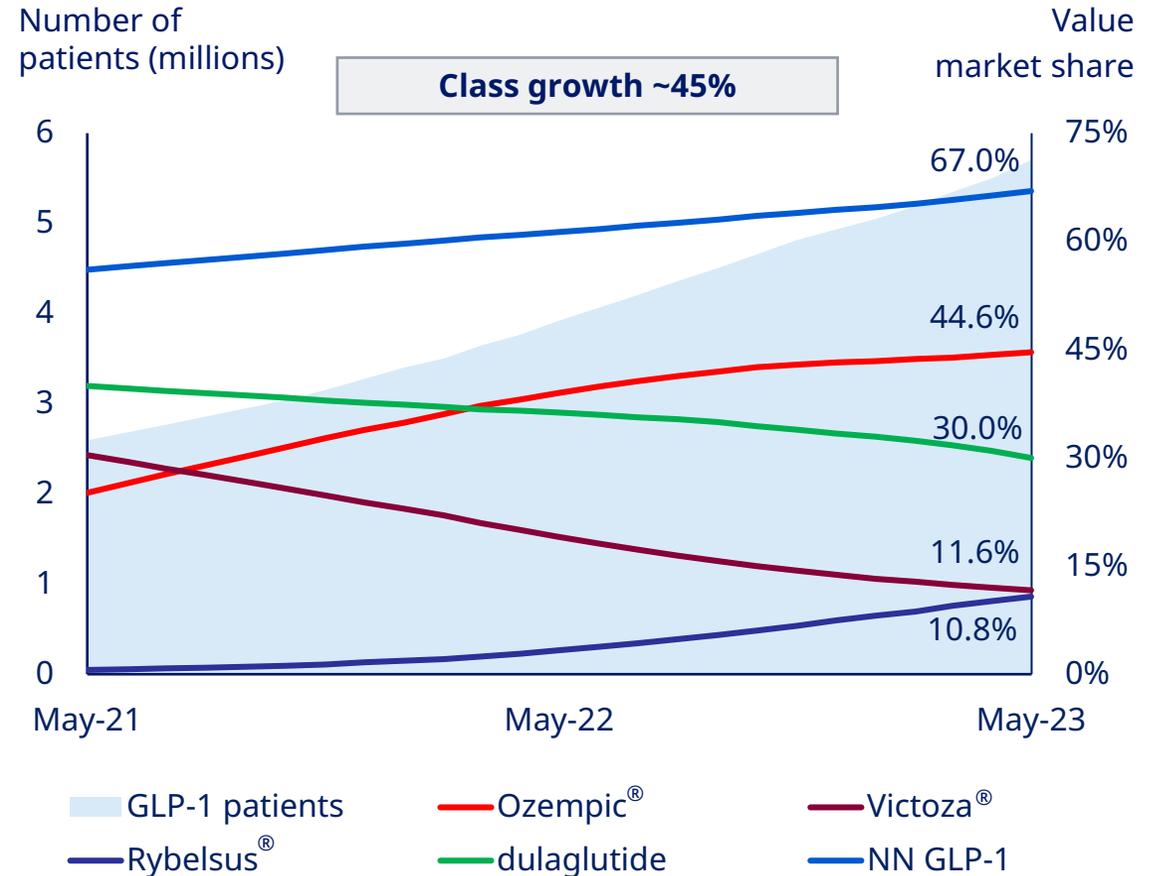
CER: Constant exchange rates; IO: International Operations; NAO: North America Operations
 Note: Sales growth rates are at CER
 Source: IQVIA MAT, May 2023 (Spot rate); Volume growth based on Moving Annual Total (MAT)

International Operations diabetes care sales growth is driven by GLP-1 performance

Reported Diabetes care sales and growth per IO geography

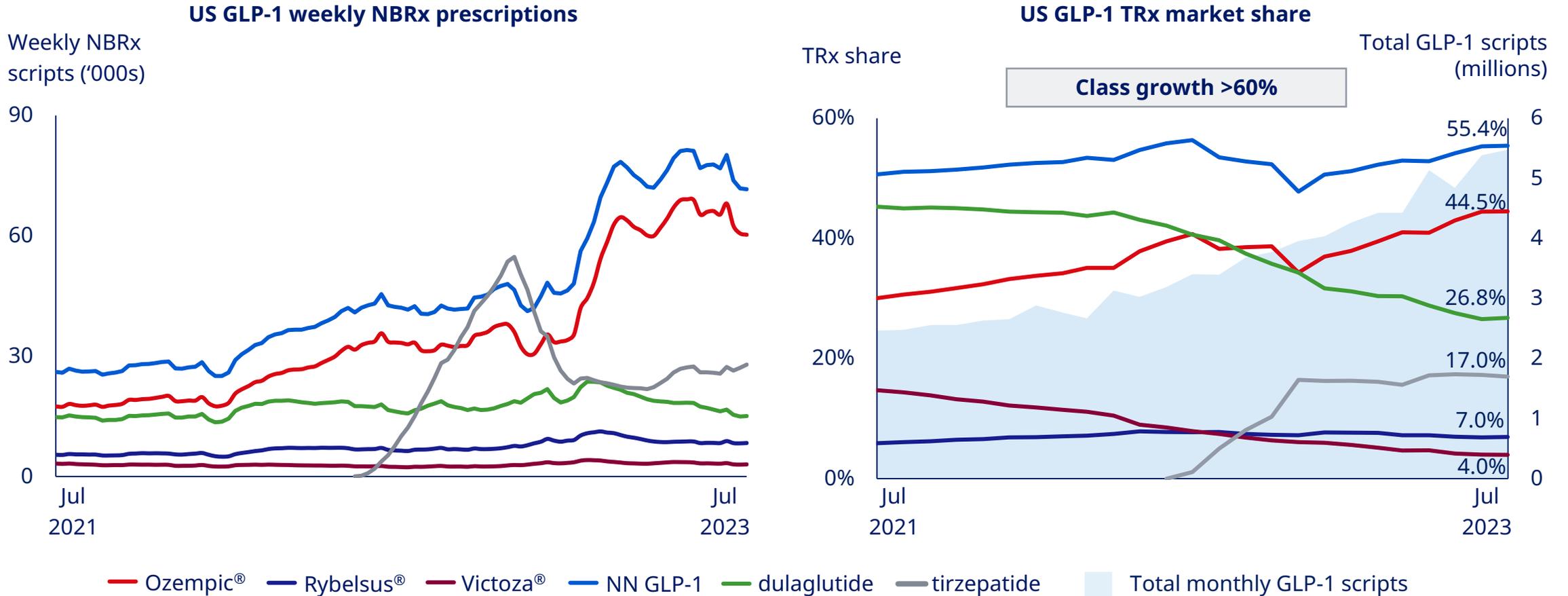


GLP-1 patients and value market share in IO



IO: International Operations; NN: Novo Nordisk; EMEA: Europe, Middle East and Africa; China: Mainland China, Hong Kong and Taiwan; RoW: Rest of World; CER: Constant exchange rates
 Note that the market share and patient numbers are based on countries with IQVIA coverage. GLP-1 class growth calculated as Mar'23-May'23 vs Mar'22-May'22 (Rolling 3-month average)
 Source: IQVIA MAT, May 2023 (Spot rate). Volume packs are converted into full-year patients based on WHO assumptions for average daily doses

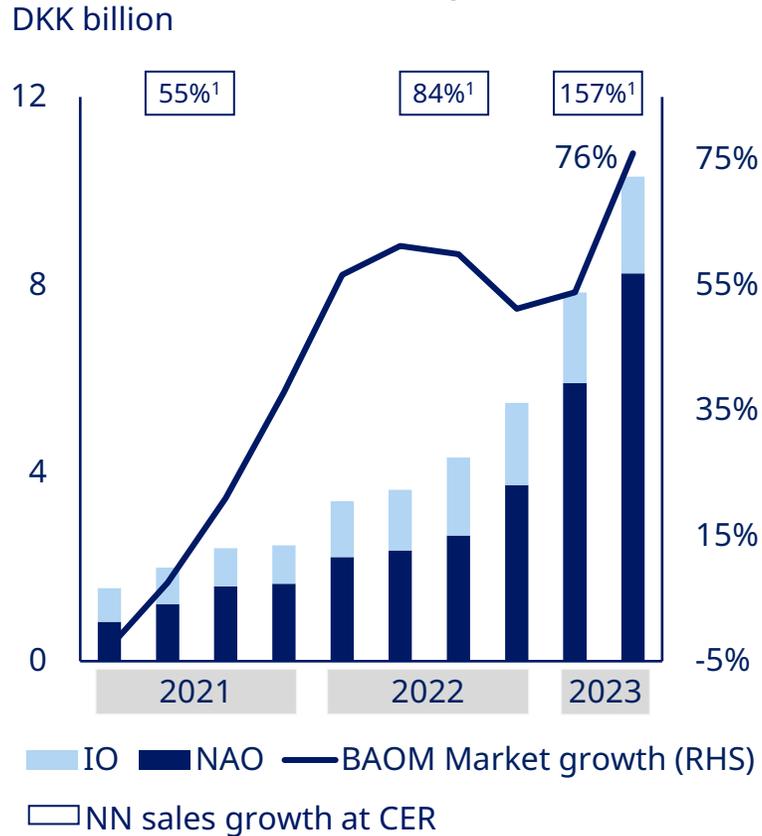
GLP-1 class expansion accelerates in the US in the first half of 2023 with volume growth across our portfolio



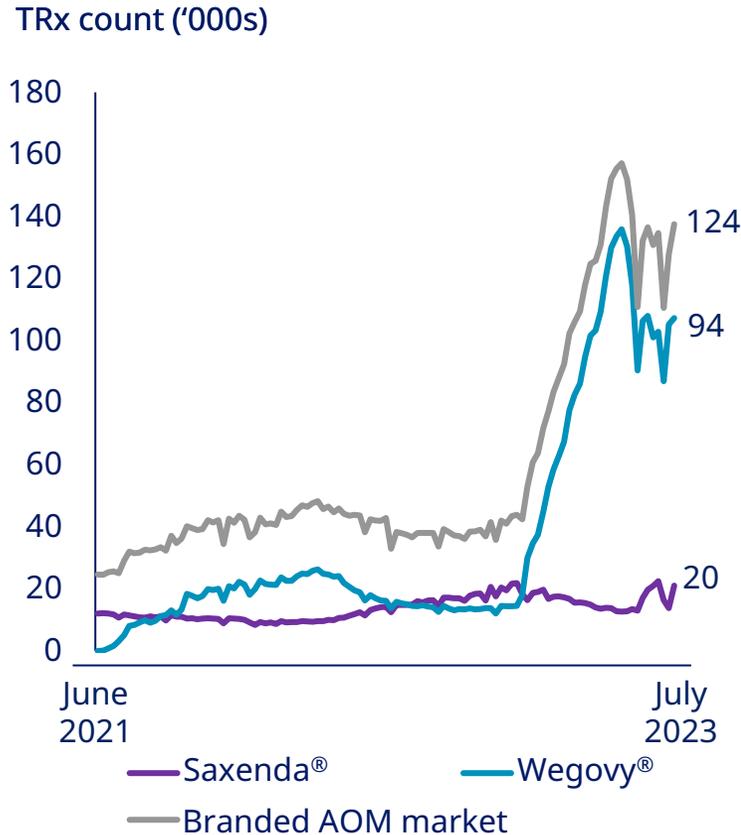
NBRx: New-to-brand prescriptions; TRx: Total prescriptions; NN: Novo Nordisk; Scripts: Prescriptions; US: United States
 Note: Class growth calculated as Q2 2023 vs Q2 2022
 Source: IQVIA Xponent, NBRx data from week ending 21 Jul 2023. TRx data from week ending 21 Jul 2023. Each data points represents a rolling four-week average

Obesity care sales grew by 157% in the first half of 2023 mainly driven by the US

NN sales and volume BAOM market growth within Obesity care



Branded AOM TRx in the US²



The US

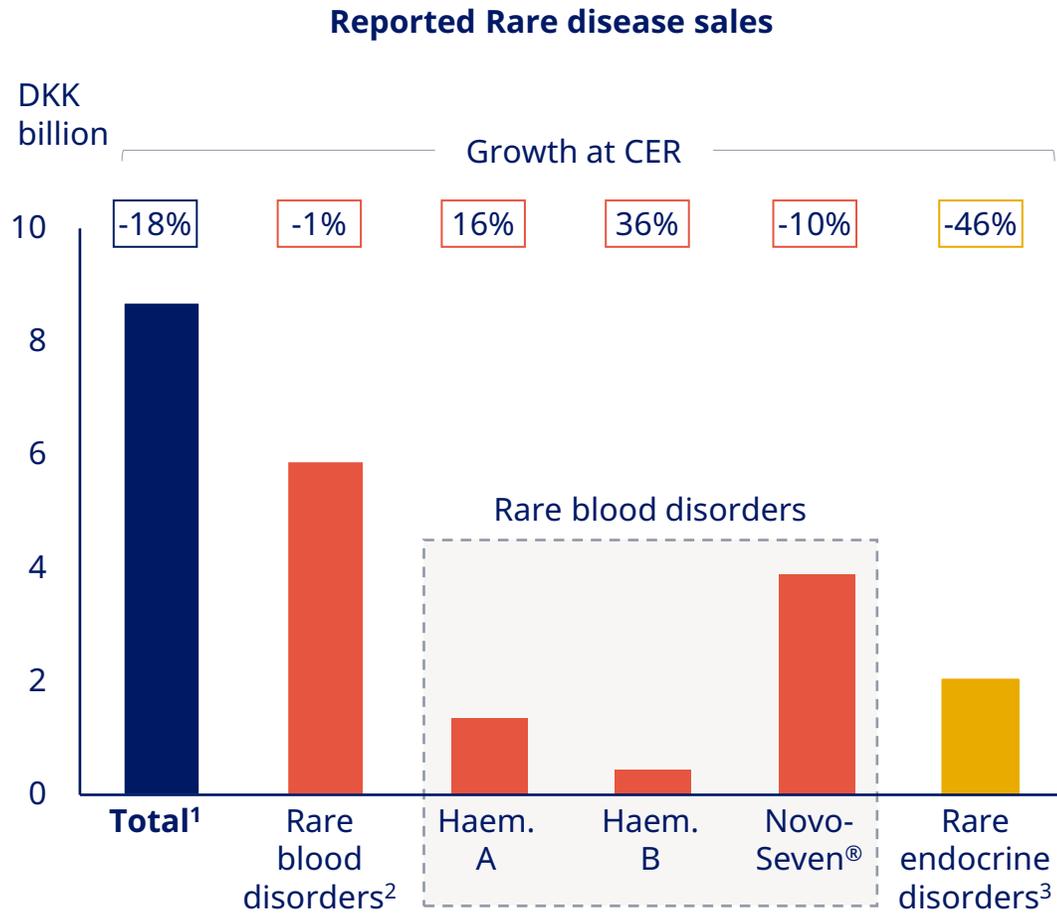
- Commercial relaunch in January 2023
- Broad commercial formulary access
- While supply capacity is gradually being expanded, the supply of the lower dose strengths will remain restricted to safeguard continuity of care

International Operations

- Wegovy® launched in Denmark, Norway and Germany
- Limited roll-out in IO in 2023 balancing supply and demand

¹Annual growth at CER. Each TRx data points represents one week of data; ²IQVIA weekly, 28 July 2023
 NAO: North America operations; IO: International operations; RHS: Right-hand side axis; Rx: Prescriptions; AOM: Anti-Obesity Medications (includes Wegovy®, Saxenda®, Qsymia, Belviq and Contrave); CER: Constant exchange rates
 Note: Sales growth at constant exchange rates. 76% volume growth for Global BAOM market growth refers to moving annual total.

Rare disease sales decreased by 18% driven by temporary reduction in manufacturing output



Rare disease sales driven by global commercial execution

Rare disease sales decrease is driven by:

- 18% sales decline in North America Operations
- 17% sales decline in International Operations

Rare blood disorders sales decreased by 1%, driven by:

- Lower sales of NovoSeven® partially countered by sales of haemophilia A and B products

Rare endocrine disorders sales decreased by 46% driven by:

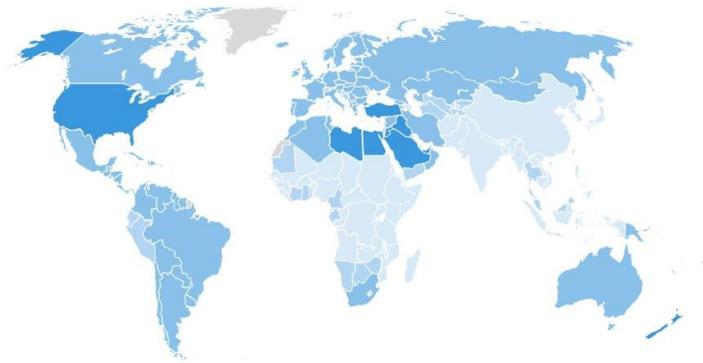
- North America Operations sales for Norditropin® declined by 45% reflecting a temporary reduction in manufacturing output and lower realised prices in the US
- Novo Nordisk is the leading company in the global human growth disorder market with a value market share of ~29.5%

¹Total includes "Other Rare disease", which consists of primarily Vagifem® and Activelle®; ²Comprises NovoSeven®, NovoEight®, Esperoct®, Refixia® and NovoThirteen®; ³ Primarily Norditropin®; CER: Constant exchange rates; Haem. A: Haemophilia A; Haem. B: Haemophilia B; Unless otherwise specified, sales growth is at constant exchange rates
 Note: NovoThirteen® is not shown for Rare blood disorders breakdown, only for the total bar.

SELECT will add to the clinical evidence of semaglutide to further establish obesity as a serious chronic disease

Obesity is a global epidemic affecting more than 764 million people¹

Obesity is associated with **>200 possible health complications including cardiovascular disease²**



Obesity prevalence (%)



SELECT adds to clinical evidence underlining obesity as a serious chronic disease

A central graphic of a human silhouette in a light grey color, positioned within a white oval shape. The silhouette is facing forward and is the central focus of the clinical evidence section.

STEP & OASIS trials

- ✓ Demonstrate superior weight loss with semaglutide vs placebo for people with obesity

STEP HFpEF trial

- ✓ Demonstrate superior improvement in KCCQ-CSS vs placebo

SELECT CVOT trial

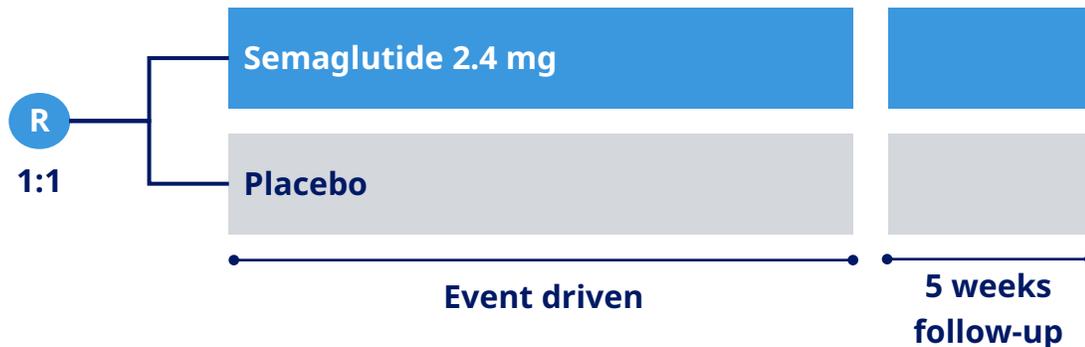
SELECT is the largest trial ever completed by Novo Nordisk, including >17,500 participants across more than 800 sites in 41 countries

Semaglutide 2.4 mg could become the first and only AOM with a proven CV risk reduction for people with obesity and established CVD

¹ World Obesity Atlas 2022 ² Yuen M., Earle R., Kadambi N., et al. A systematic review and evaluation of current evidence reveals 236 Obesity-Associated Disorders (OBAD). Massachusetts General Hospital & George Washington University. [Poster presentation]
Note: Obesity is defined as BMI > 30; PwO: People with obesity; KCCQ-CSS: Kansas City Cardiomyopathy Questionnaire Clinical summary score, CVD: Cardiovascular disease; HFpEF: Heart Failure with preserved ejection fraction; CVOT: Cardiovascular outcomes trial; AOM: Anti-obesity medication; CV: Cardiovascular

Semaglutide 2.4 mg showed 20% MACE reduction in the SELECT trial for people with overweight or obesity and established CVD

SELECT trial with 17,604 people with BMI>27 and established CVD



Primary endpoint

- Time from randomisation to first occurrence of 3-point MACE¹

Secondary confirmatory endpoints

Time from randomisation to first occurrence of:

- CV death
- HF composite endpoint
- All-cause death

Objective

- Demonstrate that semaglutide s.c. 2.4 mg OW lowers the incidence MACE vs. placebo when both added to standard of care in subjects with established CV disease and overweight or obesity.

Headline results

- Semaglutide 2.4 mg demonstrated an 20% reduction in MACE

Safety

- In the trial, once-weekly subcutaneous semaglutide 2.4 mg appeared to have a safe and well-tolerated profile, as seen with previous trials investigating semaglutide 2.4 mg

Next steps

- Novo Nordisk expects to file for regulatory approvals of the label indication expansion for semaglutide 2.4 mg in the US and the EU during 2023
- Full data set to be presented at scientific congress in H2 2023

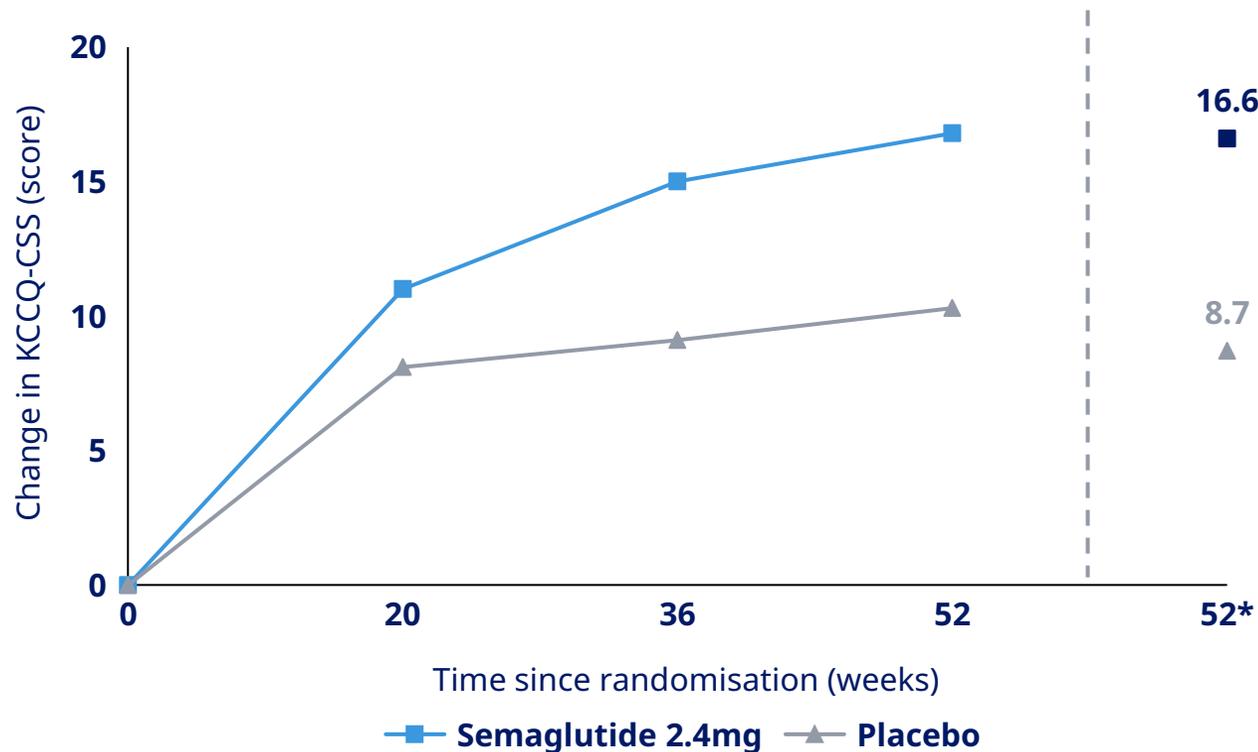
¹MACE includes non-fatal myocardial infarction, non-fatal stroke, and cardiovascular death.

MACE: Major adverse cardiovascular events; HF: Heart failure; CV: Cardiovascular; CVD: Cardiovascular Disease; OW: Once-weekly; s.c.: Subcutaneous; BMI: Body mass index

Semaglutide 2.4 mg demonstrated superior improvement on the primary endpoint of KCCQ-CSS vs placebo in the STEP HFpEF trial

Superior improvement in KCCQ-CSS score in patients treated with semaglutide 2.4 mg

Mean baseline KCCQ-CSS score: 56.7



Phase 3 trial STEP HFpEF with semaglutide 2.4 mg has been successfully completed in Q2 2023

Primary endpoints:

- KCCQ-CSS estimated treatment difference between semaglutide 2.4 mg and placebo of 7.8
- Estimated treatment difference in body weight change between semaglutide 2.4 mg and placebo of -10.7%

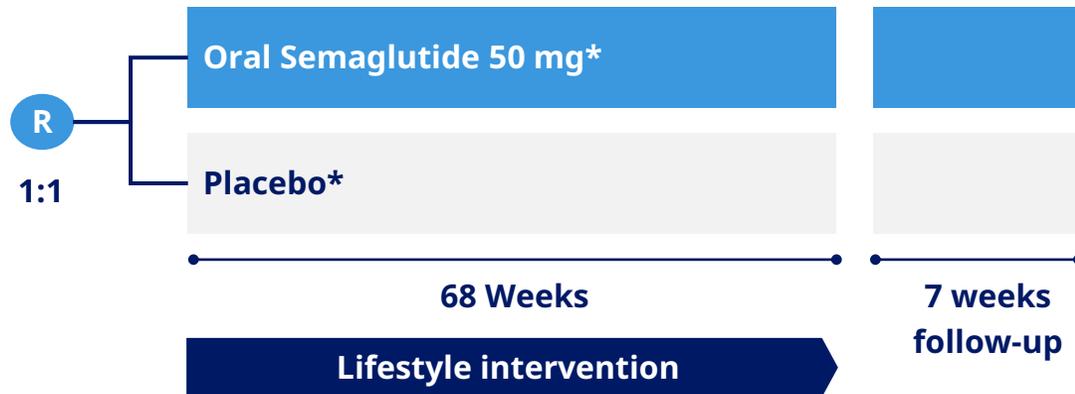
Safety:

- The safety profile in HFpEF patients is consistent with previous data for semaglutide 2.4 mg

Note: Data shown is the treatment policy estimand. *Lines are based on observed data where the value denoted after 52 weeks is estimated mean value derived based on multiple imputation
 KCCQ-CSS: Kansas City Cardiomyopathy Questionnaire Clinical summary score

OASIS 1 trial with oral semaglutide 50 mg demonstrated superior weight loss in people with overweight or obesity vs placebo

OASIS 1 enrolled 667 patients with overweight or obesity



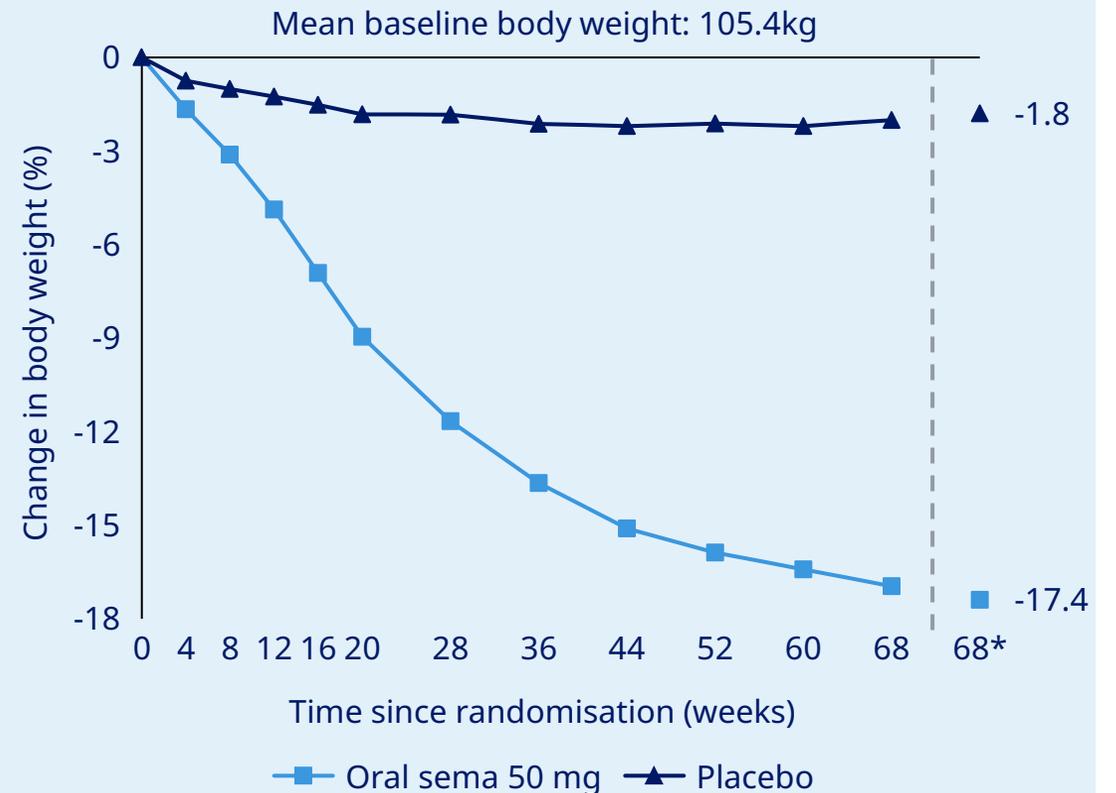
Objective

- To compare the safety and efficacy of 50 mg oral semaglutide with placebo in people with overweight or obesity without T2D

Co-primary endpoints

- Percentage change in body weight from baseline to week 68
- Achievement of $\geq 5\%$ weight loss from baseline at week 68

OASIS 1 showed statistically significant weight loss vs placebo



*As an adjunct to a reduced calorie diet and increased physical activity in adults with obesity or with overweight and weight related comorbidities (Weight related comorbidities are hypertension, dyslipidaemia, obstructive sleep apnoea and CVD)
 Note: Observed data are on-treatment. Week 68* is the body weight change using the trial product estimand
 Sema: Semaglutide; T2D: Type 2 diabetes

Novo Nordisk has agreed to acquire Inversago Pharma

Acquisition of Inversago Pharma supports Novo Nordisk's aspiration within obesity and other metabolic disorders



Innovation and
therapeutic focus

- **Further raise the innovation-bar for diabetes treatment**
- **Develop a leading portfolio of superior treatment solutions for obesity**
- Strengthen and progress the Rare disease pipeline
- **Establish presence in Other serious chronic diseases focusing on CVD, NASH and CKD**

Inversago has multiple drug candidates affecting the peripheral cannabinoid receptors



Novo Nordisk acquired Inversago for up to USD 1.075 billion



Leading candidate INV-202 is an **oral CB1 receptor blocker**, for the treatment of obesity, diabetes and complications associated with metabolic disorders.



INV-202 showed **weight loss potential** in phase 1

R&D milestones

■ Clinical milestones¹
■ Regulatory milestones¹

	Project	Q2 2023	Q3 2023	Q4 2023
Diabetes care	Oral semaglutide (25/50mg)		US submission	EU submission
	Cagrisema T2D		Phase 3 initiation	
	OW GLP-1/GIP			Phase 2 initiation
	SemaDapa		✓ Phase 1 results	
Obesity care	Oral semaglutide (50 mg)	✓ Phase 3 results	US submission	EU submission
	SELECT CVOT		✓ Phase 3 results	
			US/EU Submission	
	STEP HFpEF	✓ Phase 3 results		Phase 3 results (T2D)
	PYY 1875	✓ Phase 1/2 results		
	Oral Amycretin			Phase 1 results
Rare disease	Sogroya® (Somapacitan)		✓ EU/JP approval (GHD)	
Other serious chronic diseases	Ziltivekimab (HFpEF)	✓ Phase 3 initiation		

¹Expected to be published in the given quarter or in the subsequent quarterly company announcement

CVOT: Cardiovascular Outcomes Trial; EU: European Union; GHD: Growth Hormone Deficiency; GIP: Gastric inhibitory polypeptide; GLP-1: Glucagon Like Peptide 1; HFpEF: Heart failure with preserved ejection fraction; JP: Japan; OW: once weekly; PYY: Peptide YY; T2D: Type 2 Diabetes Mellitus; US: United States

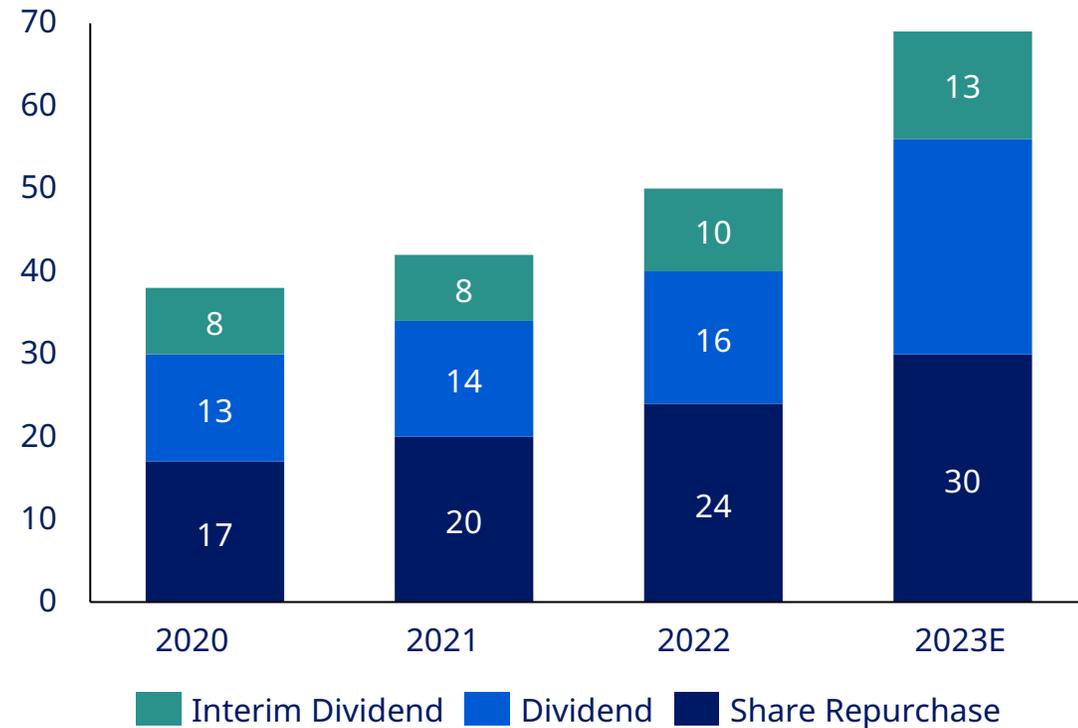
Financial results – First six months of 2023

In DKK million	First six months of 2023	First six months of 2022	Change (reported)	Change (CER)
Sales	107,667	83,296	29%	30%
Gross profit	91,629	70,310	30%	32%
<i>Gross margin</i>	85.1%	84.4%		
Sales and distribution costs	(26,754)	(21,023)	27%	28%
<i>Percentage of sales</i>	24.8%	25.2%		
Research and development costs	(13,855)	(10,329)	34%	34%
<i>Percentage of sales</i>	12.9%	12.4%		
Administration costs	(2,143)	(1,961)	9%	10%
<i>Percentage of sales</i>	2.0%	2.4%		
Other operating income and expenses	18	541	(97%)	(96%)
Operating profit	48,895	37,538	30%	32%
<i>Operating margin</i>	45.4%	45.1%		
Financial items (net)	96	(2,824)		
Profit before income tax	48,991	34,714	41%	
Income taxes	(9,749)	(7,186)	36%	
<i>Effective tax rate</i>	19.9%	20.7%		
Net profit	39,242	27,528	43%	
Diluted earnings per share (DKK)	17.41	12.08	44%	

Attractive capital allocation to shareholders

Annual cash return to shareholders

DKK billion



Capital allocation

- Return of free cash flow through both share buy backs and dividends
- For 2022, the total dividend per share increased 19.2% to DKK 12.40 (including interim dividend of DKK 4.25 per share paid in August 2022)
- For 2023, the interim dividend of DKK 6.00 per share will be paid in August 2023
- Overall share repurchase programme for 2023 of up to DKK 30 billion
- To secure liquidity for both the Novo Nordisk B shares and American Depositary Receipts, the Board of Directors has decided to split the share in a two-for-one ratio in September 2023

Note: Share repurchase programmes run for 12 months starting in February. The total programme may be reduced in size if significant business development opportunities arise during 2023. Dividend for 2023E added for illustrative purposes only

Financial outlook for 2023

	Expectations 10 August 2023	Expectations 4 May 2023
Sales growth – at CER	27% to 33%	24% to 30%
Sales growth - reported	Around 6 percentage points lower	Around 6 percentage points lower
Operating profit growth – at CER	31% to 37%	28% to 34%
Operating profit growth - reported	Around 9 percentage points lower	Around 9 percentage points lower
Financial items (net)	Gain of around DKK 2.8 billion	Gain of around DKK 3.0 billion
Effective tax rate	19% to 21%	19% to 21%
Free cash flow	DKK 64 to 72 billion	DKK 66 to 74 billion

The financial outlook is based on an assumption of a continuation of the current business environment and given the current scope of business activities and has been prepared assuming that currency exchange rates remain at the level as of 7 August 2023

Note: Changes since last highlighted in bold

CER: Constant exchange rates

Strategic aspirations 2025



Purpose and sustainability (ESG)

- Progress towards zero environmental impact
- Being respected for adding value to society
- Being recognised as a sustainable employer



Innovation and therapeutic focus

- Further raise the innovation-bar for diabetes treatment
- Develop a leading portfolio of superior treatment solutions for obesity
- Strengthen and progress the Rare disease pipeline
- Establish presence in Other serious chronic diseases focusing on CVD, NASH and CKD



Commercial execution

- Strengthen Diabetes leadership - aim at global value market share of more than 1/3
- More than 25 billion DKK in Obesity sales by 2025
- Secure a sustained growth outlook for Rare disease



Financials

- Deliver solid sales and operating profit growth
- Drive operational efficiencies across the value chain to enable investments in future growth assets
- Deliver free cash flow to enable attractive capital allocation to shareholders

Note: The strategic aspirations are not a projection of Novo Nordisk's financial outlook or expected growth. CVD: Cardiovascular disease; NASH: Non-alcoholic steatohepatitis; CKD: Chronic kidney disease.

Investor contact information

Share information

Novo Nordisk's B shares are listed on the stock exchange in Copenhagen under the symbol 'NOVO B'. Its ADRs are listed on the New York Stock Exchange under the symbol 'NVO'.

For further company information, visit Novo Nordisk on:
www.novonordisk.com

Upcoming events

02 November 2023 Financial statement for the first nine months of 2023
31 January 2024 Financial statement 2023

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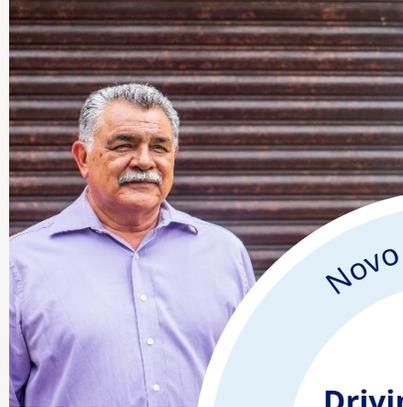
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Novo Nordisk Corporate Strategy

Diabetes care

Strengthen leadership by offering innovative medicines and driving patient outcomes



Obesity care

Strengthen treatment options through market development and by offering innovative medicines and driving patient outcomes



Rare disease

Secure a leading position by leveraging full portfolio and expanding into adjacent areas



Other serious chronic diseases

Establish presence by building competitive pipeline and scientific leadership

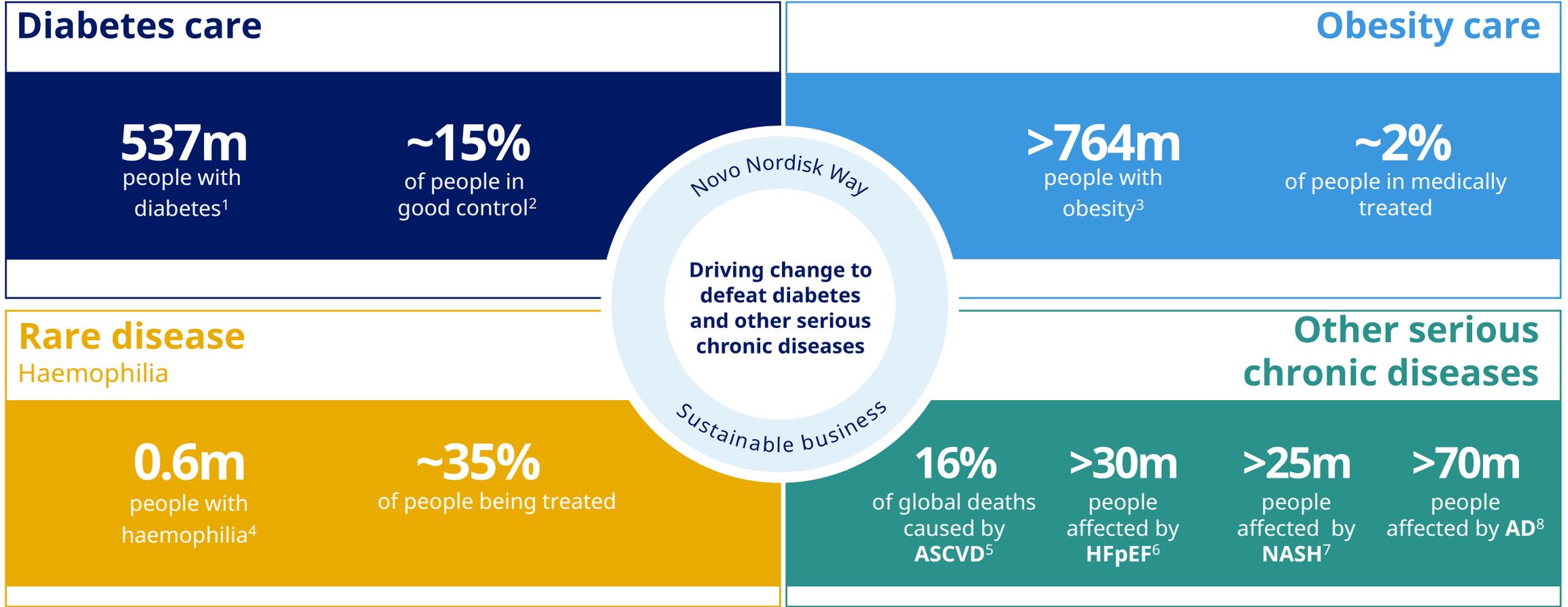


Novo Nordisk Way

Driving change to defeat diabetes and other serious chronic diseases

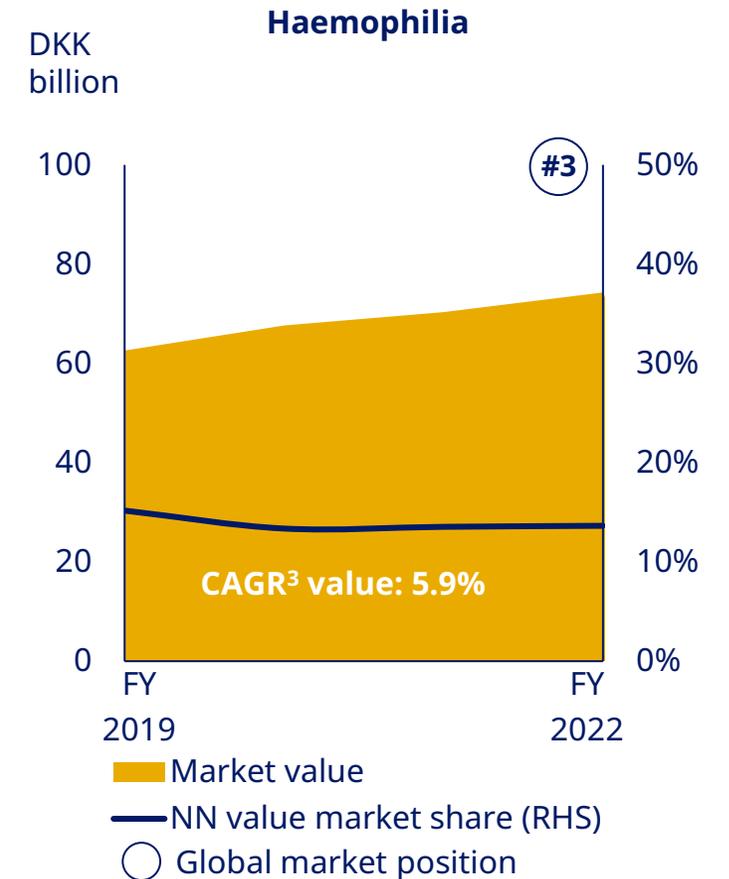
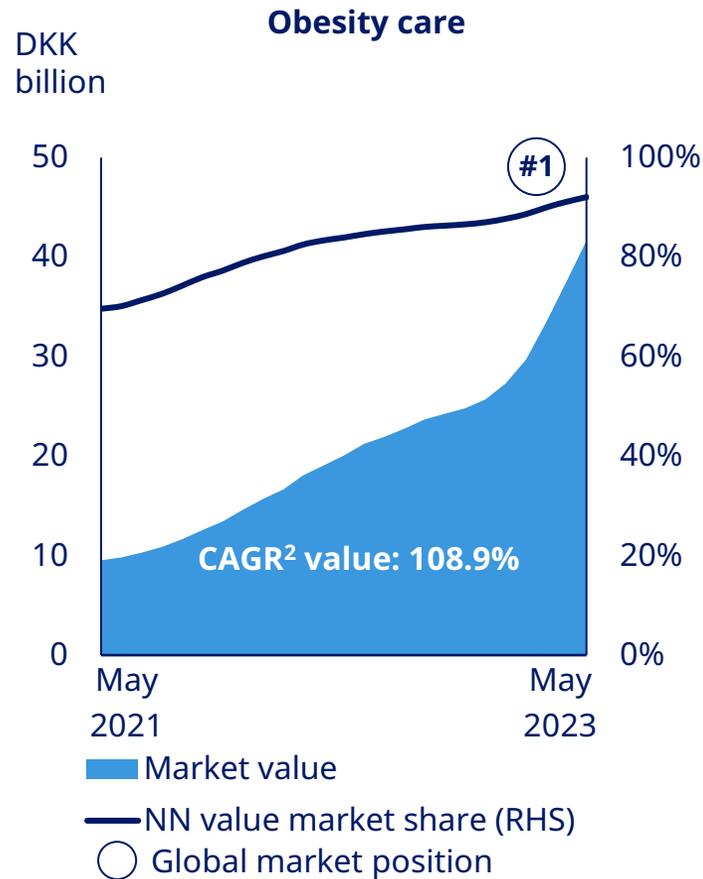
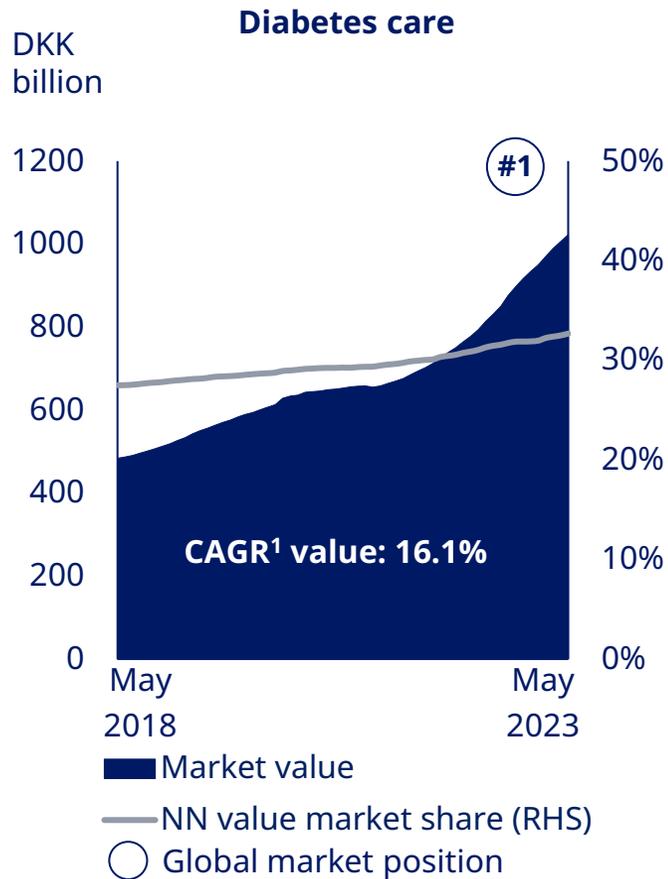
Sustainable business

Novo Nordisk's opportunity is in the large unmet needs across all therapy areas in scope



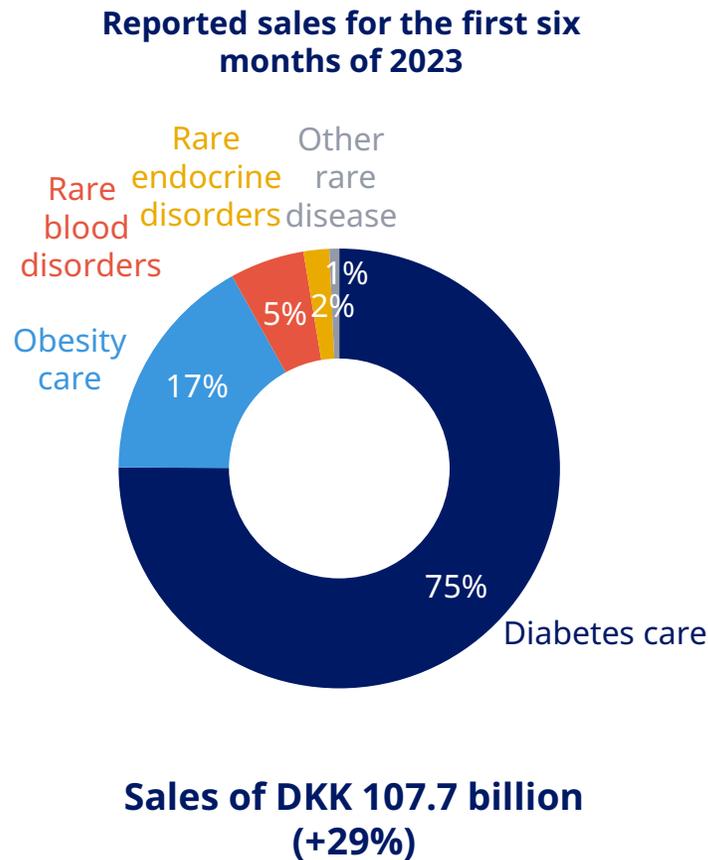
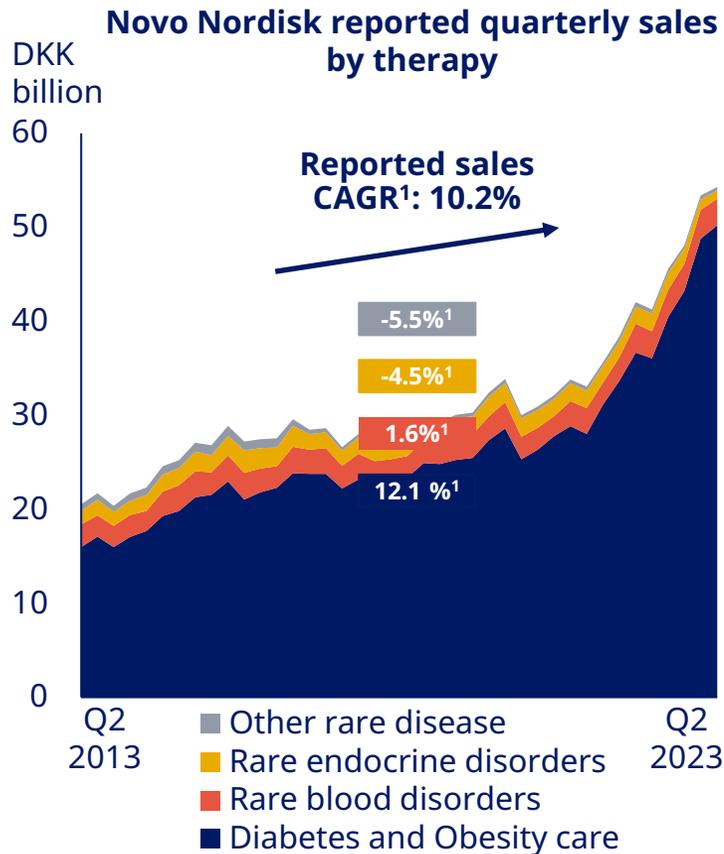
¹International Diabetes Federation: Diabetes Atlas 10th edition, 2021; ²Real-world studies indicate between 30-55% of patients reach HbA_{1c} target <7% .e.g. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4388968/>, taking 42.5% in good control of treated people; ³World Diabetes Atlas 2022; ⁴ WFH annual survey 2020 (120 of 147 countries responded): Prevalence by calculating expected number of patients using 20.9 per 100.000 in haemophilia Identified patients as proxy for receiving some sort of treatment; ⁵"The top 10 causes of death", WHO, 9 December 2020 (ASCVD denoted as ischaemic heart disease); ⁶Groenewegen A et al. Eur J Heart Fail 2020;22:1342-13561; Gurwitz JH et al. Am J Med 2013;126:393-400; ⁷Estes C, Modeling the epidemic of non-alcoholic fatty liver disease demonstrates an exponential increase in burden of disease, Hepatology, 2018; ⁸The World Alzheimer Report 2015, The Global Impact of Dementia, Alzheimer's Disease International (ADI), London.

Novo Nordisk has leading positions in diabetes, obesity and haemophilia



¹ CAGR for 5-year period; ² CAGR for 2-year period; ³ CAGR for 3-year period; RHS: Right-hand side; Note: Annual sales figures for haemophilia A, B and bypassing agent segments, plasma derived products excluded except Feiba®; Source: Company reports for haemophilia market; IQVIA MAT, May 2023; Note: Diabetes and Obesity care market values are based on list prices in the US. NN: Novo Nordisk.

Sales growth of 30%, driven by the GLP-1 portfolio for diabetes and obesity treatment



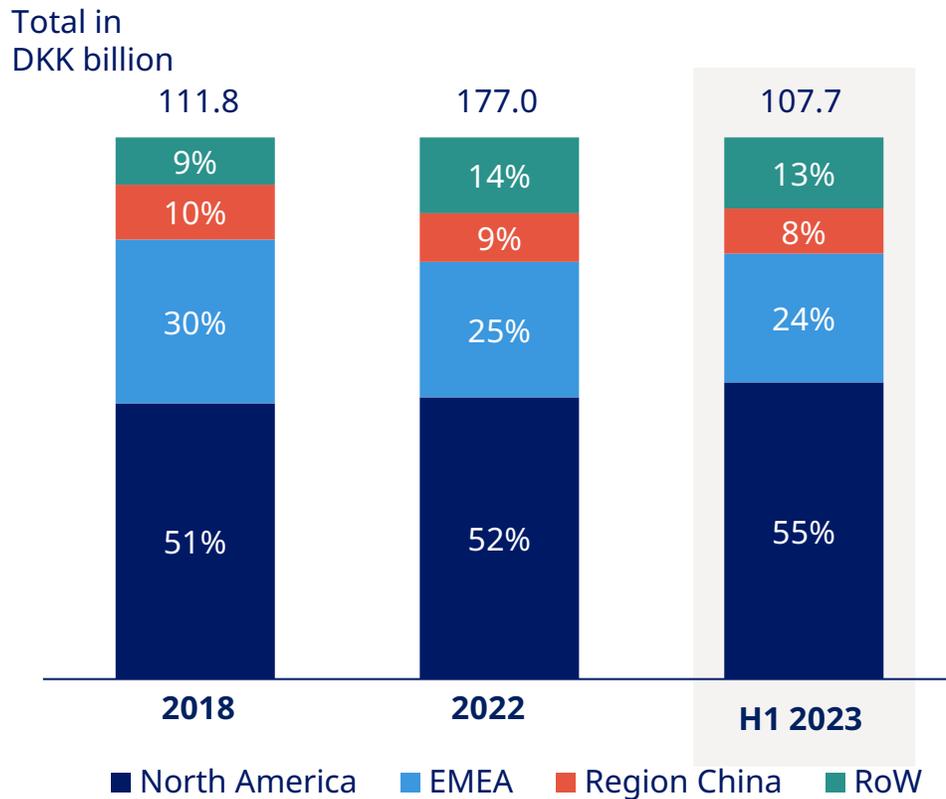
Reported sales and growth breakdown for the first six months of 2023

Therapy	Sales (mDKK)	Growth	Share of growth
Injectable GLP-1 ²	46,392	44%	56%
Rybelsus®	8,344	98%	17%
Total GLP-1	54,736	50%	73%
Total insulin³	24,697	-7%	-8%
Other Diabetes care ⁴	1,396	-19%	-2%
Total Diabetes care	80,829	24%	63%
Obesity care ⁵	18,148	157%	44%
Diabetes and Obesity care	98,977	37%	107%
Rare blood disorders ⁶	5,885	-1%	0%
Rare endocrine disorders ⁷	2,030	-46%	-7%
Other Rare disease ⁸	775	-11%	0%
Rare disease	8,690	-18%	-7%
Total	107,667	30%	100%

¹ CAGR for 10-year period; ² Comprises Victoza®, Ozempic®; ³ Comprises Tresiba®, Xultophy® and Levemir®, Ryzodeg® and NovoMix®, Fiasp® and NovoRapid®; ⁴ Primarily Novonorm®, needles and GlucaGen® HypoKit®; ⁵ Comprises Saxenda® and Wegovy®; ⁶ Comprises NovoSeven®, NovoEight®, NovoThirteen®, Refixia®, and Esperoct®; ⁷ Comprises Norditropin® and Macrilen™; ⁸ Primarily Vagifem® and ActiVelle®
 Note: Sales numbers are reported in Danish kroner; Growth is at constant exchange rate, except for total sales growth of 29%; Refixia® and NovoThirteen® are launched as Rebinyn® and TRETEN®, respectively, in North America.

Sales growth of 30%, driven by both NAO and IO with 44% and 17% sales growth respectively

Historic and reported sales by geography



Reported sales and growth breakdown for the first six months of 2023

Regions	Sales (mDKK)	Growth	Share of growth
International Operations	48,707	17%	29%
EMEA	25,598	19%	16%
Region China	8,928	12%	4%
RoW	14,181	18%	9%
North America Operations	58,960	44%	71%
Hereof USA	54,531	42%	63%
Total sales	107,667	30%	100%

Source: Quarterly company announcement

IO: International Operations; NAO: North American Operations; EMEA: Europe, Middle East, and Africa; RoW: Rest of World; Region China covers mainland China, Hong Kong and Taiwan

Note: Numbers may not add up to 100% due to rounding; Growth at Constant exchange rates; Sales numbers are reported in Danish kroner

Novo Nordisk holds solid patent protection, competitive advantages and a collaborative approach to innovation

Novo Nordisk’s position is protected by patents and value chain setup



EU/US patent protection¹
2031/32²



2031/2032^{2,3}



2030⁴



2034/32²



2028/29



2028/29



2028/29



2027/28



2023⁵

Novo Nordisk holds competitive advantages compared to biosimilars

Research & Development

- Need to show comparability in PK/PD trials
- Strict regulatory requirements in the EU and the US
- Requirement for both drug and device offering

Manufacturing

- Economies of scale
- Up-front CAPEX requirements with slow return on investment

Commercialisation

- Large and fragmented target audience
- Cost pressure from payers
- On-going conversion to next-generation drugs and slow market dynamics

Partnerships and acquisitions support future R&D

siRNA treatments



Combination treatments for NASH



Oral formulations of therapeutics



Gene editing for haemophilia



Novel treatments for CVD/Rare disease



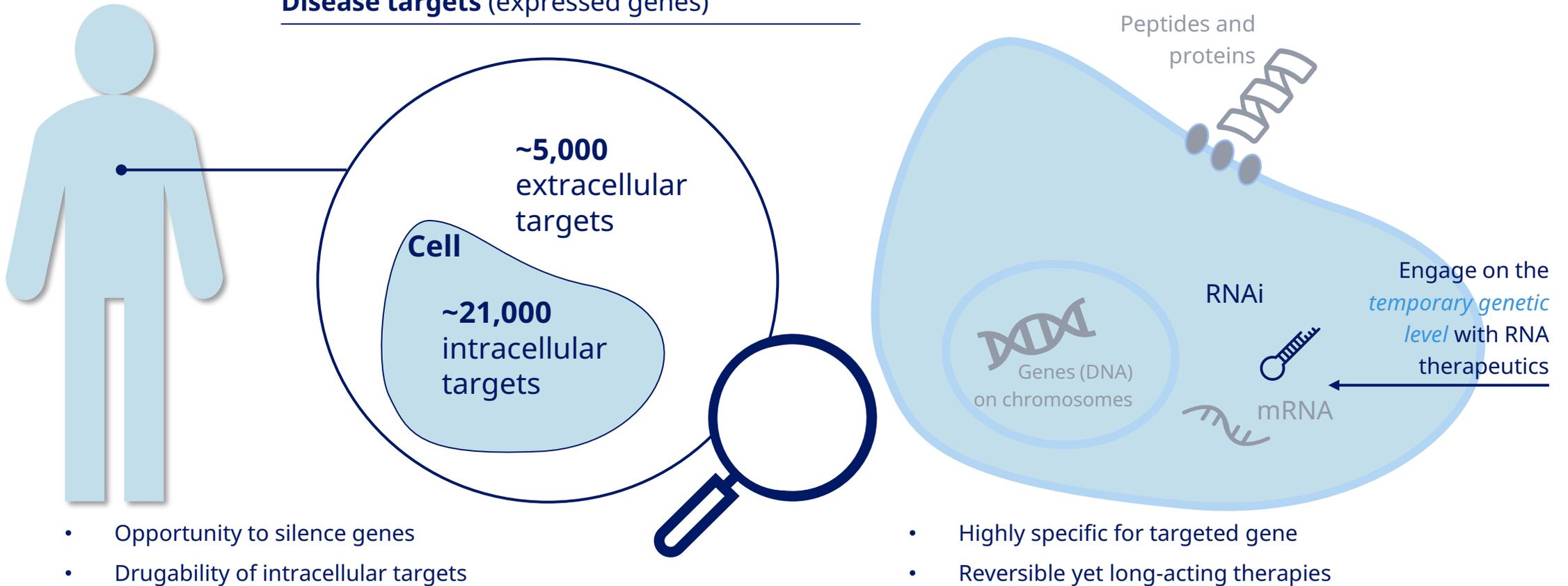
Novel treatments for metabolic diseases



¹ List does not include all marketed products. ² Current estimates. Wegovy® patent identical to Ozempic® patent; ³ Tablet formulation and once-daily treatment regimen are protected by additional patents expiring in 2031-2034; ⁴ Formulation patent; active ingredient patent has expired; PK: Pharmacokinetic, PD: Pharmacodynamic; CAPEX: Capital expenditure; siRNA: Silencing ribonucleic acid; NASH: Non-alcoholic steatohepatitis; CVD: Cardiovascular disease

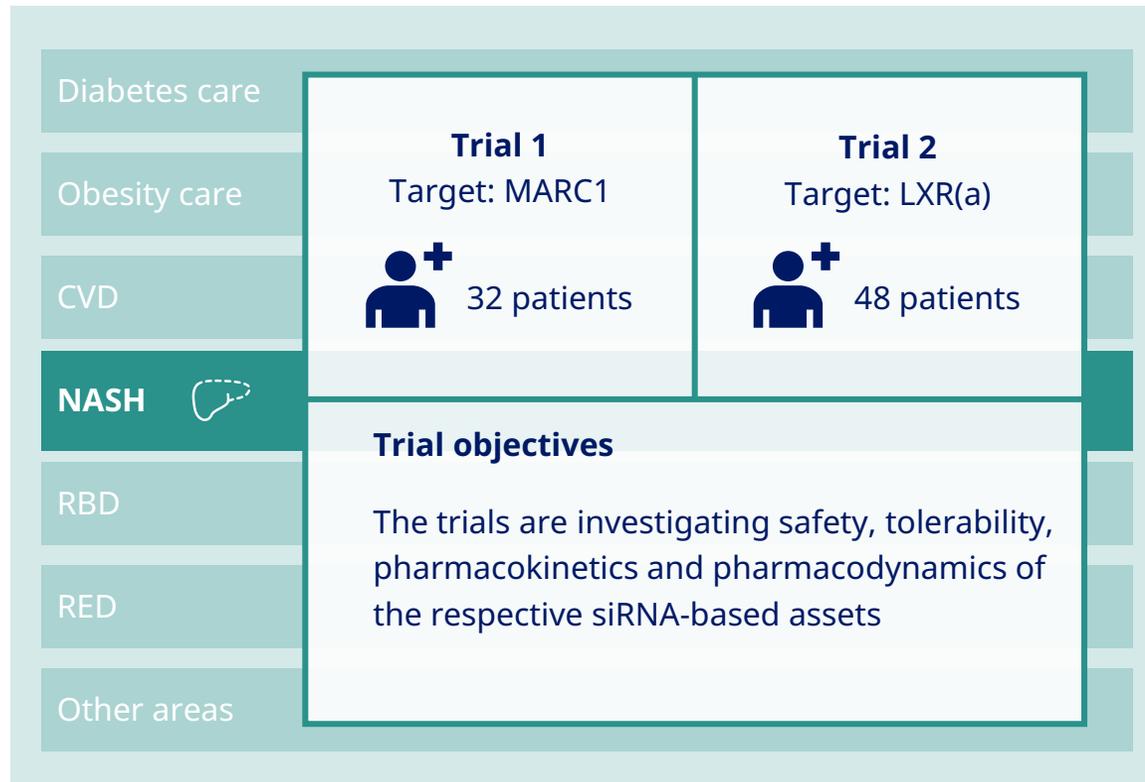
The acquisition of Dicerna Pharmaceuticals and their RNAi technology in 2021 provided access to intracellular targets

Disease targets (expressed genes)



First two human dose initiations with Dicerna in Q4 2022 in line with ambition presented at Capital Markets Day 2022

First two phase 1 trials in NASH with siRNA technology initiated



Novo Nordisk and Dicerna

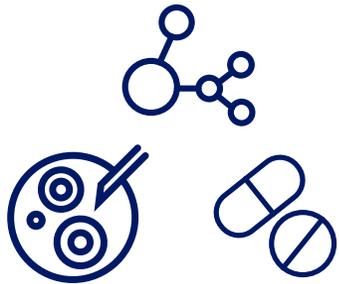
- After a productive partnership since 2019, Novo Nordisk acquired Dicerna pharmaceuticals in 2021 for \$3.3 bUSD
- Integrated into Novo Nordisk and now operates as a transformational research unit (TRU) responsible for the siRNA research technology platform
- Setup to preserve the agility and speed of a smaller biotech, while leveraging the scale and experience of a large pharmaceutical company

Ambition

- Generate an average of 3 first human dose projects per year across therapy areas with the siRNA technology platform

Novo Nordisk's core capabilities provide a competitive advantage to continue to defeat diabetes

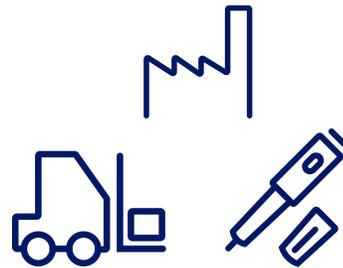
Engineering, formulating, developing and delivering protein-based treatments



Today: Oral solutions to differentiate from competition

Tomorrow: Expand oral platforms and transformational medicines via Novo Nordisk stem cell platform

Efficient large-scale production of proteins



Today: The world's largest producer of insulin and GLP-1

Tomorrow: Expand capacity and continue efficiency gains

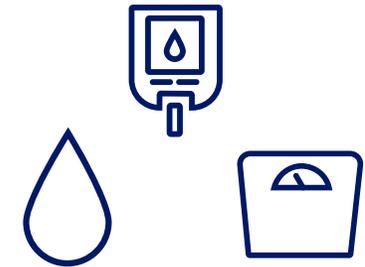
Global commercial reach and leader in chronic disease care



Today: Global reach and industry leading GLP-1 portfolio

Tomorrow: Continued rollout of portfolio and launch of new products

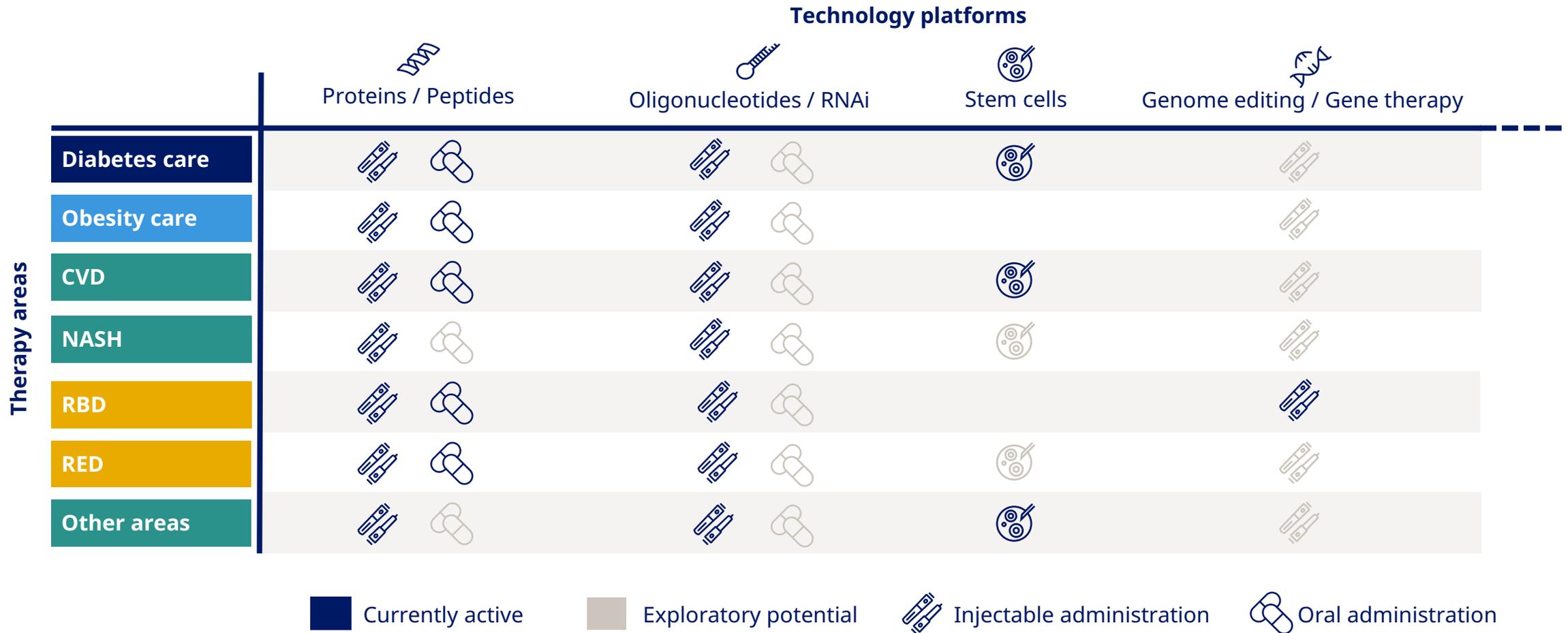
Deep disease understanding



Today: Provide value and outcomes beyond HbA_{1c} for diabetes

Tomorrow: Normalise living with diabetes supported by digital solutions

Core capabilities and additional technology platforms open up new opportunities across therapy areas

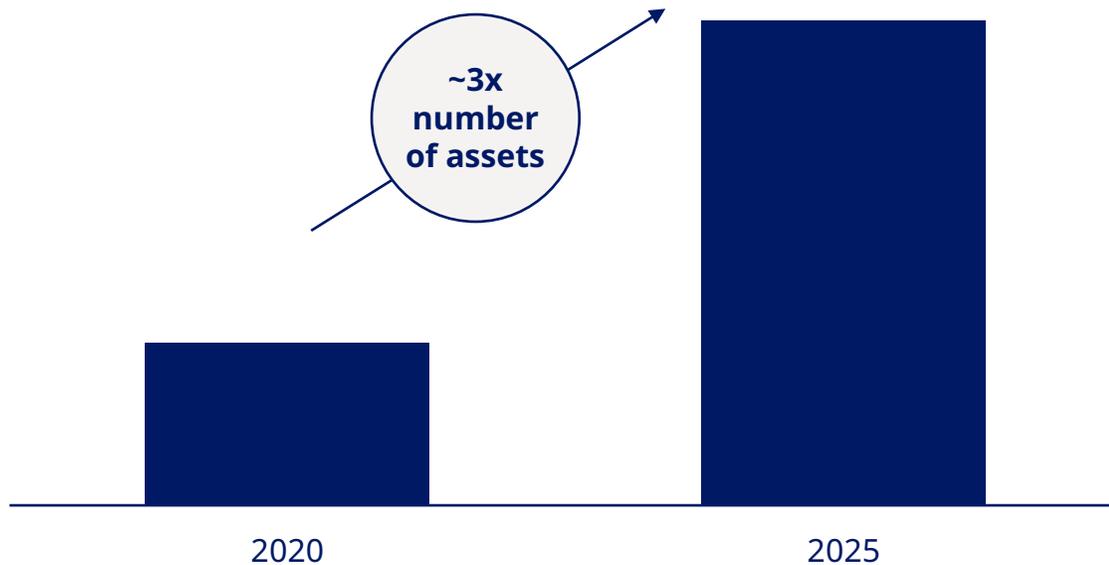


Note: Currently active means Novo Nordisk is currently pursuing research projects, while exploratory potential indicates that the platform is potentially applicable for the given disease
 RBD: Rare blood disorders; RED: Rare endocrine disorders; CVD: Cardiovascular disease; NASH: Non-alcoholic steatohepatitis; RNA: Ribonucleic acid

Human data-driven decision-making with faster timelines to enable a robust development pipeline

Speed up time to reach FHD and increase number of phase 1 assets

ILLUSTRATIVE



Future Research & early development trends for Novo Nordisk

- More first human doses pursued to enable a robust late-stage pipeline
- Around 3x faster timeline from lead candidate to first human dose
- First human doses with the new technologies, cell-based therapies and RNAi was in 2022
- Ambition of generating first human dose projects on average per year across disease areas with the RNAi platform

Pipeline supports significant growth opportunities across all four strategic focus areas

PHASE 1

NN1845 – GSI
 NN1471 – Pumpinsulin
 NN9041 – DNA Immunotherapy
 NN9541 – OW GLP-1/GIP co-agonist
 NN9904 – Once weekly oral sema
 NN9487 – Oral Amycretin
 NN6020 – DCR-AUD¹
 NN6582 – LXR(a) in NASH
 NN6581 – MARC1 in NASH
 NN9003 – Stem Cells in HF
 NN9001 – Stem Cells in PD

PHASE 2

NN9388 – Cagrisema
 NN7533 – Ndec in SCD
 NN7535 – Etavopivat in Beta thalassemia
 NN9931 – Gilead in NASH
 NN9500 – FGF-21 in NASH
 NN6021 – Belcesiran in AATLD
 NN6019 – ATTR Cardiomyopathy

PHASE 3

NN1535 – Icosema
 NN9924 – Oral Semaglutide 25 and 50 mg
 NN9536 – Semaglutide 7.2 mg
 NN9838 – Cagrisema
 NN9932 – Oral Semaglutide 50 mg obesity²
 NN9931 – Semaglutide 2.4 mg in NASH
 NN6535 – Semaglutide 14.0 mg in AD
 NN6018 – Ziltivekimab in ASCVD
 NN6018 – Ziltivekimab in HFpEF
 NN7769 – Mim8 in HA
 NN7535 – Etavopivat in SCD
Other PHASE 3 trials
 SOUL – Oral semaglutide 14.0 mg CVOT
 FOCUS – Semaglutide 1.0 mg in diabetic retinopathy
 FLOW – Semaglutide 1.0 mg in CKD
 STRIDE – Semaglutide 1.0 mg in PAD
 STEP – Semaglutide 2.4 mg in HFpEF
 SELECT – Semaglutide 2.4 mg in obese population

SUBMITTED

NN1436 – Insulin Icodec
 NN7415 – Concizumab³ in HwI
 NN7022 – Nedosiran in PH

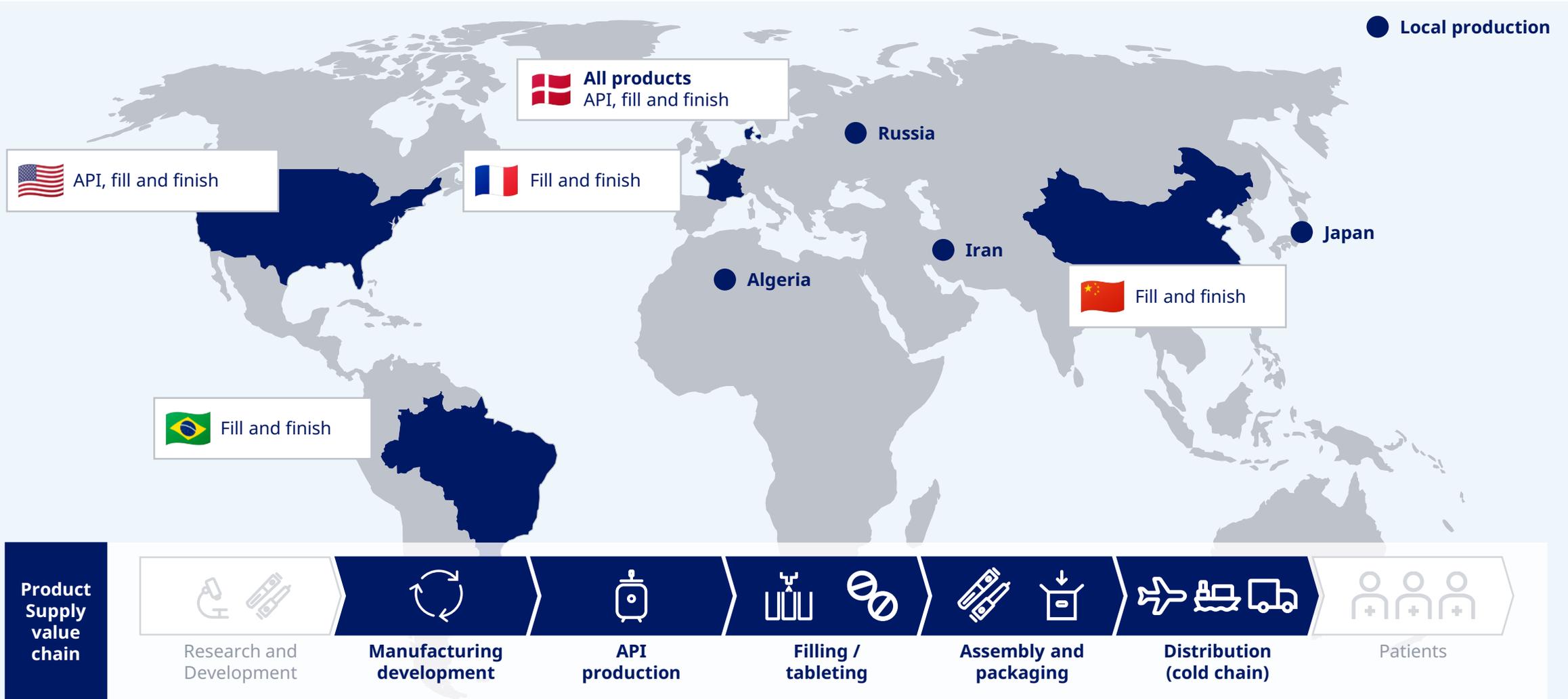
APPROVED

Tresiba®
 Xultophy®
 Levemir®
 Ryzodeg®
 NovoMix®
 Fiasp®
 NovoRapid®
 Rybelsus®
 Ozempic®⁴
 Victoza®
 Wegovy®
 Saxenda®
 NovoSeven®
 NovoEight®
 Esperoct®
 NovoThirteen®
 Refixia®
 Alhemo®⁵
 Norditropin®
 Sogroya®

Diabetes care
 Obesity care
 Rare blood disorders
 Rare endocrine disorders
 Other serious chronic diseases

¹ Dicerna-Alcohol Use Disorder; ² 25 mg trial also initiated; ³ Submitted to EU/JP for HwI; ⁴ Higher doses of injectable semaglutide (8 mg and 16 mg) tested in phase 2; ⁵ Approved in Canada for HBwI; AATLD: Alpha-1 Antitrypsin Deficiency-associated Liver Disease; AD: Alzheimer's Disease; ASCVD: Atherosclerotic Cardiovascular Disease; ATTR: Transthyretin amyloidosis; CKD: chronic kidney disease; CVOT: Cardiovascular outcome trial; FGF-21: Fibroblast growth factor 21; GHD: Growth hormone disorder; GSI: Glucose Sensitive Insulin; HA: Haemophilia A; HF: Heart failure; HFpEF: heart failure with preserved ejection fraction; HwI: Haemophilia with inhibitors; JP: Japan; LXR(a): Liver X receptor alpha; MARC1: Mitochondrial amidoxime reducing component 1; MDS: myelodysplastic syndrome; NASH: Nonalcoholic Steatohepatitis; PAD: Peripheral arterial disease; PD: Parkinson's Disease; PH: Primary hyperoxaluria; SCD: Sickle cell disease; Sema: Semaglutide; US: United States.

Novo Nordisk has a global manufacturing setup



Diabetes care

Disease and market	37
GLP-1 segment	45
Insulin segment	53



SIMONE LENSBOLE
Simone lives with type 2 diabetes
Denmark

Diabetes – the inability to manage blood sugar levels appropriately

Facts about diabetes

Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin produced by the pancreas

Primary classifications:

Type 1 diabetes: Complete insulin deficiency due to destruction of beta-cells in the pancreas

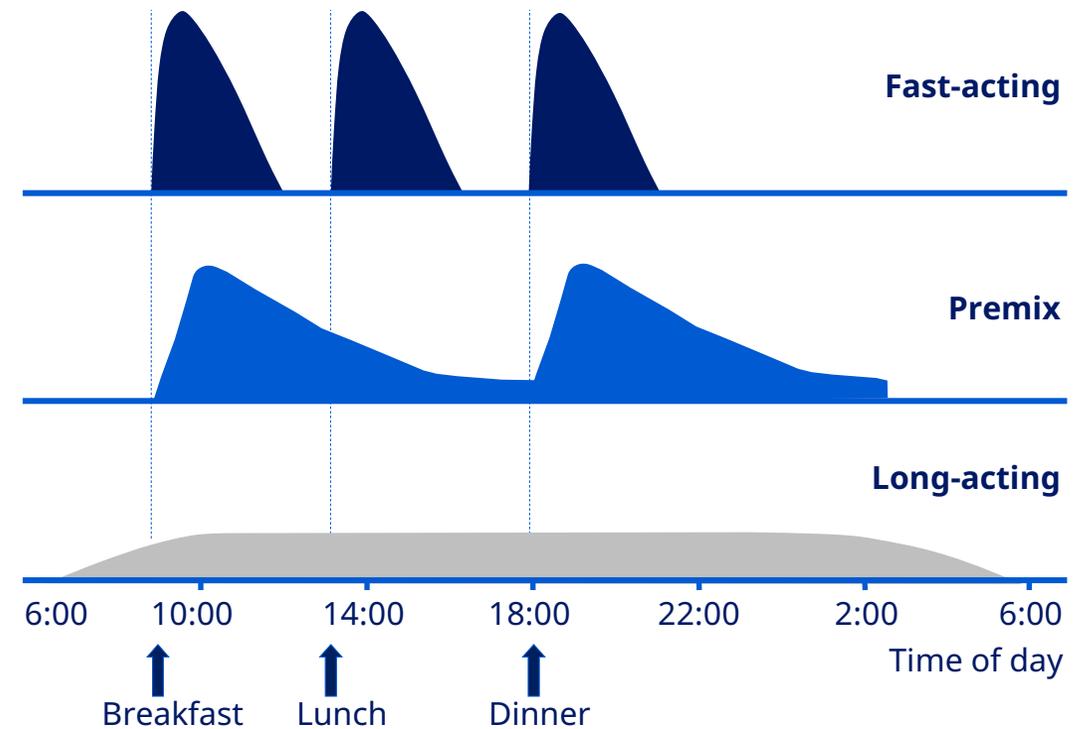
Type 2 diabetes: Characterised by some degree of insulin resistance and insulin deficiency

Insulin:

- Facilitates uptake of blood sugar into cells
- Inhibits glucose release from the liver



Insulin analogue action profiles

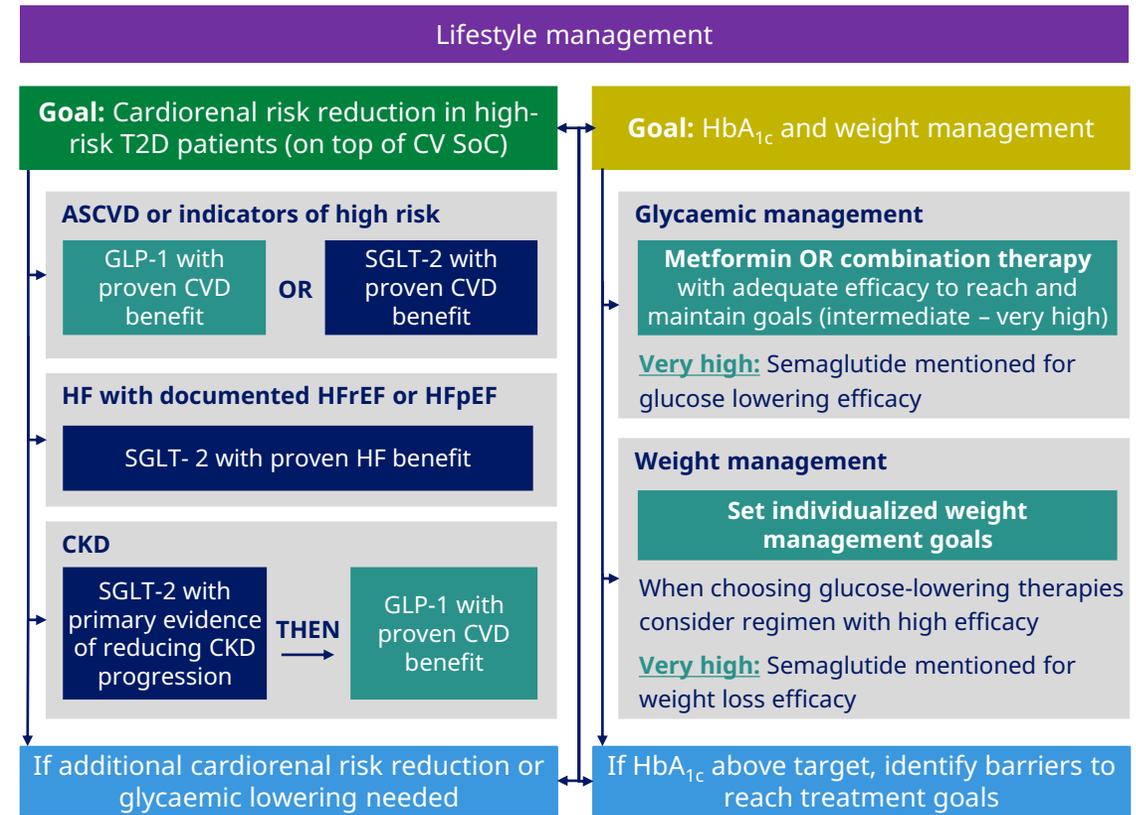


GLP-1s have positive effects beyond glycaemic control and treatment guidelines now reflect the CV risk benefits

Medications for treatment of type 2 diabetes

Class	Efficacy	Hypo risk	Weight change	Cardiovascular effects	
				ASCVD	HF
Metformin	High	No	Neutral	Potential Benefit	Neutral
Sulfonylurea	High	Yes	Gain	Neutral	Neutral
TZDs	High	No	Gain	Potential Benefit	Increased risk
DPP-IV inhibitors	Intermediate	No	Neutral	Neutral	Potential risk
SGLT-2 inhibitors	Intermediate	No	Loss	Benefit	Benefit
GLP-1	High	No	Loss	Benefit/Neutral ¹	Neutral
Long-acting insulin	High	Yes	Gain	Neutral	Neutral
Fast-acting insulin	High	Yes	Gain	Neutral	Neutral

Updated ADA/EASD diabetes treatment guidelines

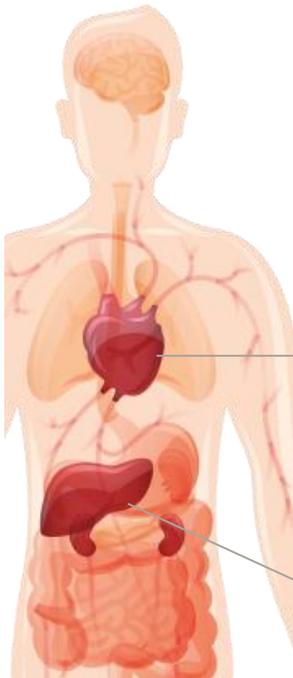


¹ Benefit: dulaglutide, liraglutide, semaglutide; Neutral: exenatide once weekly, lixisenatide
 Hyp: Hypoglycaemia; ASCVD: Atherosclerotic cardiovascular disease; HF: Heart failure; TZDs: Thiazolidinediones
 Source: Adapted from: "Standards of Medical Care in Diabetes – 2022" Supplement 1, p.133; diabetes.org. American Diabetes Association.

T2D: Type 2 diabetes; CVD: Cardiovascular Disease; SoC: Standard of Care; HF: Heart failure; CKD: Chronic Kidney Disease; ADA: American Diabetes Association; EASD: European Association for the Study of Diabetes
 Sources Adapted from: "Management of Hyperglycemia in Type 2 Diabetes, 2022. A Consensus Report by the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD)", Davies MJ. Et al, Diabetes Care 2022 (<https://doi.org/10.2337/dci22-0034>)

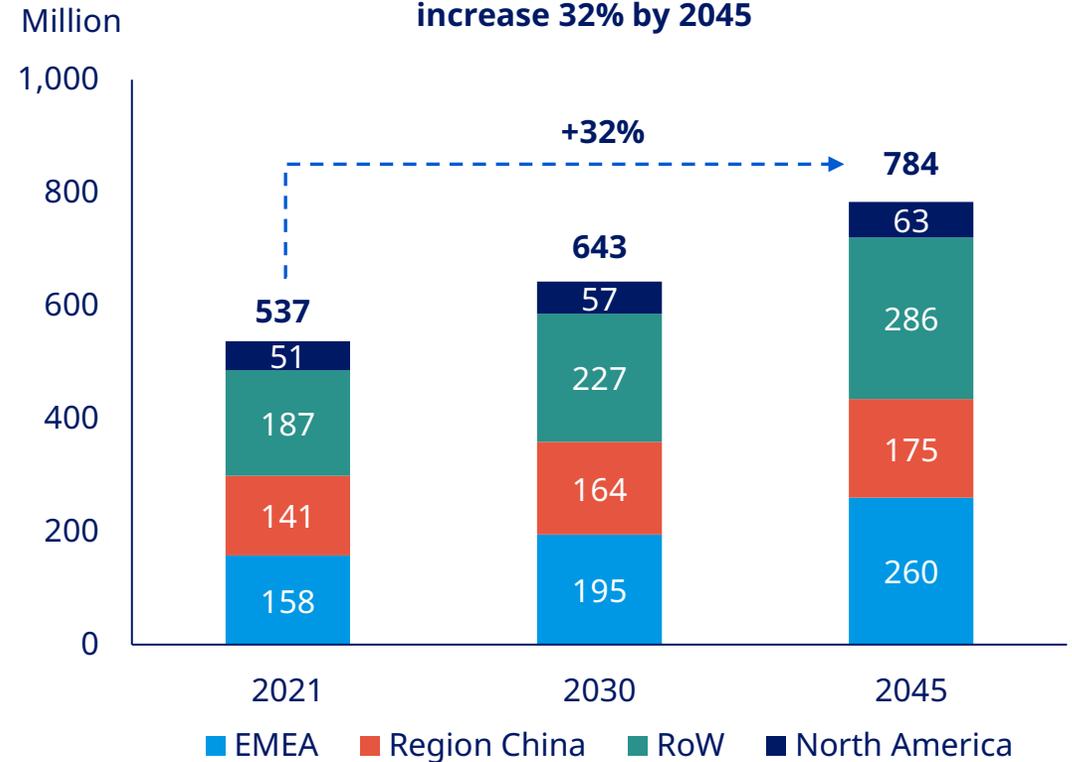
People with diabetes have increased mortality risk, and the diabetic population is expected to increase to 784 million by 2045

Diabetes is associated with shorter life expectancy and lower quality of life



<p>Diabetes</p>	<ul style="list-style-type: none"> • Life expectancy 8 years shorter¹ • Driven by 200% increased risk of all cause mortality¹
<p>CVD</p>	<ul style="list-style-type: none"> • 70% of people with diabetes die from atherosclerotic CVD² • 150% increase in risk of stroke³
<p>Organs</p>	<ul style="list-style-type: none"> • Higher likelihood of neuropathy, retinopathy, limb amputation, cancer and cognitive dysfunction⁴

The number of people with diabetes is expected to increase 32% by 2045

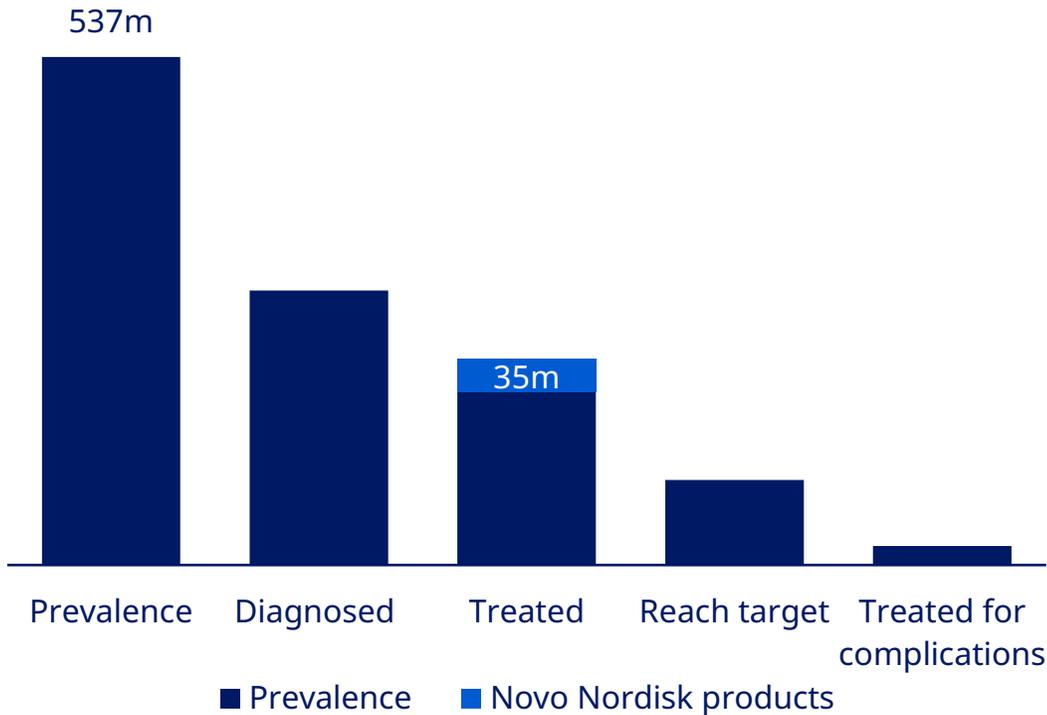


¹ Diabetes Care 2017 Mar; 40 (3): 338-345; ² https://www.who.int/cardiovascular_diseases/en/;
³ <https://www.diabetes.org/diabetes/complications.>; CVD: Cardiovascular disease; OAD: Oral anti-diabetic
⁴ Diabetes Care 2005 Jan;28(1):164-176

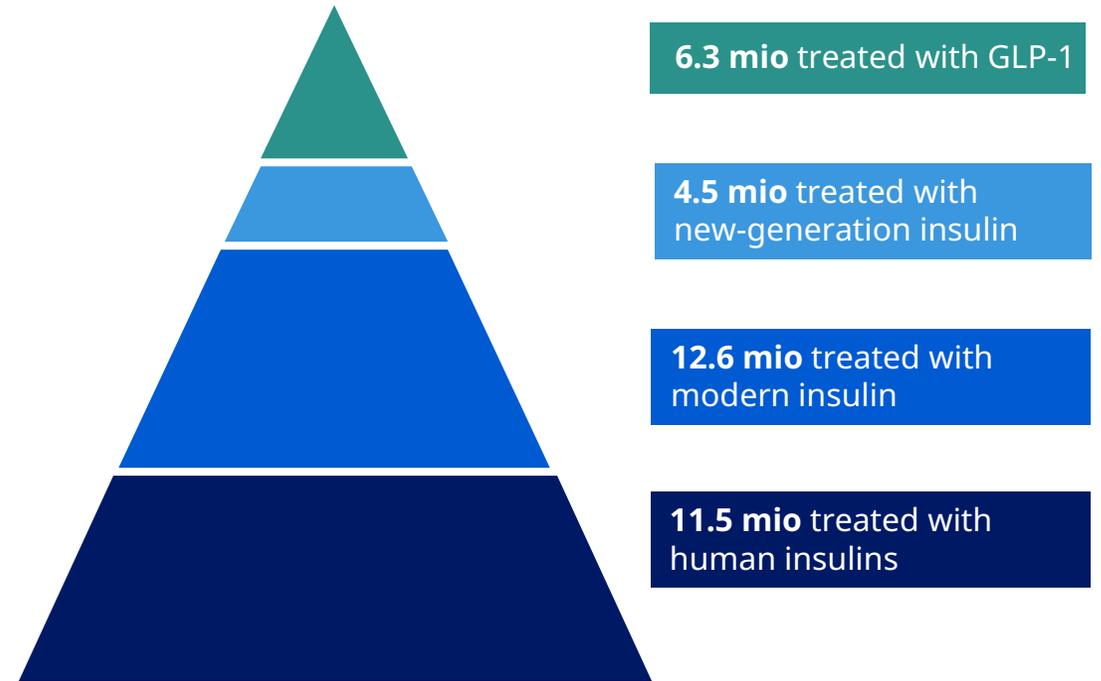
Source: International Diabetes Federation: Diabetes Atlas 10th Edition 2021
 EMEA: Europe, Middle East, Africa; RoW: Asia Pacific, Latin America

The unmet need within diabetes care remains large with too few patients reaching glycaemic target and treated for complications

1 in 2 adults go undiagnosed and more treated patients should reach their HbA_{1c} target



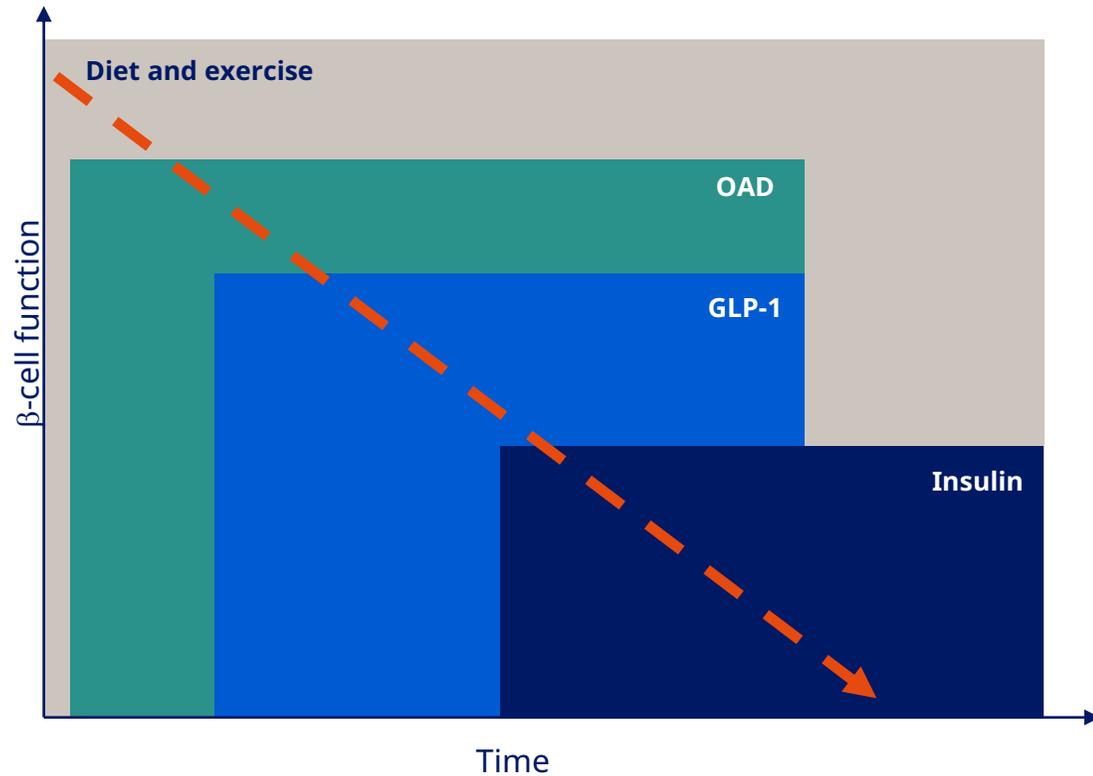
Of the 537 million, 36.3 million¹ people are currently treated with Novo Nordisk diabetes products



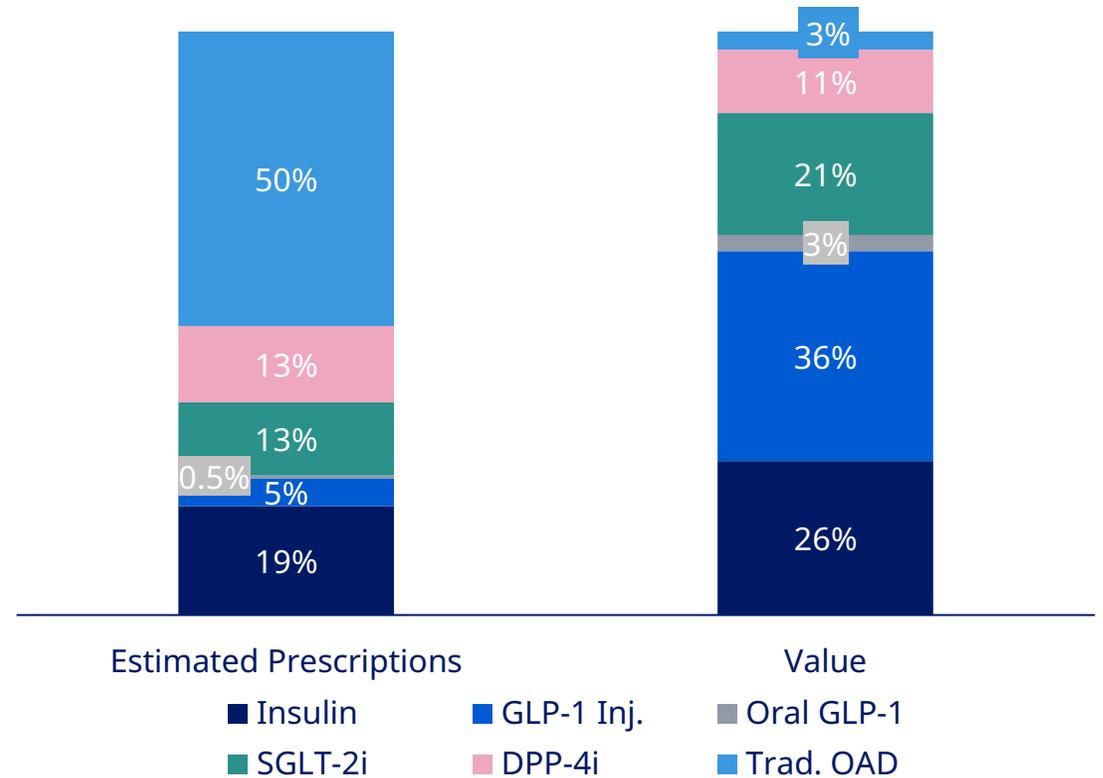
Source : Diabetes prevalence and diagnosed are based on Diabetes Atlas 10th edition, 2021; Treated is based on IQVIA patient data; real-world studies indicate between 30-55% of patients reach HbA_{1c} target <7% .e.g. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4388968/>

¹ In addition to the above-mentioned product classes, oral anti-diabetics constitutes the remainder of people treated with Novo Nordisk products; Estimated number for full-year 2022 (total available in Novo Nordisk Annual Report 2022)

Diabetes is a chronic disease requiring treatment intensification over time



Distribution of estimated prescriptions¹ and value across treatment classes



¹The estimated GLP-1 share of prescriptions is based on volume packs from IQVIA. Volume packs are converted into full-year patients/prescriptions based on WHO assumptions for average daily doses or if not available, Novo Nordisk assumptions.
 Note: Other OADs cover: metformin, sulfonylurea, thiazolidinediones. OAD: Oral anti-diabetic
 Source: MIDAS; patient and value figures based on IQVIA MAT, May 2023

Better outcomes and broader reach can be accomplished through continued innovation, supported by digital solutions

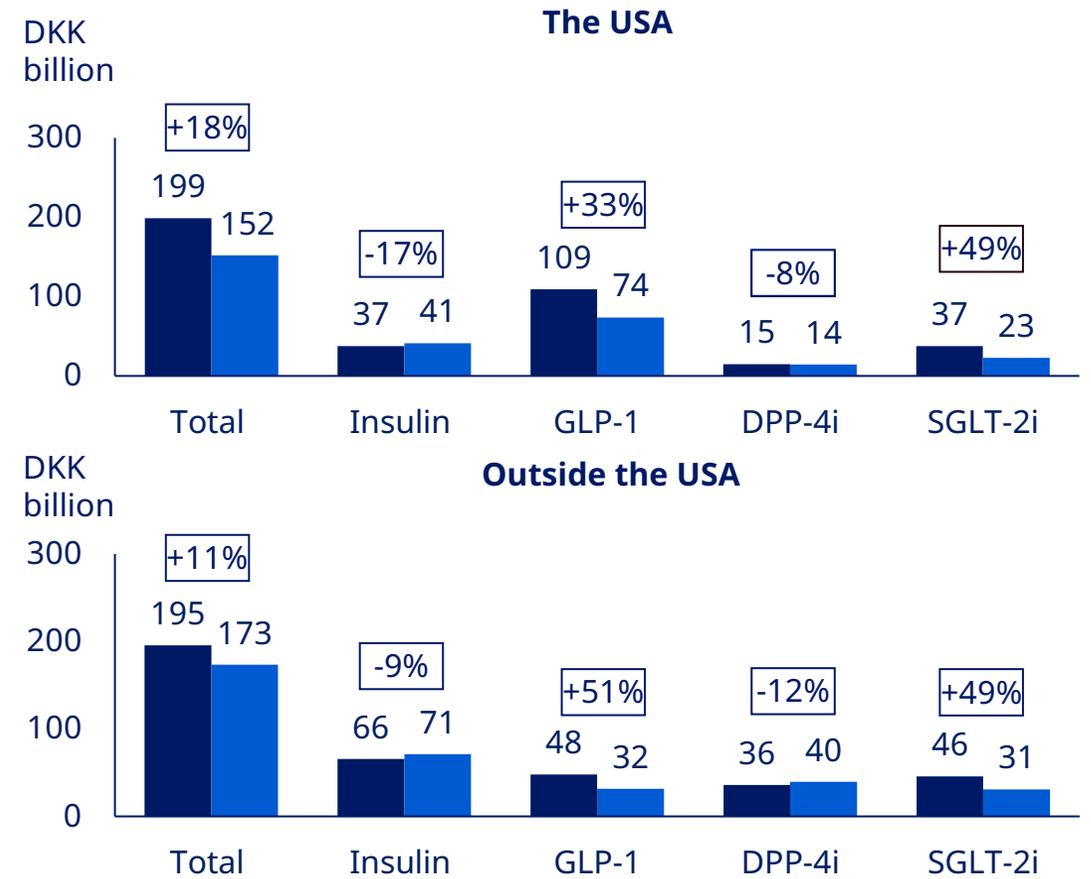
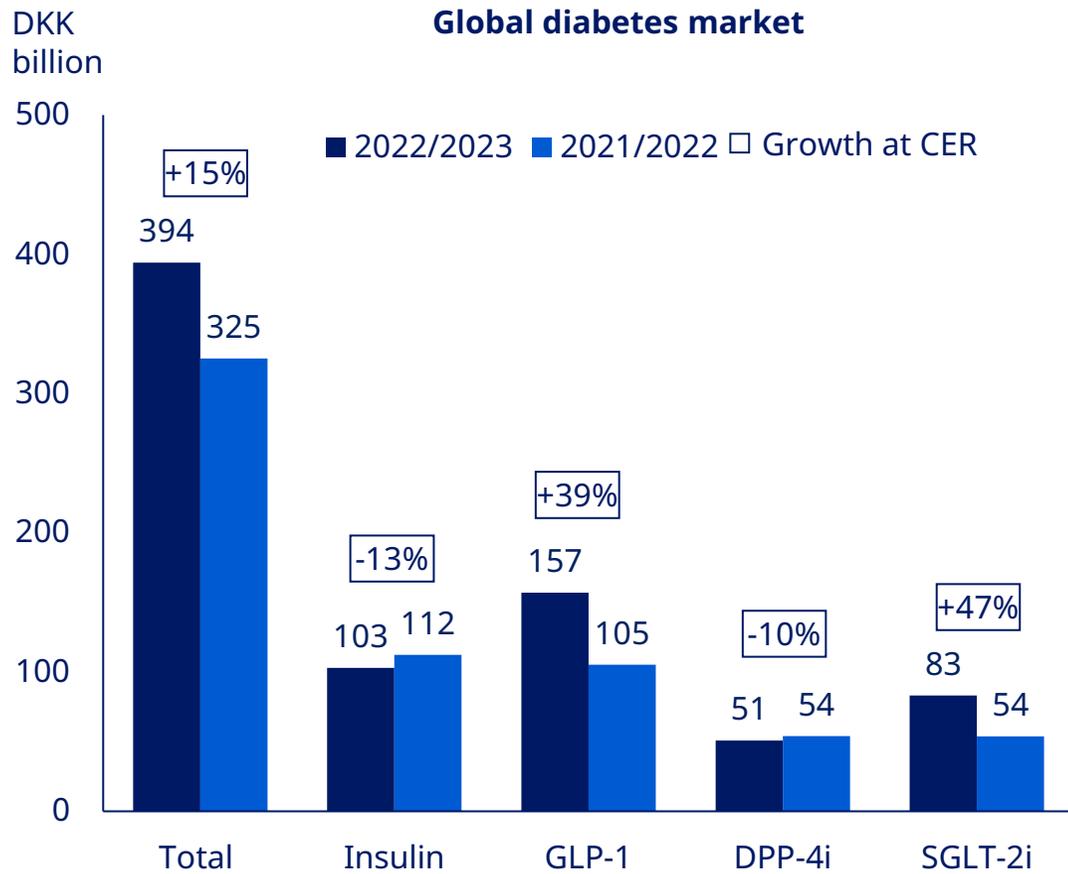
Novo Nordisk's product portfolio follows the patient treatment journey

Portfolio and pipeline	 semaglutide tablets	 semaglutide injection	 insulin degludec [rDNA origin] injection		
	High dose oral semaglutide	Ozempic® 2.0 mg	Icodec	IcoSema	 fast-acting insulin aspart
	Uncontrolled on current OAD	Needing first injectable	Needing first basal insulin	Needing more than basal insulin	Needing added meal-time insulin control

Digital health solutions		<p>NovoPen®6 / NovoPen Echo® Plus are smart insulin pens and launched in 14 countries</p>		<p>Partnered with global CGM players</p>
				

CGM: Continuous glucose monitoring; Grey boxes in the portfolio and pipeline references phase 2 or phase 3 assets.

The total branded diabetes market has a global value of DKK ~395 billion annually

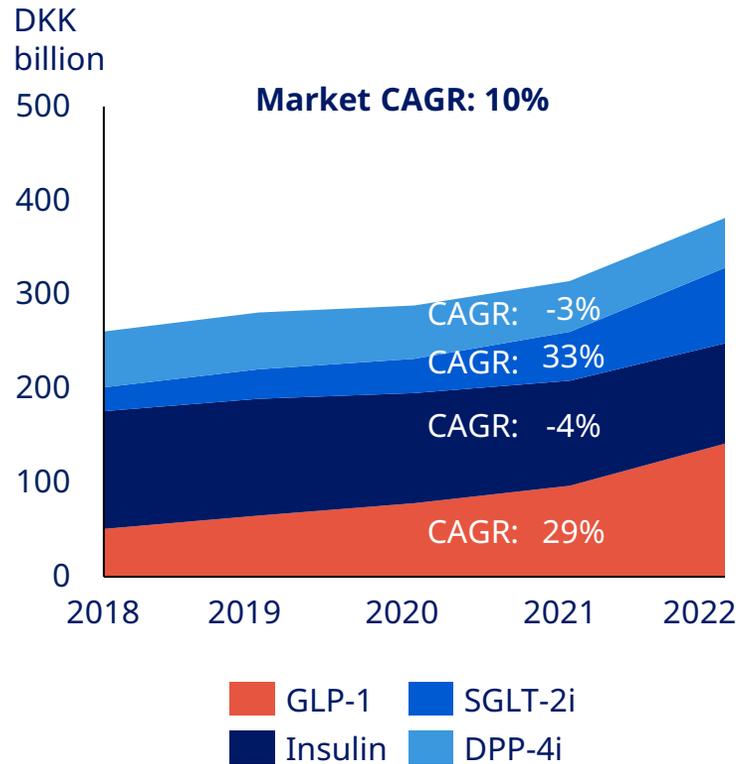


Source: Company announcements as of Q1 2023; 2022/2023 data based on Q2 2022 to Q1 2023 and 2021/2022 data based on Q2 2021 to Q1 2022

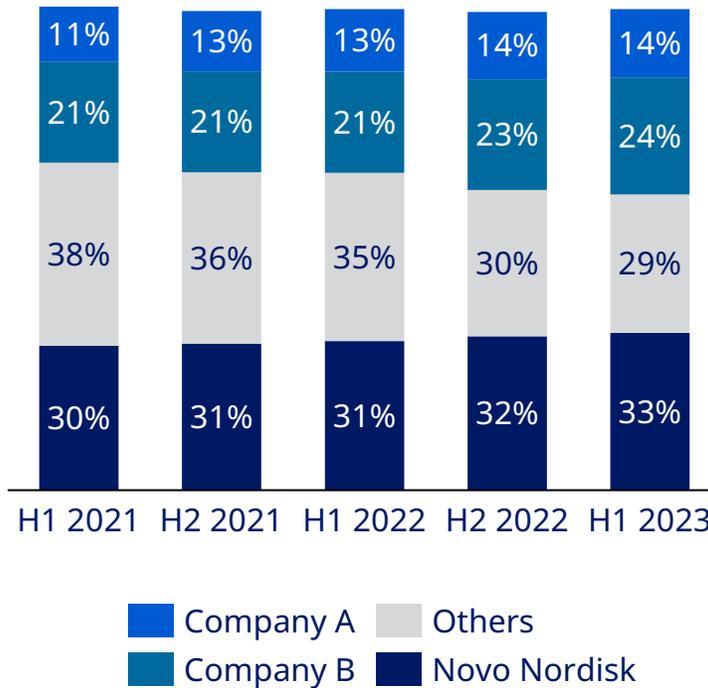
Note: The segment value is based on reported figures, whilst the market growth is under constant exchange rate (CER). For Novo Nordisk the diabetes growth includes Insulin and GLP-1, excluding 'other Diabetes care'.

Novo Nordisk has a leadership position within the growing diabetes market

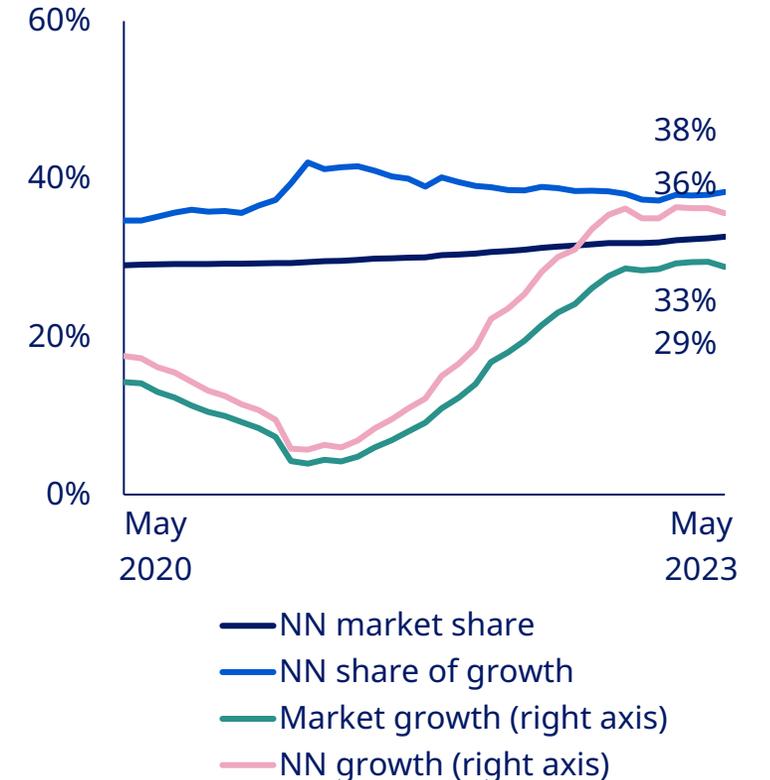
Global diabetes market by treatment class¹



Novo Nordisk remains global diabetes value market leader



Novo Nordisk market share and share of growth



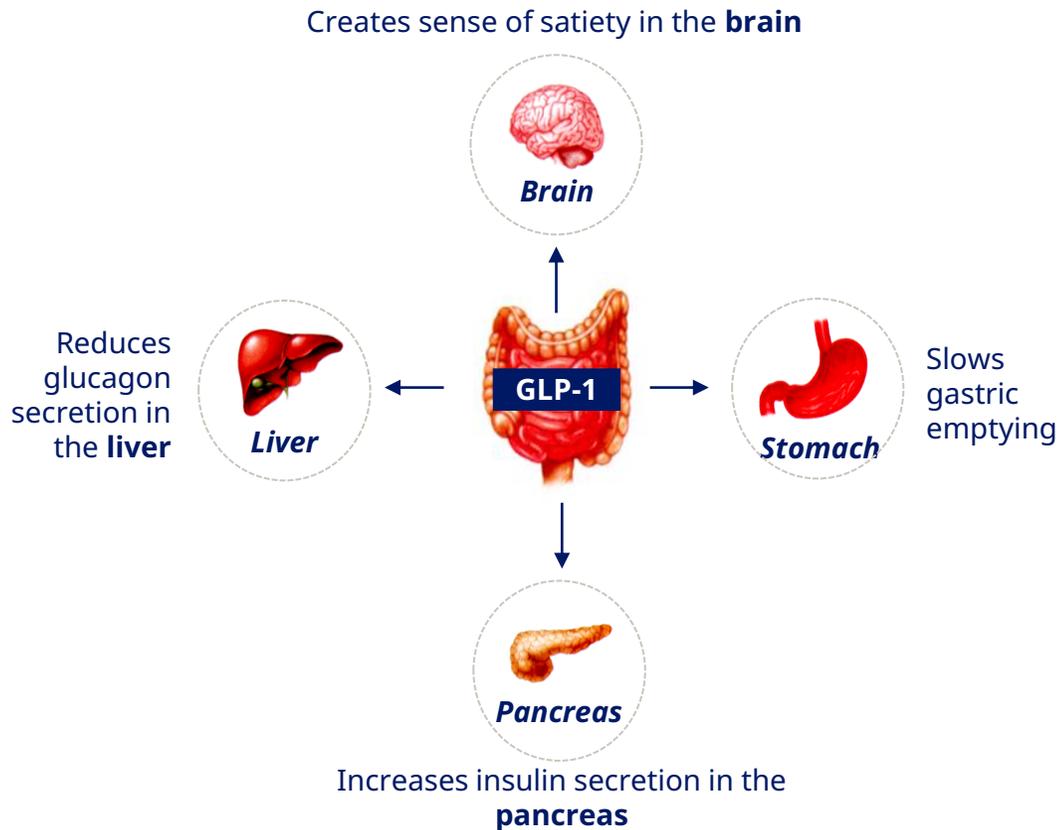
¹ Data is based on company reported sales. Data does not include generic metformin, sulphonylureas or thiazolidinedione

NN: Novo Nordisk

Source: IQVIA MAT, May 2023 value figures Note: IQVIA data can be inflated due to use of list prices in the US. Due to contractual obligations competitor names are not disclosed. Company A and B represent actual companies

GLP-1 effect dependent on blood glucose level

GLP-1 mechanism of action when blood sugar levels increase



Semaglutide holds a plethora of therapeutic opportunities¹

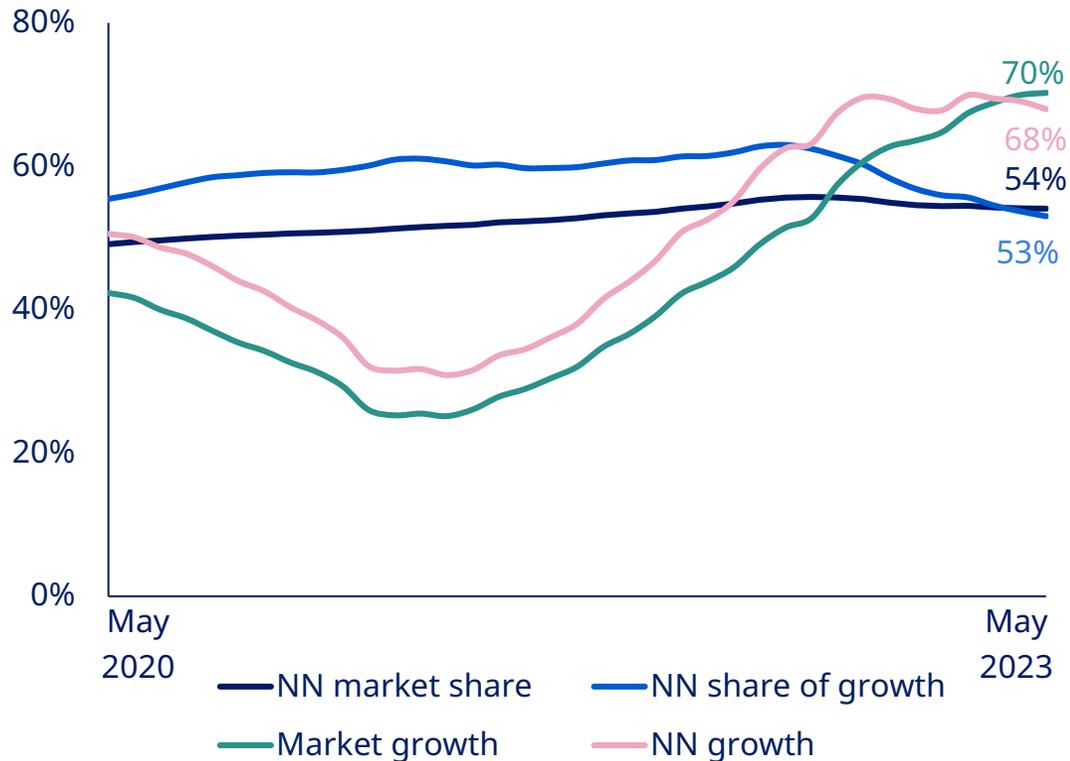
Diabetes	FOCUS - Diabetic retinopathy outcomes trial Semaglutide s.c.; ~1,500 patients, T2D ≥10 years
CVD	SOUL - Cardiovascular outcomes trial Oral semaglutide; ~9,600 patients, T2D, established CVD or CKD
Obesity	SELECT - Cardiovascular outcomes trial Semaglutide 2.4 mg, ~17,500 patients with obesity and without diabetes, event driven
NASH	Semaglutide in NASH Semaglutide s.c.; phase 3 and 2 trials
CKD	FLOW - Chronic kidney disease outcomes trial Semaglutide 1.0 mg; ~3,200 patients, T2D, moderate to severe CKD
PAD	STRIDE - Peripheral artery disease trial Semaglutide 1.0 mg; ~ 800 patients with T2D and PAD
Brain disorders	Alzheimer's Disease Oral Semaglutide 14 mg; ~ 3,700 patients with early Alzheimer's disease
Heart Failure	STEP - HFpEF Semaglutide 2.4 mg; ~ 600 patients with obesity-related HFpEF

¹ List is not exhaustive

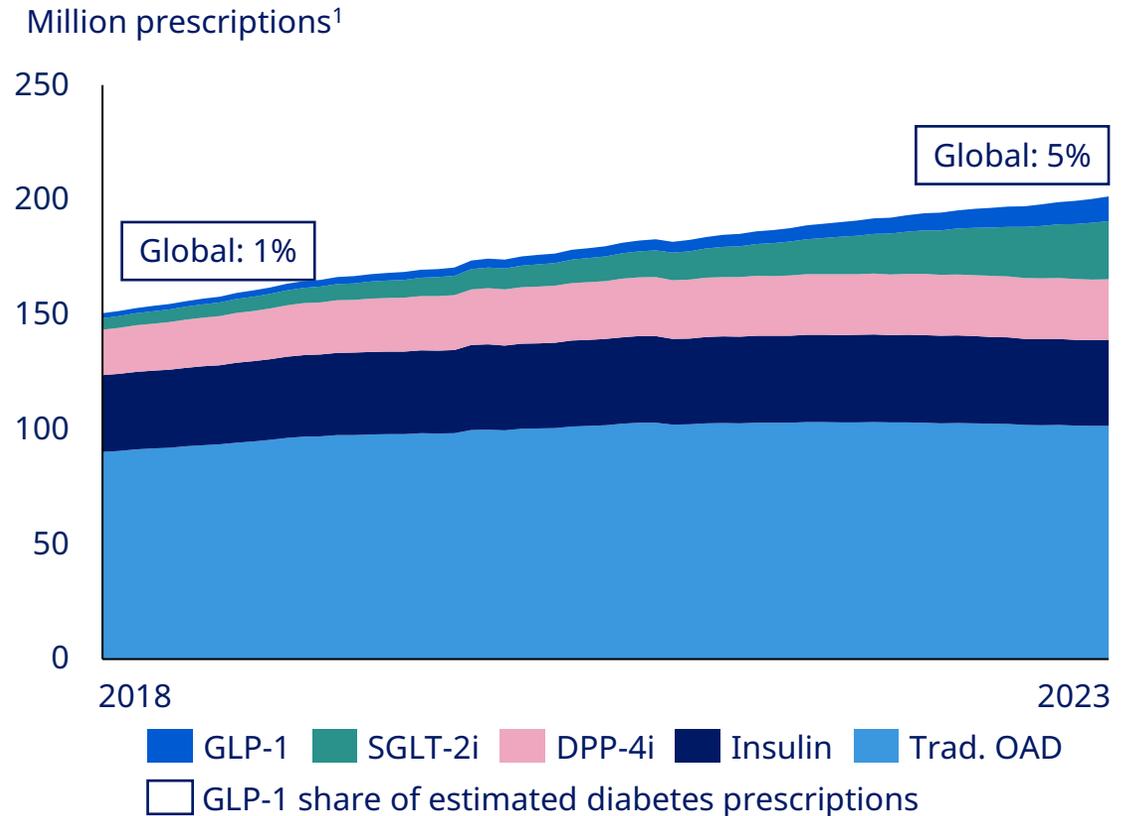
Sc: Subcutaneous; T2D: Type 2 diabetes; CVD: Cardiovascular disease; CKD: Chronic kidney disease; NASH: Non-alcoholic steatohepatitis; PAD: Peripheral artery disease

Novo Nordisk has 54% of the global GLP-1 market, while GLP-1 penetration of diabetes volume varies across regions

GLP-1 market growth and Novo Nordisk market share

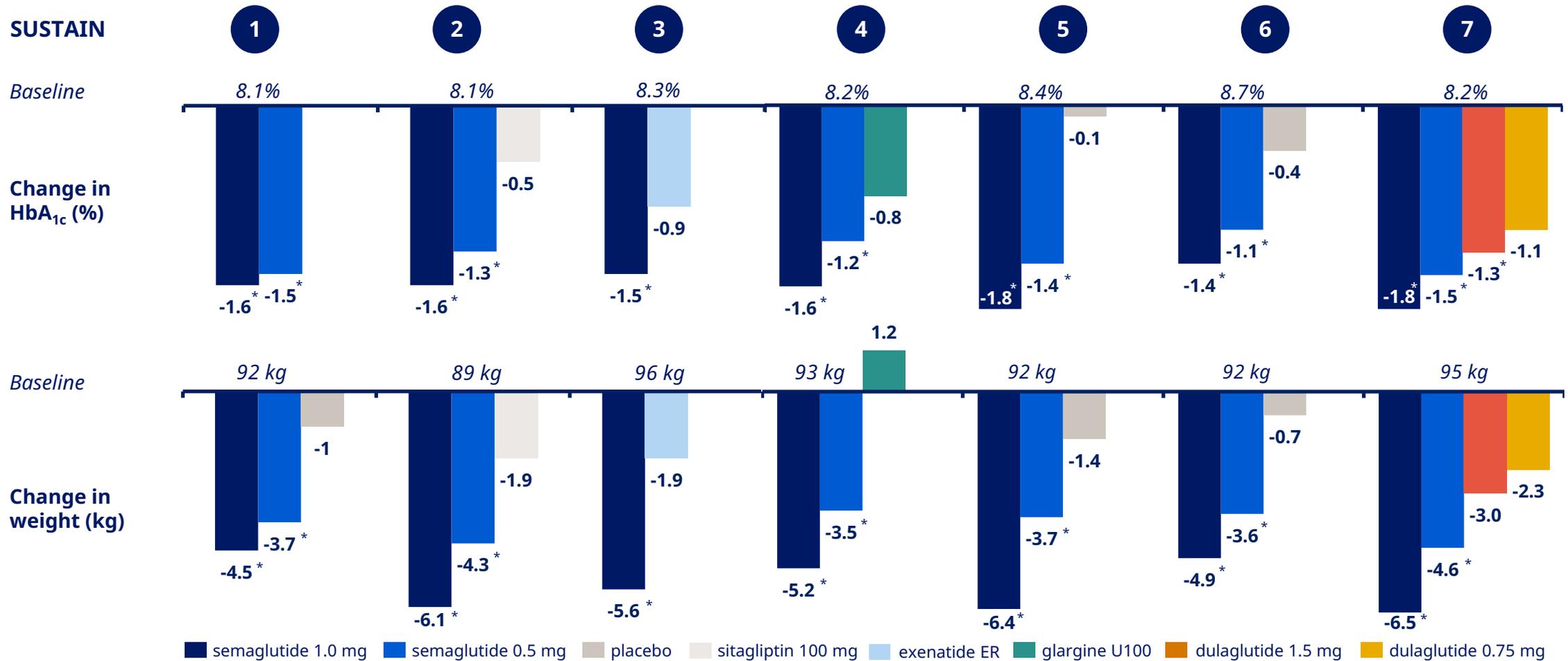


GLP-1 share of total estimated diabetes prescriptions¹ is 5%



¹ The estimated GLP-1 share of prescriptions is based on volume packs from IQVIA. Volume packs are converted into full-year patients/prescriptions based on WHO assumptions for average daily doses or if not available, Novo Nordisk assumptions
 Source: IQVIA MAT volume (Spot rate), May 2023

SUSTAIN trials with subcutaneous semaglutide



* Statistically significant; SUSTAIN 1: QW sema vs placebo in drug-naïve people with T2D; SUSTAIN 2: QW sema vs sitagliptin 100 mg QD in people with T2D added to 1-2 OADs; SUSTAIN 3: QW sema vs QW exenatide ER 2.0 mg in people with T2D added to 1-2 OADs; SUSTAIN 4: QW sema vs QD insulin glargine in people with T2D added to 1-2 OADs; SUSTAIN 5: QW sema vs placebo in people with T2D added to insulin; SUSTAIN 6: QW sema vs placebo, added to standard-of-care; SUSTAIN 7: QW sema vs QW dulaglutide 75 mg and 150 mg in people with T2D added to 1-2 OADs: ER: Extended-release; QW: once-weekly; QD: once-daily; sema: semaglutide; T2D: type 2 diabetes, OAD: oral anti-diabetics

Semaglutide 2.0 mg s.c. brings patients needing treatment intensification to target

Phase 3 trial, SUSTAIN FORTE, completed and label application approved in the US and the EU

Estimand	Trial product estimand		Treatment policy estimand	
	2.0 mg	1.0 mg	2.0 mg	1.0 mg
Once-weekly semaglutide	2.0 mg	1.0 mg	2.0 mg	1.0 mg
HbA _{1c} reduction	2.2%*	1.9%	2.1%*	1.9%
Body weight reduction (kg)	6.9*	6.0	6.4	5.6
HbA _{1c} < 7.0% ¹	68%	58%		

¹ ADA recommended treatment target

*Statistically significant

S.c.: subcutaneous; Sema: Semaglutide; T2D: Type 2 diabetes

Data from SUSTAIN FORTE



Semaglutide 2.0 mg showed superior HbA_{1c} reduction with more patients reaching target¹ versus semaglutide 1.0 mg

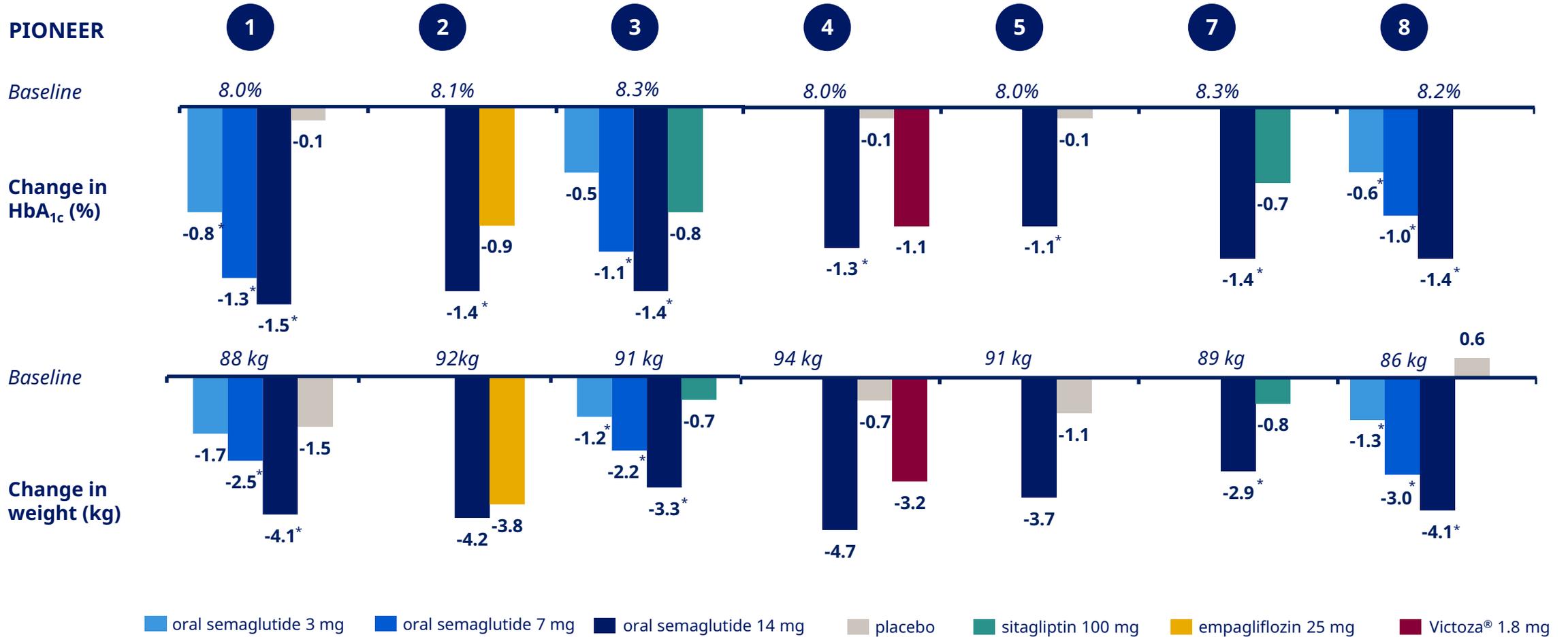


Semaglutide 2.0 mg appeared to have a safe and well-tolerated profile
Gastrointestinal adverse events were similar for semaglutide 1.0 mg and 2.0 mg



Label expansion application approved in the US and the EU

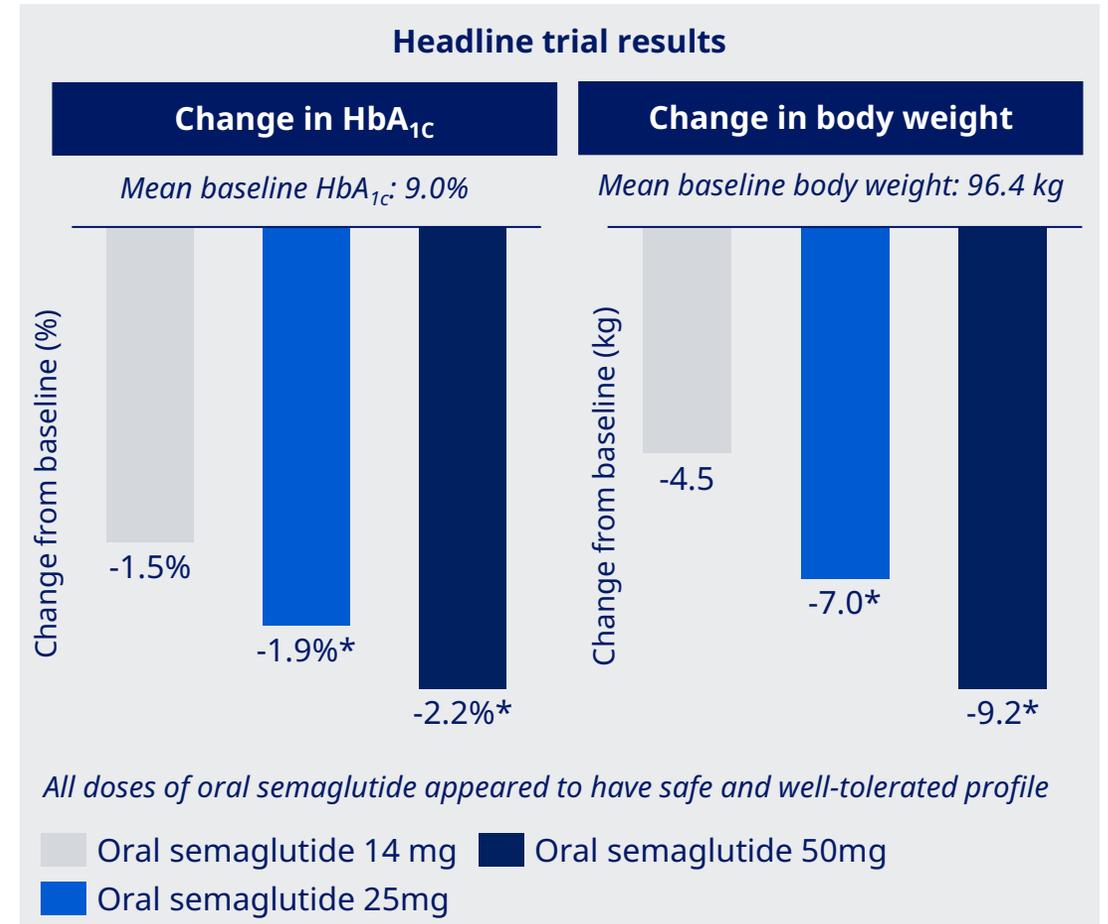
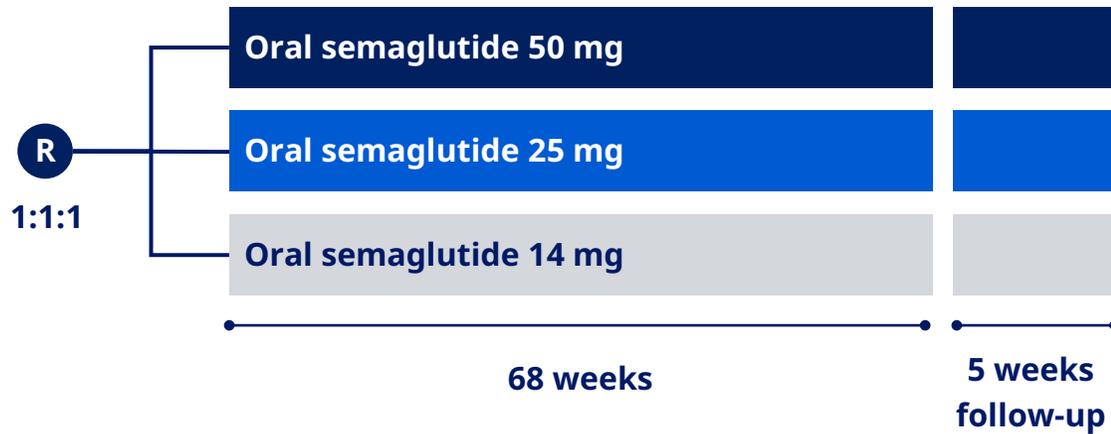
PIONEER programme with oral semaglutide



Note: PIONEER 9 and PIONEER 10 were Japanese studies and PIONEER 6 was a CV safety study. * Statistically significant based on the hypothetical treatment policy; PIONEER 1: QD oral sema vs placebo in people with T2D treated with diet and exercise only; PIONEER 2: QD oral sema vs empagliflozin 25 mg in people with T2D; PIONEER 3: QD oral sema vs sitagliptin 100 mg in people with T2D; PIONEER 4: QD oral sema vs Victoza® 1.8 mg and placebo in people with T2D; PIONEER 5: QD oral sema vs placebo in people with T2D and moderate renal impairment; PIONEER 7: QD oral sema using a flexible dose adjustment based on clinical evaluation vs sitagliptin 100 mg in people with T2D; PIONEER 8: Effects of QD oral sema vs placebo in people with long duration of T2D treated with insulin ER: Extended-release; QW: once-weekly; QD: once-daily; oral sema: oral semaglutide; T2D: type 2 diabetes, OAD: oral anti-diabetics; CV: Cardiovascular

PIONEER PLUS achieved its primary endpoint and demonstrated statistically significant HbA_{1c} reduction vs oral sema 14 mg

Oral semaglutide 25 mg and 50 mg vs 14 mg in subjects with T2D



Primary endpoint:

- Change from baseline to week 52 in HbA_{1c}

Secondary endpoint:

- Change from baseline to week 52 in body weight

Inclusion criteria (1,606 participants):

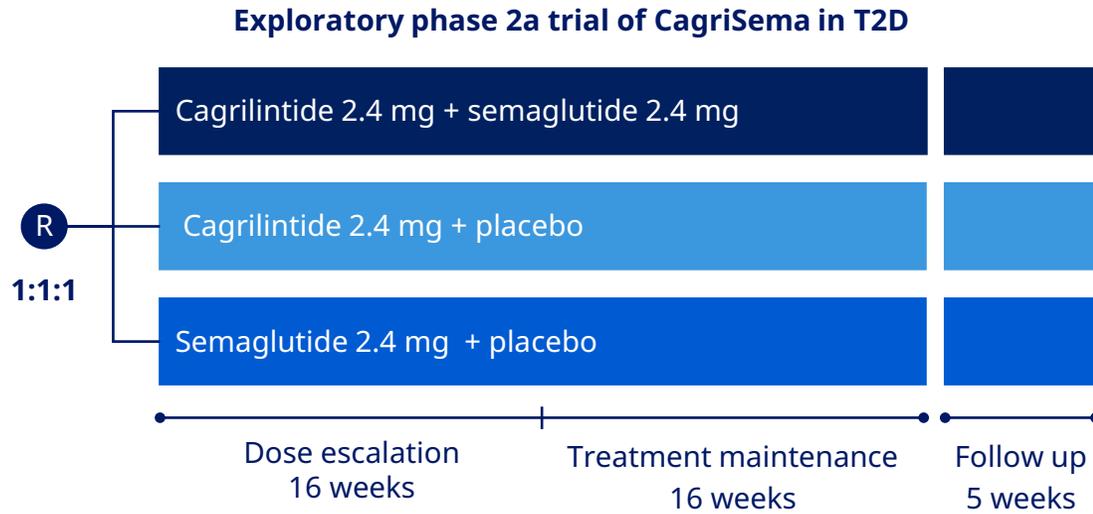
- Type 2 Diabetes
- HbA_{1c} 8.0 - 10.5%
- BMI ≥25 kg/m²
- Stable dose of 1-3 OADs (metformin, SU, SGLT-2i or DPP-4i¹)

*Statistically significant/superior vs oral semaglutide 14 mg; ¹DPP-4i terminated at randomization

T2D: Type 2 diabetes; HbA_{1c}: Glycated haemoglobin; BMI: Body Mass Index; OADs: Oral antidiabetic drugs; SU: Sulfonylurea; SGLT-2i: Sodium-glucose cotransporter-2 inhibitors; DPP-4i: dipeptidyl peptidase-4 inhibitors

Note: Trial product estimands shown; Trial objective: To compare the safety and efficacy of 25 and 50 mg oral semaglutide with 14 mg oral semaglutide once daily in people with type 2 diabetes

Phase 2 trial for CagriSema in people with type 2 diabetes was successfully completed in Q3 2022

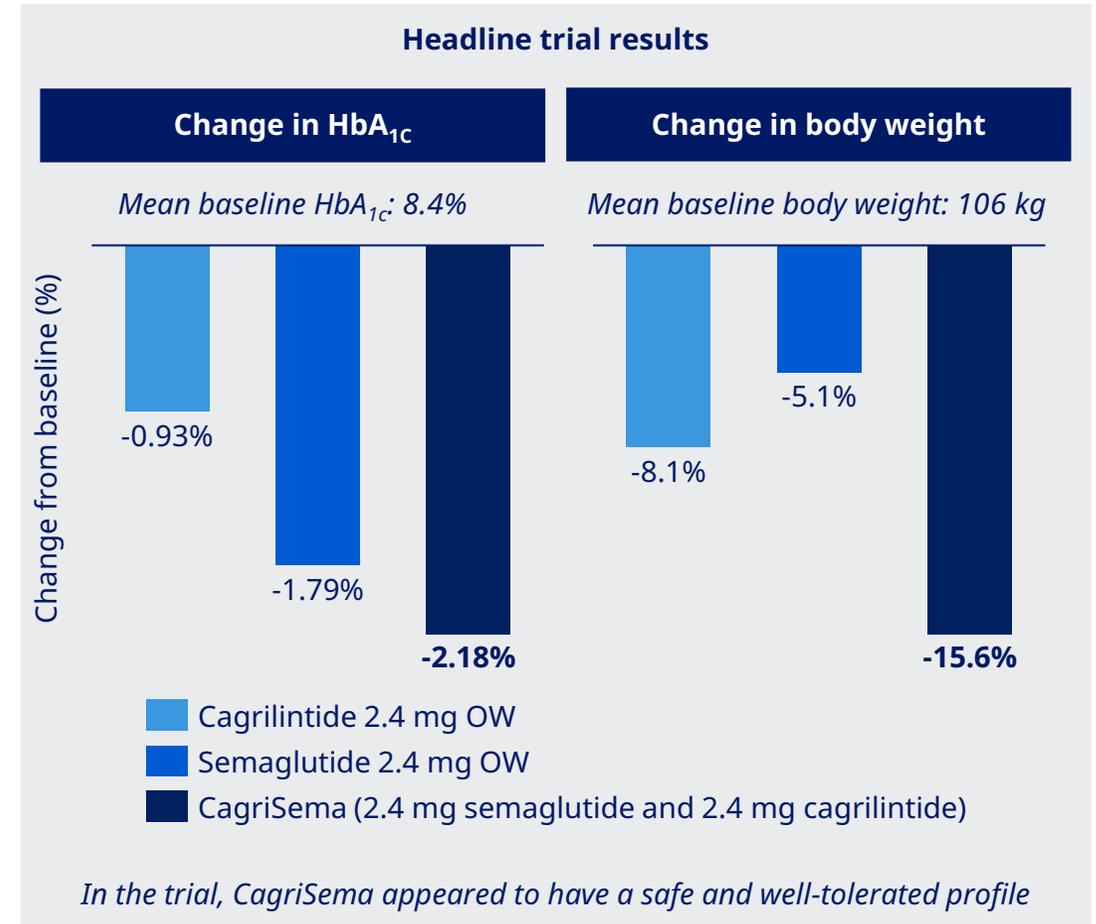


Primary endpoint:

Change from baseline (week 0) to week 32 in HbA_{1c}

Inclusion criteria (92 people):

- Type 2 diabetes
- HbA_{1c} 7.5–10.0%
- Metformin +/- SGLT2i
- BMI ≥27 kg/m²



Note: Trial product estimands shown; Trial objective: To compare the effect of co-administered (separate *injections*) semaglutide and cagrilintide versus semaglutide in subjects with T2D inadequately controlled on metformin with or without SGLT2 inhibitor
 T2D: Type 2 diabetes, BMI: body mass index; HbA_{1c}: Glycosylated haemoglobin; OW: Once-weekly

Phase 3 trial programme with CagriSema in type 2 diabetes, REIMAGINE, is expected to initiate in Q3 2023

CagriSema characteristics



CagriSema is a fixed dose combination of injectable cagrilintide 2.4 mg and semaglutide 2.4 mg



Phase 3a programme with CagriSema in T2D:

- Aims to confirm efficacy and safety across four global trials
- Expected completion during 2025/2026

Global phase 3 trial programme

REIMAGINE 1
vs placebo

- 180 patients with T2D
- 40-week vs. placebo
- Primary endpoint: HbA_{1c}

REIMAGINE 2
FDC trial

- 2700 patients with T2D, MET +/- SGLT-2i
- 68-week vs. semaglutide, cagrilintide and placebo
- Primary endpoint: HbA_{1c} and bodyweight

REIMAGINE 3
Add-on to insulin

- 270 patients with T2D, Basal insulin +/- MET
- 40-week vs. placebo
- Primary endpoint: HbA_{1c}

REIMAGINE 4
H2H vs tirzepatide

- 1000 patients with T2D, MET +/- SGLT-2i
- 68-week vs. tirzepatide
- Primary endpoint: HbA_{1c} and bodyweight

REDEFINE 3
CVOT – shared with obesity programme

- 4000 patients¹
- Event driven
- Primary endpoint: 3-point MACE



¹ 65% of patients with T2D, 35% without T2D

FDC: Fixed dose combination; T2D: Type 2 Diabetes; H2H: Head-to-head; CVOT: Cardiovascular outcomes trial; 3P: Three point; MACE: Major adverse cardiovascular event; MET: Metformin; SGLT-2i: sodium-glucose co-transporter-2 inhibitor

Note: CagriSema is a fixed dose combination of injectable cagrilintide 2.4 mg and injectable semaglutide 2.4 mg

Novo Nordisk global insulin market leadership at 45.7% and the global insulin volume market declined by 1.9%

North America Operations

Market growth: -3.0%
MS: 37.9%
MS gain/loss¹: -0.5%-p
Sales growth: -25%

USA

Market growth: -3.2%
MS: 37.5%
MS gain/loss¹: -0.3%-p
Sales growth: -26%

Global

Market growth: -1.9%
MS 45.7%
MS gain/loss¹: -1.4%-p
Sales growth: -7%

International Operations

Market growth: -1.5%
MS: 48.5%
MS gain/loss¹: -1.8%-p
Sales growth: -2%

EMEA

Market growth: -4.0%
MS: 47.1%
MS gain/loss¹: -0.8%-p
Sales growth: -1%

RoW

Market growth: -4.0%
MS: 57.8%
MS gain/loss¹: 0.7%-p
Sales growth: 9%

Region China

Market growth: 9.6%
MS: 43.3%
MS gain/loss¹: -7.1%-p
Sales growth: -11%

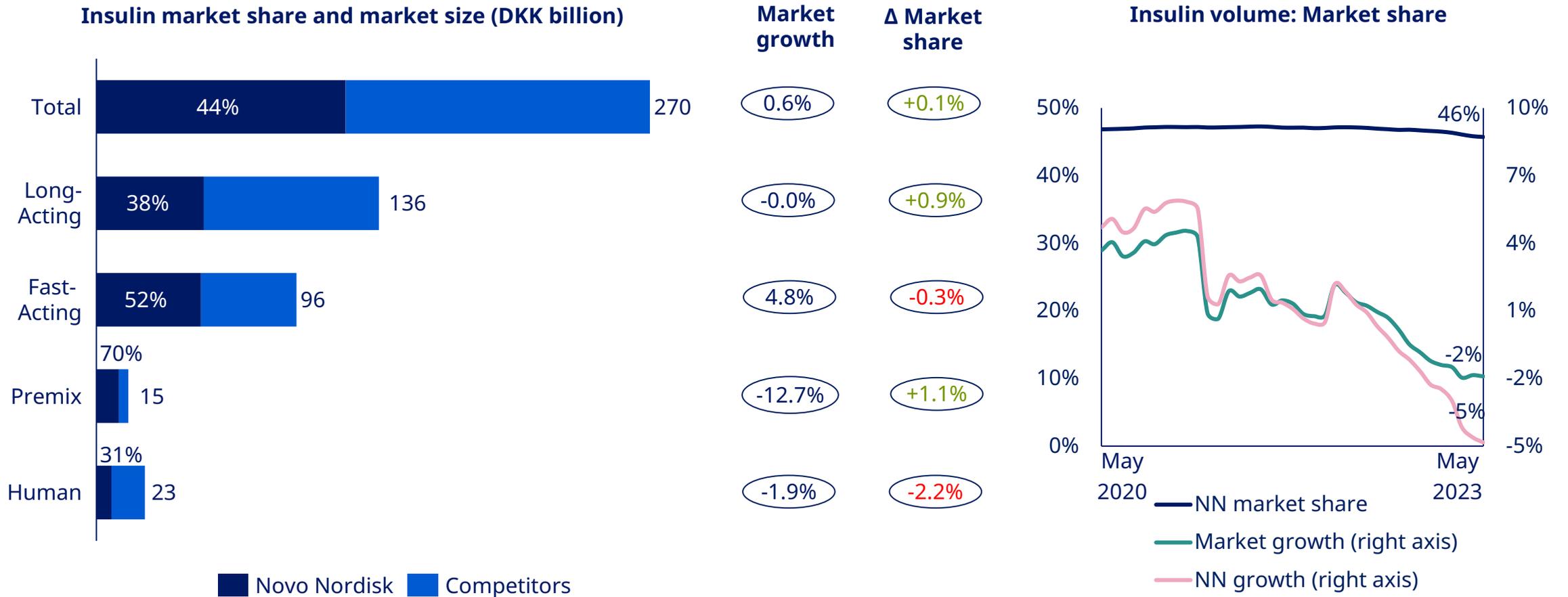
Source: IQVIA MAT, May 2023 volume figures

Note: Sales growth for first six months of 2023 at constant exchange rates; Market shares are for Novo Nordisk, market growth for total insulin market

¹MS gain/loss compared with May 2022 reported MS

EMEA: Europe, Middle East and Africa; MS: Market share; RoW: Asia Pacific; Latin America; MS: Market Share; Region China covers Mainland China, Taiwan, and Hong Kong

Insulin market size and volume share of growth and market share



Source: IQVIA, May 2023, LHS graph – Value, RHS Graph - Volume, MAT, all countries; Share of growth not depicted due to too high numbers ; NN: Novo Nordisk

Once-weekly Insulin icodec, a basal insulin intended for once-weekly treatment, may reduce the disease burden for patients

Bringing the strongest value proposition to market



Reduction of disease burden with once-weekly treatment



Tested for superior HbA_{1c} and TiR vs glargine and standard-of-care and similar safety profile of Tresiba®



App-based offering and connected smart pen to optimise titration and support compliance and data collection

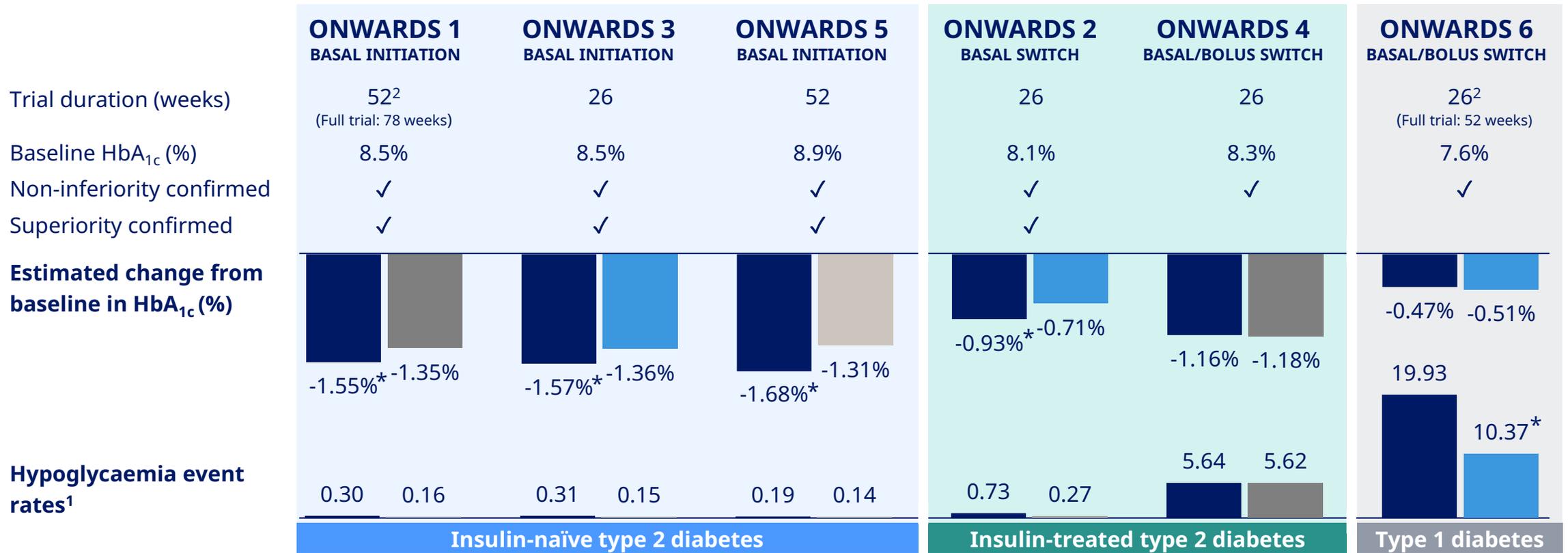


Reduced environmental footprint

Insulin icodec phase 3 programme has been completed

ONWARDS 1	984 people insulin-naïve, 78-week, vs insulin glargine U100
ONWARDS 2	526 people on basal, 26-week, vs insulin degludec
ONWARDS 3	588 people insulin-naïve, 26-week, vs insulin degludec
ONWARDS 4	582 people on both basal and bolus, 26-week, vs insulin degludec
ONWARDS 5	1,085 people, insulin-naïve using app-based dosing recommendations, 52-week
ONWARDS 6	582 people, type 1 diabetes using bolus insulin, 52-week, vs insulin degludec
Submission	Insulin Icodec has been submitted in US, EU and China in Q2 2023

Once-weekly insulin icodec appeared to be effective and to have a safe profile in the phase 3 ONWARDS programme



In people with type 2 diabetes: No statistical difference in estimated hypoglycaemia events

Once-weekly insulin icodec
 Once-daily insulin glargine U100
 Once-daily insulin degludec
 Once-daily basal insulins

*Statistically significant. 1 Severe or clinically significant hypoglycaemia events (blood glucose <3 mmol/L) per patient year, included for end of trial/end main phase in-trial. 2 Duration refers to trial main phase. ONWARDS 1: QW insulin icodec vs QD insulin glargine U100 both with non-insulin anti-diabetic treatment in insulin-naïve people with T2D; ONWARDS 2: QW insulin icodec vs QD insulin degludec in people with T2D switching from a QD insulin; ONWARDS 3: QW insulin icodec vs QD insulin degludec in insulin-naïve people with T2D; ONWARDS 4: QW insulin icodec vs QD insulin degludec both with mealtime insulin in people with T2D treated with basal and bolus insulin; ONWARDS 5: QW insulin icodec vs QD basal insulin with an app providing dosing recommendation in insulin-naïve people with T2D; ONWARDS 6: QW insulin icodec vs QD insulin degludec both with mealtime insulin in people with T1D. T1D: Type 1 diabetes; T2D: Type 2 diabetes. Note: Overview refer to primary end-points in main phases of trials

Phase 3 trial programme, COMBINE, has been initiated with IcoSema

IcoSema characteristics



IcoSema is a fixed dose combination of insulin icodec and semaglutide

- Simple and convenient once-weekly injection



Phase 3a programme with IcoSema

- Aims to confirm efficacy and safety across three global trials
- Expected completion during 2024

Focused phase 3 trial programme

COMBINE 1 Post-basal insulin

- **Initiated in Q2 2022**
- **1290 patients*** previously on basal-insulin
- **52-week** vs. insulin icodec
- **Prim. endpoint:** HbA_{1c} superiority
- **Sec. endpoint:** Weight and hypo superiority

COMBINE 2 Post-GLP-1

- **Initiated in Q2 2022**
- **680 patients*** previously on GLP-1 RA
- **52-week** vs. semaglutide 1.0mg
- **Primary endpoint:** HbA_{1c} superiority

COMBINE 3 Basal insulin intensification

- **Initiated in Q4 2021**
- **680 patients*** previously on basal insulin
- **52-week** vs. insulin glargine + insulin aspart
- **Prim. endpoint:** HbA_{1c} non-inferiority
- **Sec. endpoint:** Weight and hypo superiority

2021

2022

2023

2024

Obesity care

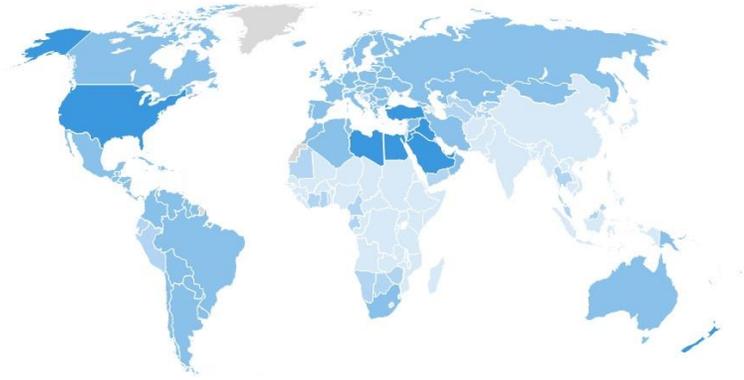
Obesity disease background	59
Obesity market development	63
Innovation	64



MICHAEL PETERSEN
Michael lives with obesity
Denmark

More than 764 million people are living with obesity, yet the narrative is changing

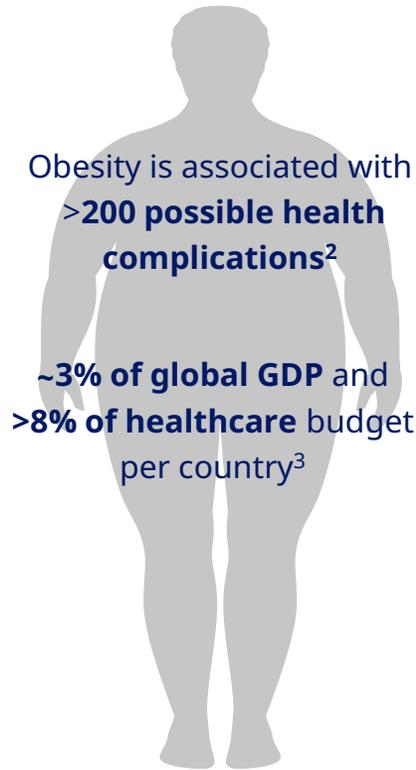
Obesity is a global epidemic affecting more than 764 million people¹



Obesity prevalence (%)



Obesity impacts both the individual and society at large



The obesity narrative is changing



Media: Shift to more empathetic tone



Healthcare professionals: Increased recognition among societies within healthcare



Policymakers: More government recognition

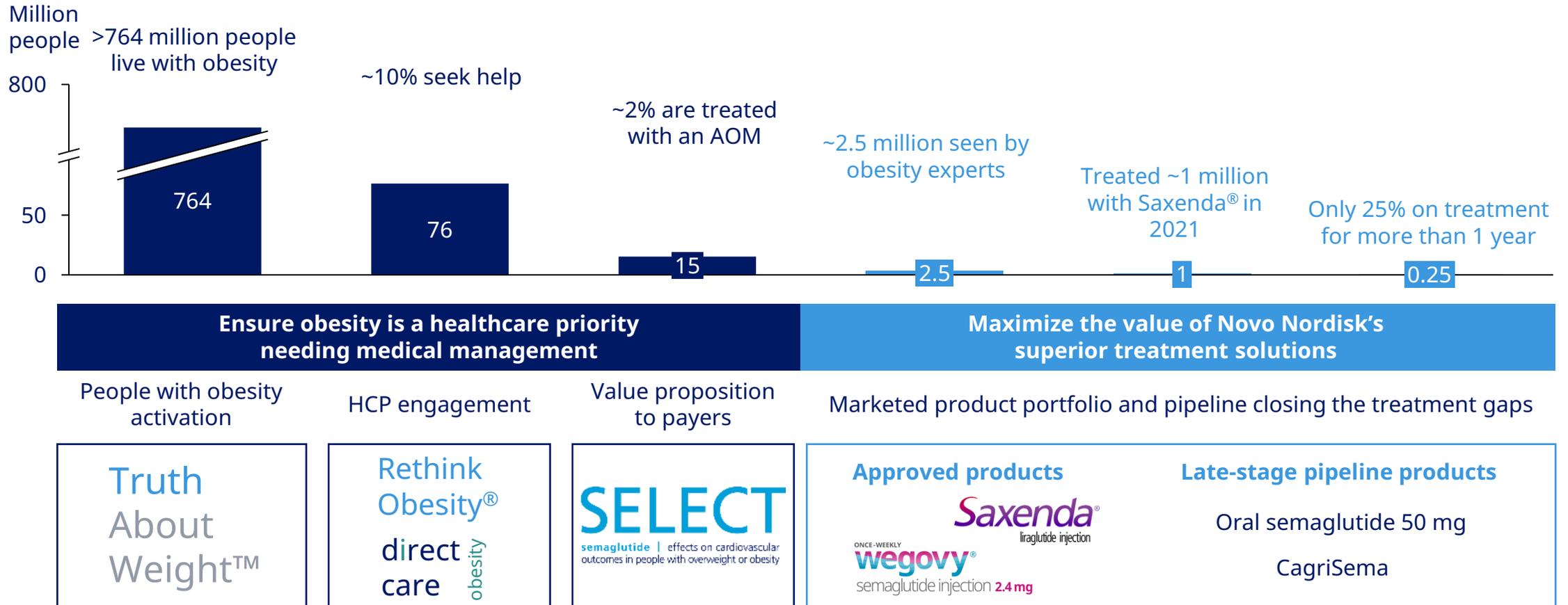


People with obesity: Patient groups are encouraging PwO to seek treatment

Note: Obesity is defined as BMI > 30; PwO: People with obesity

¹ World Obesity Atlas 2022 ² Yuen M., Earle R., Kadambi N., et al. A systematic review and evaluation of current evidence reveals 236 Obesity-Associated Disorders (OBAD). Massachusetts General Hospital & George Washington University. [Poster presentation]; ³ Dobbs R, Sawers C, Thompson F, et al. Overcoming Obesity: An Initial Economic Analysis. McKinsey Global Institute.

Patient-centric strategy designed to activate more people with obesity, drive HCP engagement, and improve market access



HCP: Healthcare providers; AOM: Anti-obesity medication; CagriSema: Cagrilintide in combination with semaglutide
 Source: World Obesity Atlas 2022; IQVIA AOM TRx 12m PwO (People with Obesity); Market Research

Large opportunity for activating more people with obesity to seek treatment and increasing the number of prescribers

Wegovy® patient characteristics in the US



77%
of patients **new to anti-obesity medication**¹

81%
of patients are **female**

37.5
Average BMI

30%
of patients have **≥3 co-morbidities**

Of the people with overweight or obesity in the US, almost 90% have a weight-related comorbidity

140
million people with a
BMI > 27

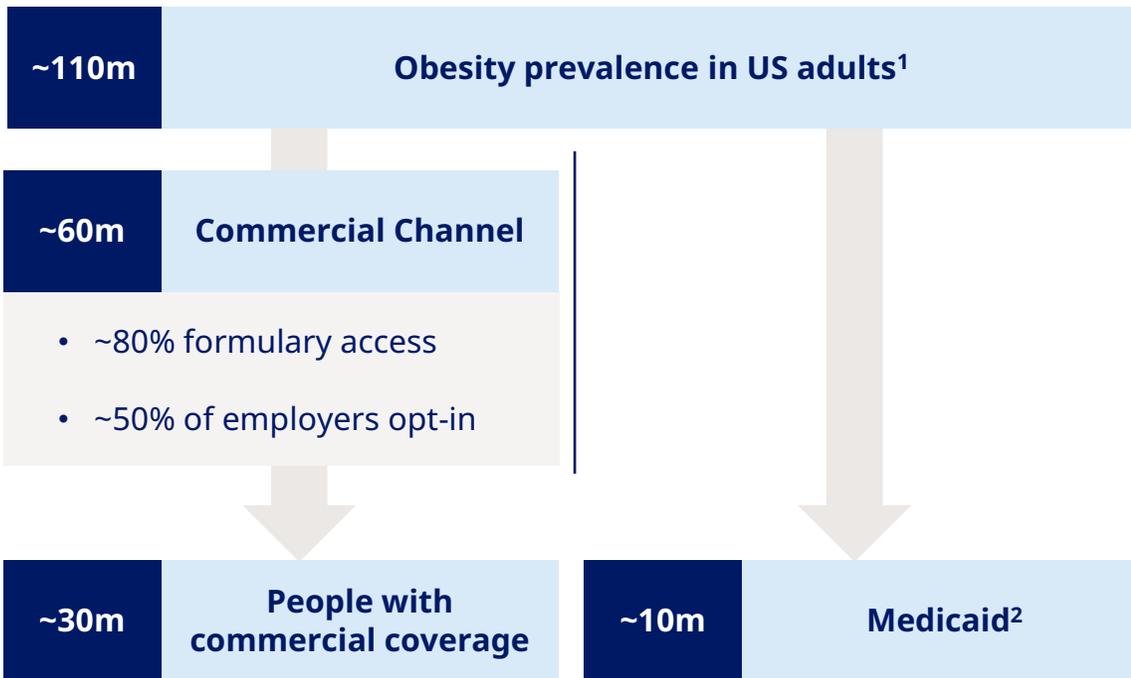
BMI (million of people)	27-30 (43)	30-35 (52)	35-40 (25)	≥40 (20)	Total (140)
No obesity-related comorbidity ²	7 (16%)	6 (12%)	2 (9%)	2 (8%)	17 (12%)
Any obesity-related comorbidity	36 (84%)	46 (88%)	23 (92%)	18 (90%)	123 (88%)
Hereof metabolic syndrome ³	21 (48%)	26 (50%)	14 (56%)	12 (61%)	72 (52%)
Hereof ASCVD	4 (8%)	5 (10%)	3 (10%)	2 (10%)	13 (9%)

¹Naïve to AOM treatment is based on total info in the database and not restricted to 12 months prior Wegovy® prescription ²Individuals without any of the following obesity related conditions: T2DM, Pre-diabetes, NASH, NAFLD, obstructive sleep apnea, osteoarthritis, PCOS, ASCVD, Heart failure, asthma, urinary incontinence, hypertension, chronic kidney disease stg. 3 or 4, musculoskeletal pain, dyslipidaemia, metabolic syndrome; ³ Metabolic syndrome defined as two or more of dyslipidaemia; hypertension; prediabetes OR type II diabetes

Source: Novo Nordisk real world research; National Health And Examination Survey (NHANES) cycles 2015-2016 and 2017-2018. BMI; Body mass index; ASCVD: Atherosclerotic cardiovascular disease

Patient access to anti-obesity medications is improving in both the US and IO

The ~45 million people having access to Wegovy® is nearly the number of people with diabetes in the US (~50 million)



Restricted reimbursement for Saxenda® is progressing

EXAMPLES



BMI ≥ 30
with two or more co-morbidities



BMI ≥ 35
With pre-diabetes and risk of CV



~60% coverage by private insurance, 20% of which includes restricted/unrestricted coverage



BMI ≥ 35
Or BMI ≥ 28 and one obesity related comorbidity

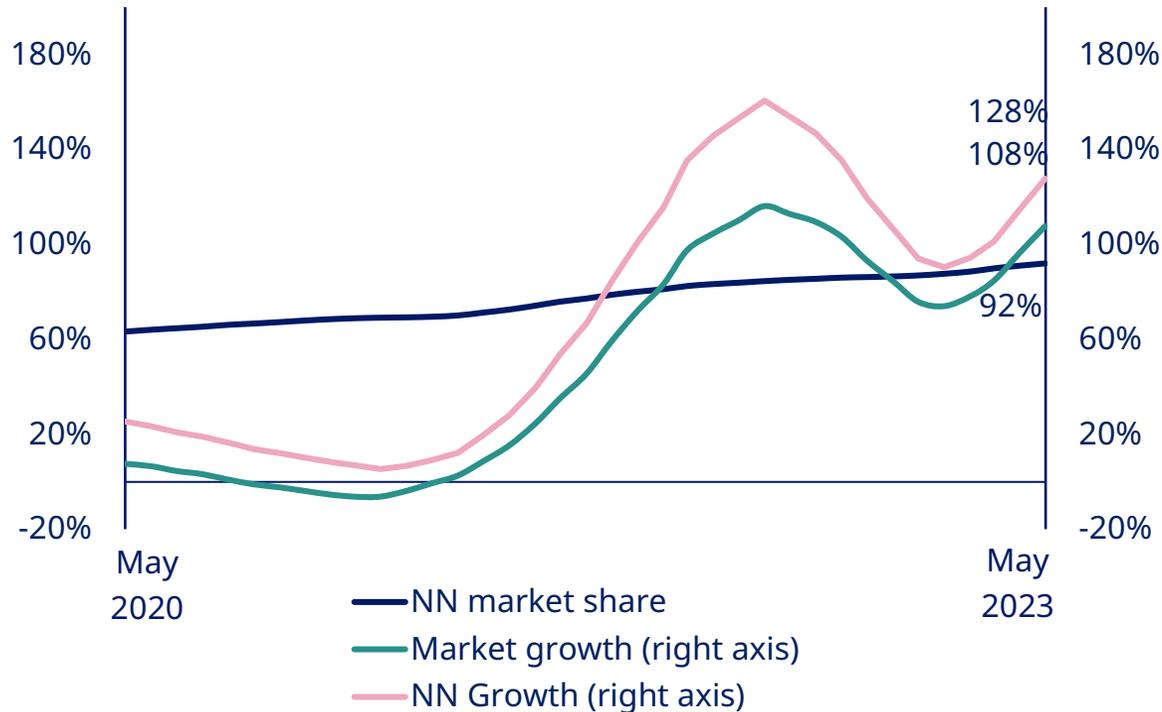
Note: Obesity is defined as BMI > 30.

¹ Prevalence: Adult obesity facts. Centers for Disease Control and Prevention, <https://www.cdc.gov/obesity/data/adult.html>; US Census Bureau. QuickFacts: United States. <https://www.census.gov/quickfacts/fact/table/US#viewtop>. Accessed Mar, 2021.;

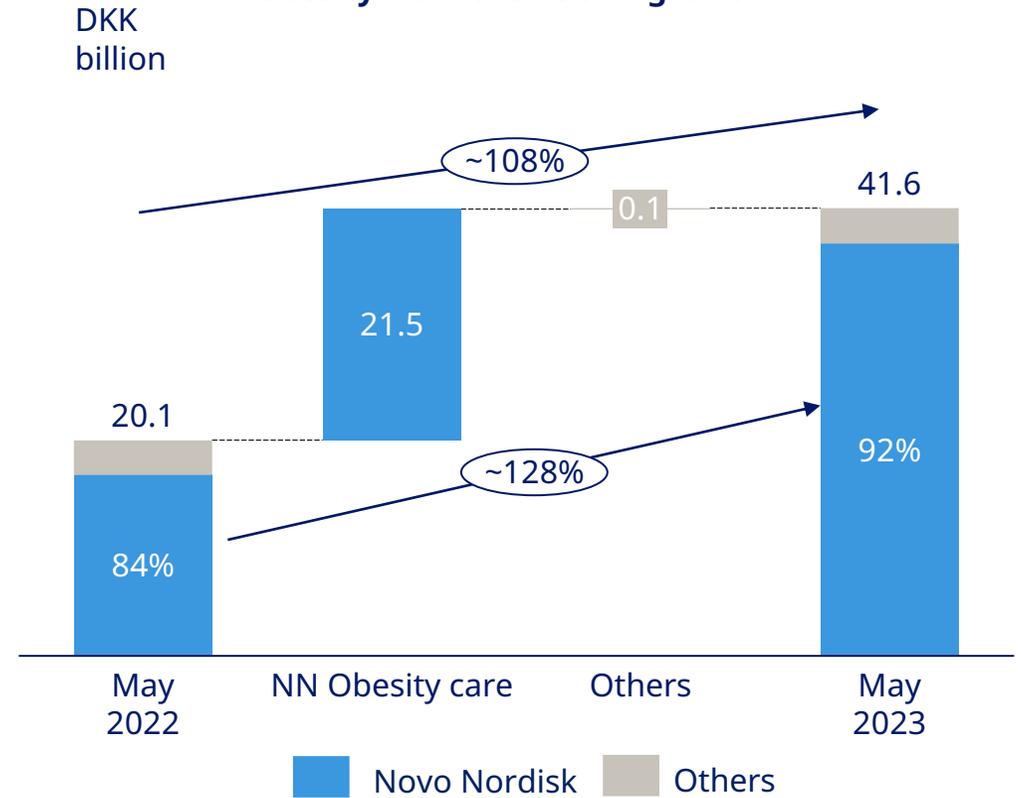
² Also includes DoD and government employees

Global obesity market growth has been accelerating with Novo Nordisk capturing the majority of growth

Obesity market growth and Novo Nordisk value market share

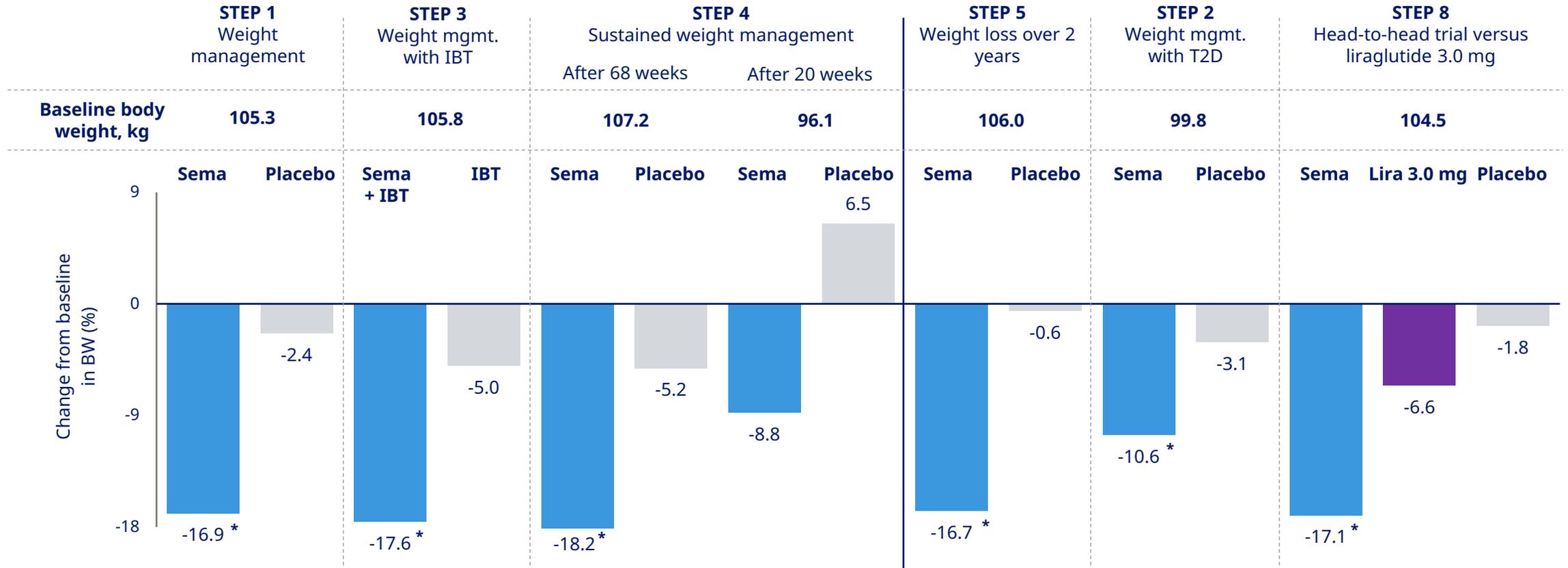


Obesity market size and growth



Source: IQVIA, May 2023 Value MAT, all countries; Share of growth not depicted due to high growth

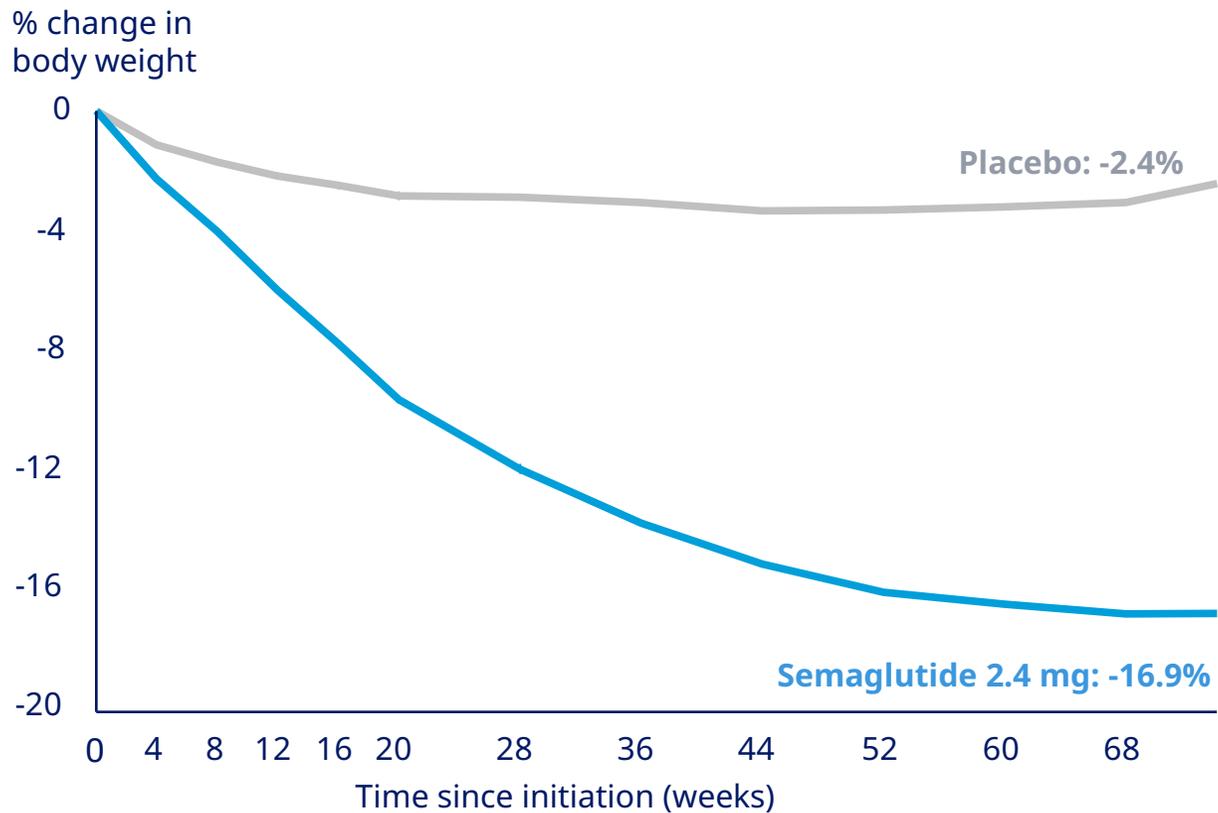
Across the STEP 1, 3, and 4 trials, a weight loss of 16.9% to 18.2% was reported for people treated with semaglutide 2.4 mg



* P-value <0.0001, based on the trial product estimand (secondary statistical approach): treatment effect if all people adhered to treatment and did not initiate other anti-obesity therapies
 IBT: Intensive behavioural therapy; Sema: Semaglutide; Lira: Liraglutide; BW: Body weight; T2D: Type 2 diabetes; Mgmt.: Management

In STEP 1, people treated with semaglutide had a superior weight loss of up to 16.9%

The pivotal STEP 1 trial showed greater than 16% weight loss



Data from STEP 1



- Average age 46
- 74.1% women
- Average BMI - 37.9 kg/m²



Improvements in lipid profile as well as C-reactive protein

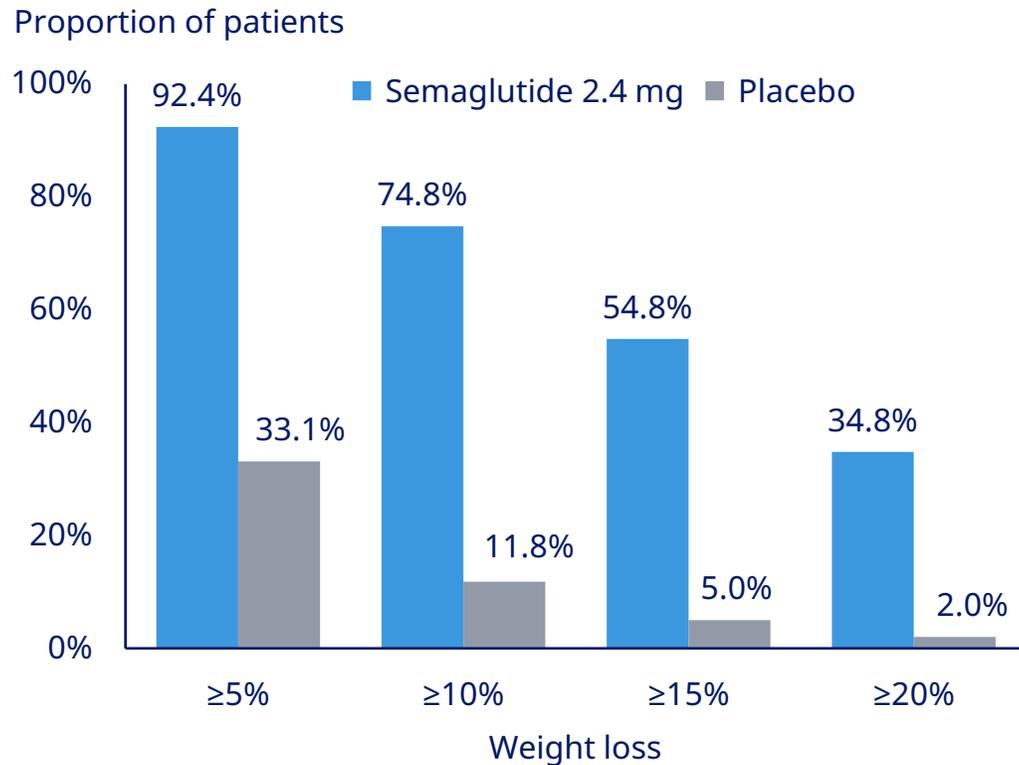


Semaglutide improved health-related quality of life as measured by SF-36 and IWQoL-lite-CT

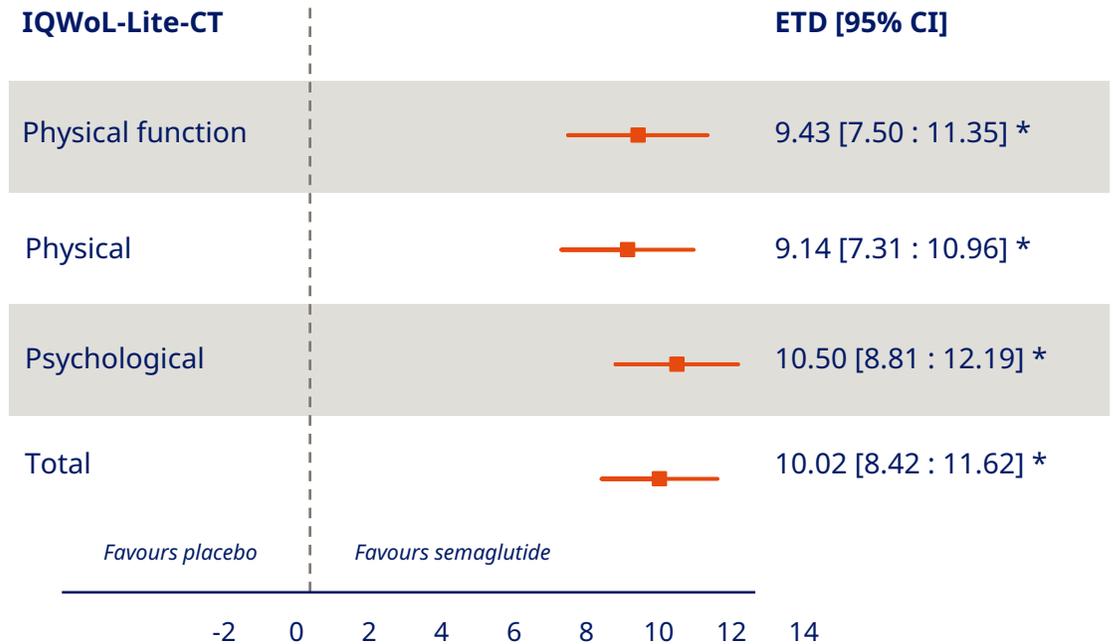
Change in body weight in % depicts observed means since time of randomisation; trial product estimand.
BMI: body mass index; SF-36: Short Form (36) Health Survey; IWQoL-lite-CT: Impact of Weight on Quality of Life-Lite questionnaire

In STEP 1, 34.8% of patients treated with sema reached $\geq 20\%$ weight loss and reported improved quality of life versus placebo

Categorical weight loss



Semaglutide 2.4 mg showed a statistically significant treatment difference versus placebo in the IWQoL-Lite-CT PRO

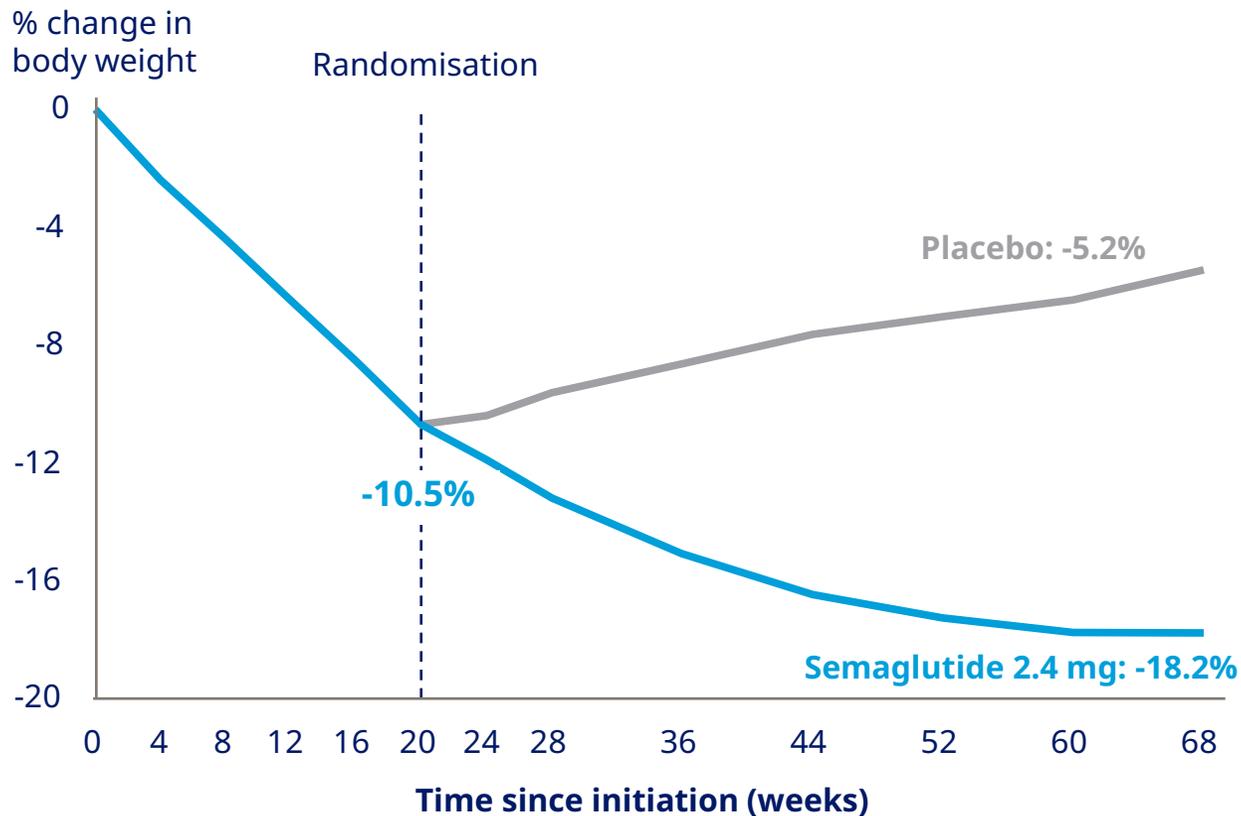


Descriptive statistic only. Based on the on-treatment data, i.e. data for people that are on-treatment at week 68

* statistically significant; p-values other than physical function were not controlled for multiplicity
 PRO: patient reported outcome; CI: confidence interval, ETD: estimated treatment difference, IWQoL-Lite-CT: Impact of Weight on Quality of Life-lite;

In STEP 4, people treated with semaglutide had a superior weight loss of up to 18.2%

STEP 4 showed significantly greater weight loss post run-in than placebo



Data from STEP 4



- Average age 46
- 79% women
- Average BMI – 38.4 kg/m²



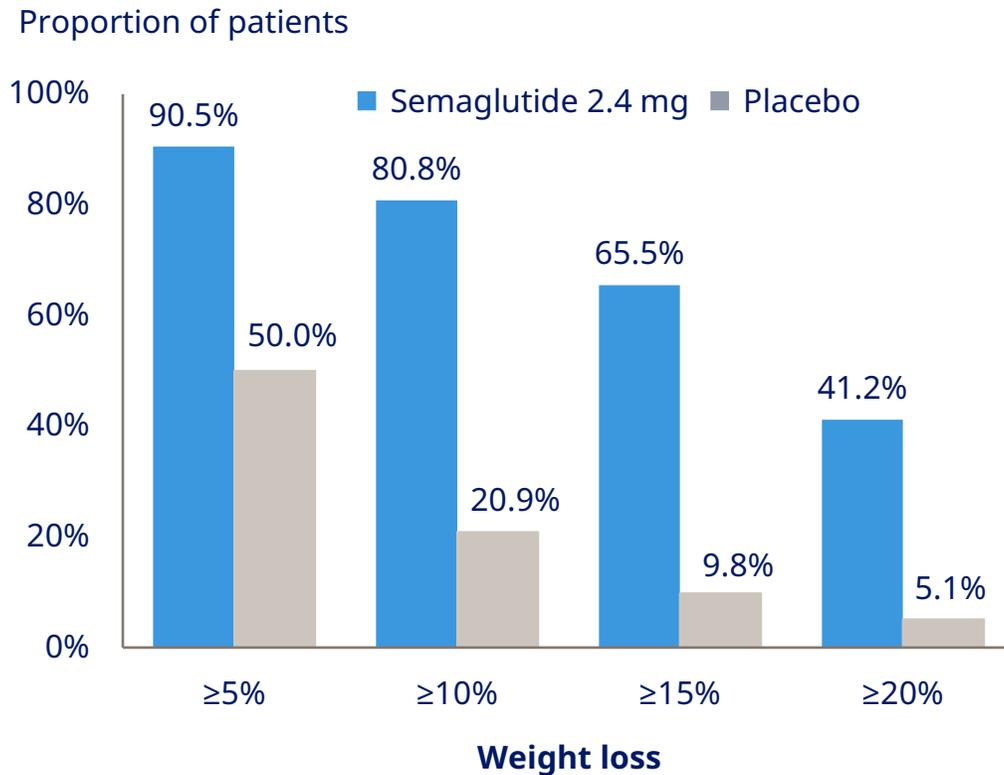
Trial highlights that obesity is a chronic disease requiring sustained treatment



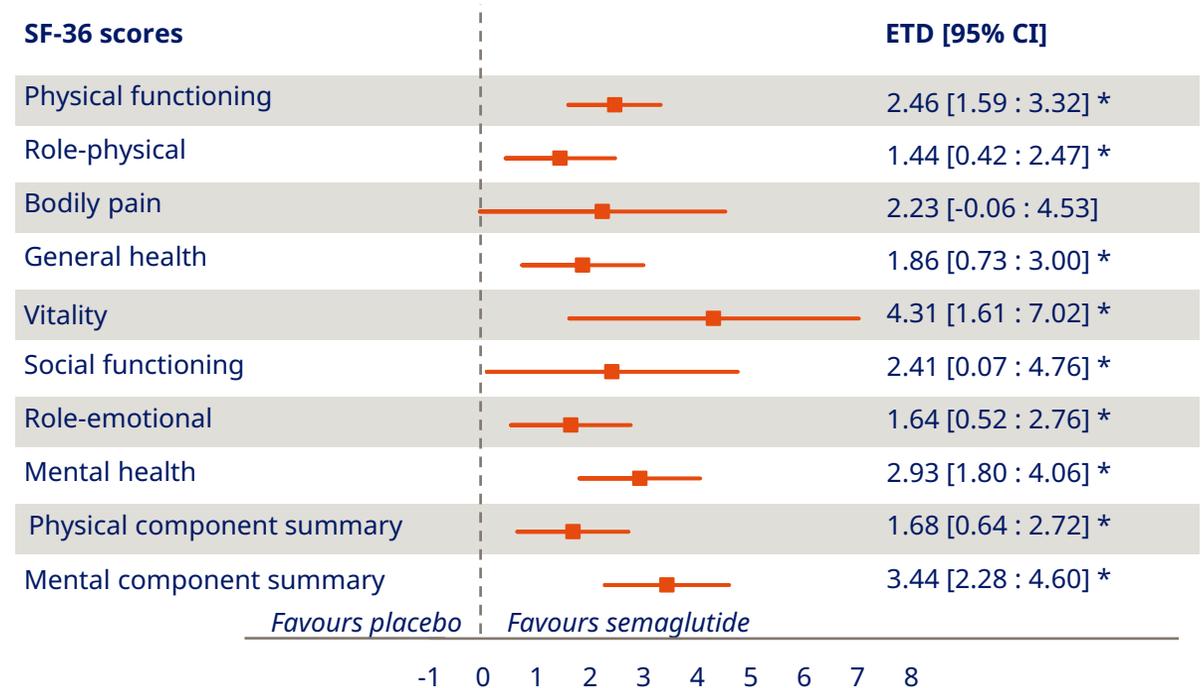
Improvements on a panel of cardiovascular risk markers

In STEP 4, 41.2% of patients treated with semaglutide reached ≥20% weight loss and reported improved quality of life vs placebo

Categorical weight loss



Semaglutide 2.4 mg showed a statistically significant treatment difference versus placebo in the SF-36 patient reported outcome

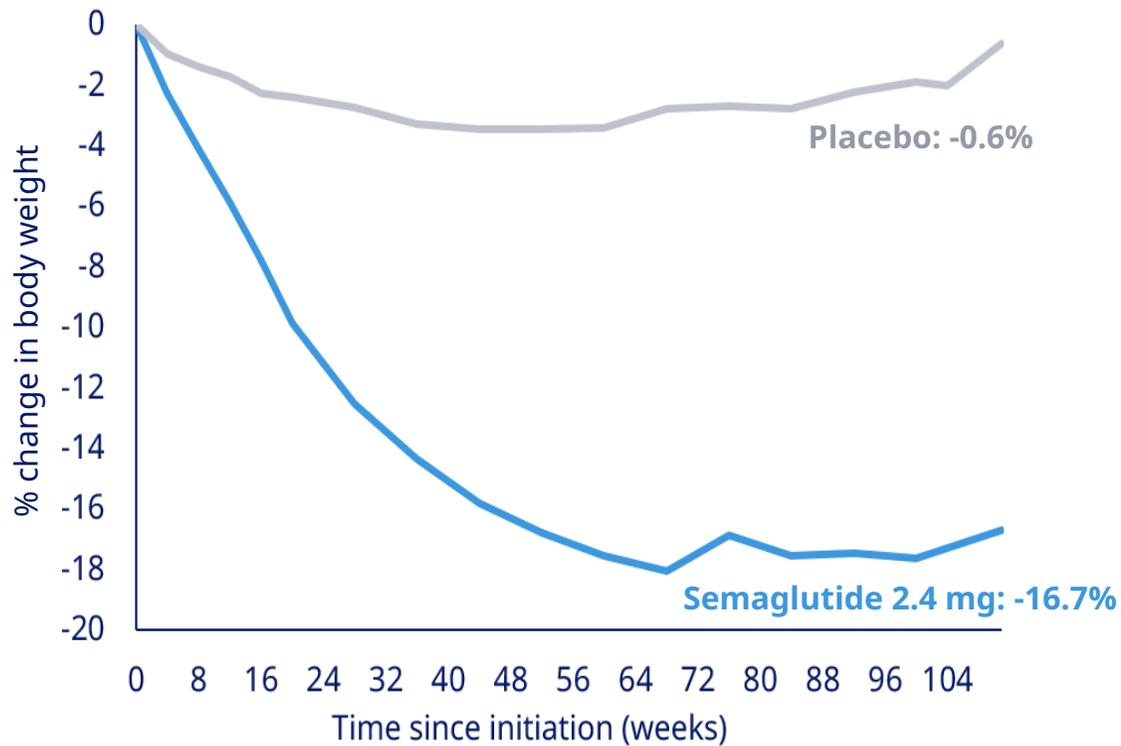


Descriptive statistics only. Based on the on-treatment data, i.e. data for people that are on-treatment at week 68

* statistically significant; p-values other than physical functioning were not controlled for multiplicity
 CI: confidence interval, ETD: estimated treatment difference, Sema: semaglutide, SF-36: Short Form (36) Health Survey

In STEP 5, people treated with semaglutide 2.4 mg sustained their weight loss over 2 years

Clinically relevant and sustained weight loss in patients with obesity or overweight



Change in body weight in % depicts observed means since time of randomisation; trial product estimand; mean body weight: 106.0 kg

Data from STEP 5



40% of patients lost $\geq 20\%$ of their body weight

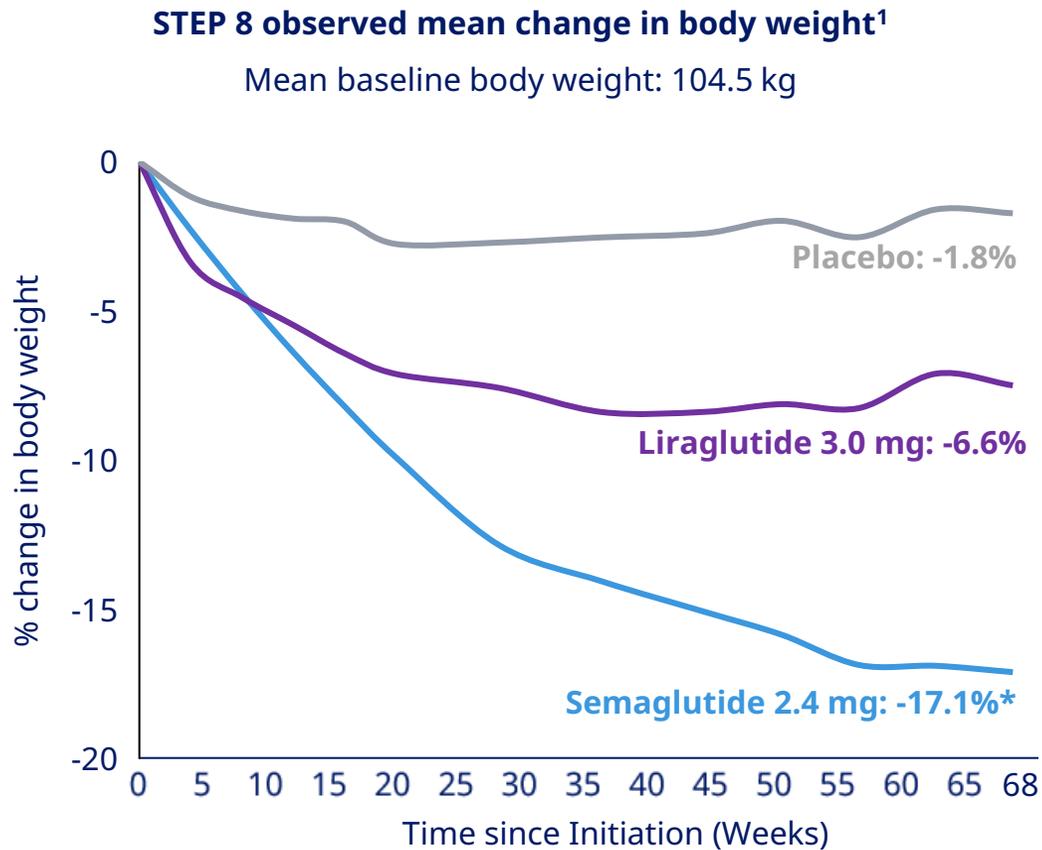


Semaglutide appeared to have a safe and well-tolerated profile



Improvements in lipid profiles as well as C-reactive protein

In STEP 8, semaglutide 2.4 mg showed weight loss of 17.1% compared to 6.6% with liraglutide 3.0 mg



Data from STEP 8

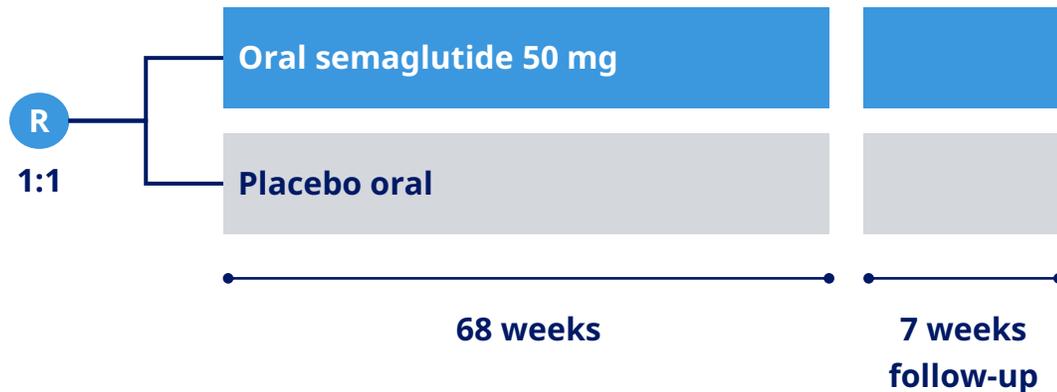
-  38.5% of patients lost $\geq 20\%$ of their body weight with semaglutide 2.4 mg vs 6.0% with liraglutide 3.0 mg
-  Liraglutide and semaglutide both appeared to have a safe and well-tolerated profile
-  Statistical significant improvements in systolic BP and CRP with semaglutide 2.4 mg vs liraglutide 3.0 mg

¹ Observed data for the on-treatment period; *p-value <0.0001 vs lira 3.0 mg; % change in body weight measured as change from baseline. Data shown is the trial product estimand; Sema: Semaglutide; Lira: Liraglutide

The phase 3a OASIS 1 trial investigating oral semaglutide 50 mg in people with overweight or obesity was completed in Q2 2023

OASIS 1 trial design

The trial included 660 patients with overweight or obesity



Inclusion criteria

- BMI: ≥ 27 kg/m² with ≥ 1 weight-related comorbidity, or
- BMI ≥ 30 kg/m²
- Weight-related comorbidities are hypertension, dyslipidaemia, obstructive sleep apnoea and CVD

Objective

To investigate superiority of oral semaglutide 50 mg vs. placebo on weight loss in people with overweight or obesity

Primary endpoint

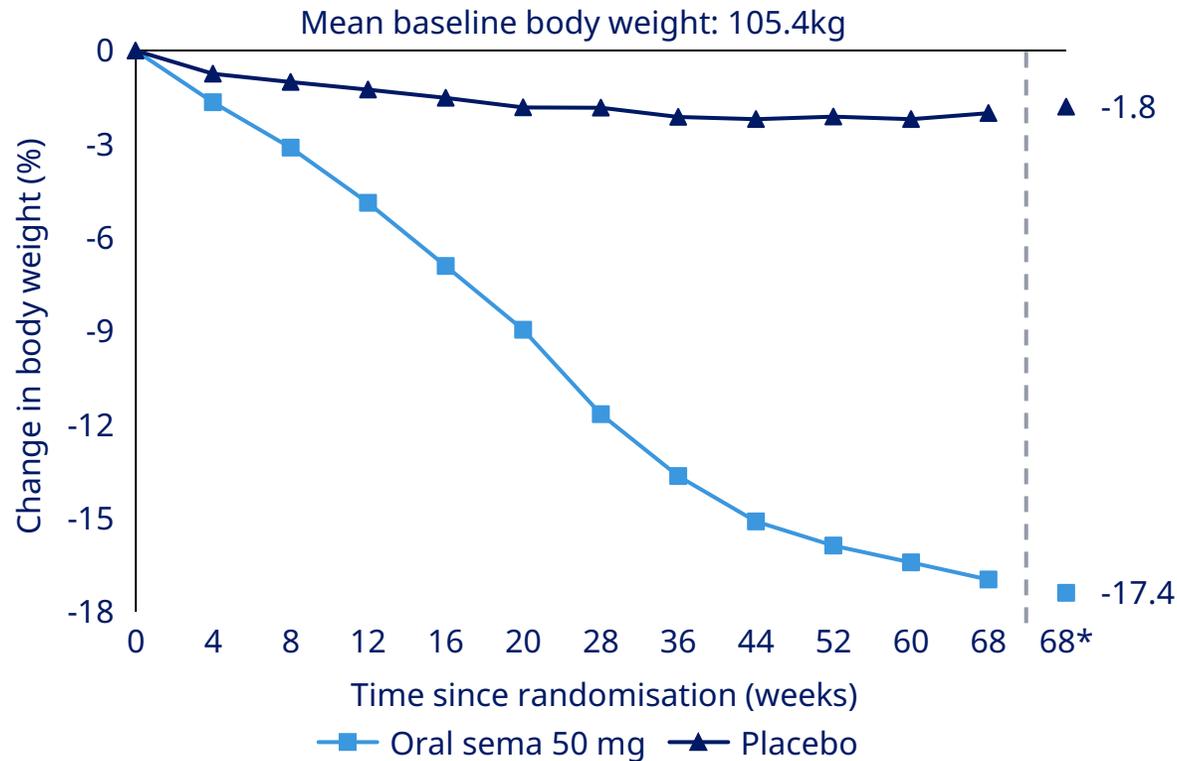
- Change in body weight from baseline (%)
- Body weight reduction $\geq 5\%$

OASIS programme scope

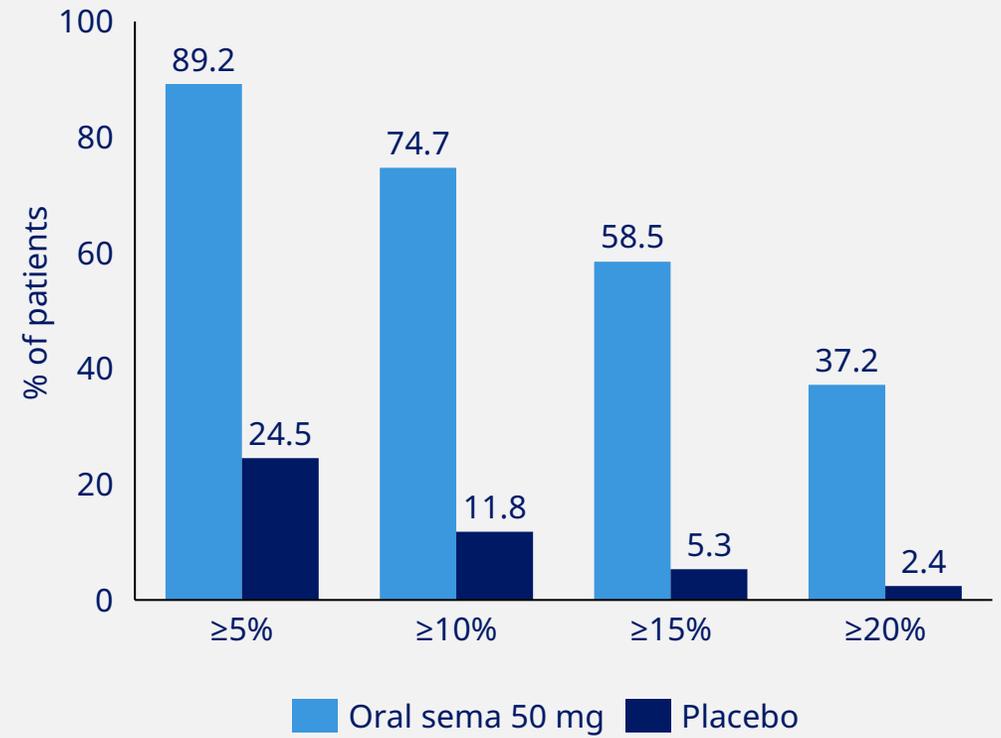
- Total of 1,000 patients across three trials: 1) A global (North America and Europe), 2) Japanese and 3) Chinese trial

Oral semaglutide 50 mg in overweight or obesity demonstrated superior body weight reduction in the OASIS 1 phase 3 trial

OASIS 1 showed significantly greater weight loss compared to placebo



Categorical weight loss % at week 68



Note: Observed data are on-treatment. Week 68* is the body weight change using the trial product estimand
Sema: Semaglutide

Phase 3 trial programme for oral semaglutide 50 mg in overweight or obesity, OASIS

Oral semaglutide characteristics



Oral semaglutide 50mg:

- Semaglutide tablets in overweight or obesity
- Once daily tablet



Phase 3a programme with oral semaglutide 50 mg

- Aims to confirm efficacy and safety
- Submission in US and EU expected during 2023
- The global launch of oral semaglutide 50 mg is contingent on portfolio prioritisations and manufacturing capacity

Focused phase 3 trial programme

OASIS 1
50 mg dose

- 667 patients
- 68 week
- Primary endpoint: BW %



OASIS 2
EAST ASIA

- 198 patients incl. T2D
- 68 week
- Primary endpoint: BW %

OASIS 3
China

- 200 patients incl. T2D
- 44 week
- Primary endpoint: BW %

OASIS 4
25 mg dose

- 300 patients
- 64 week
- Primary endpoint: BW %

2022

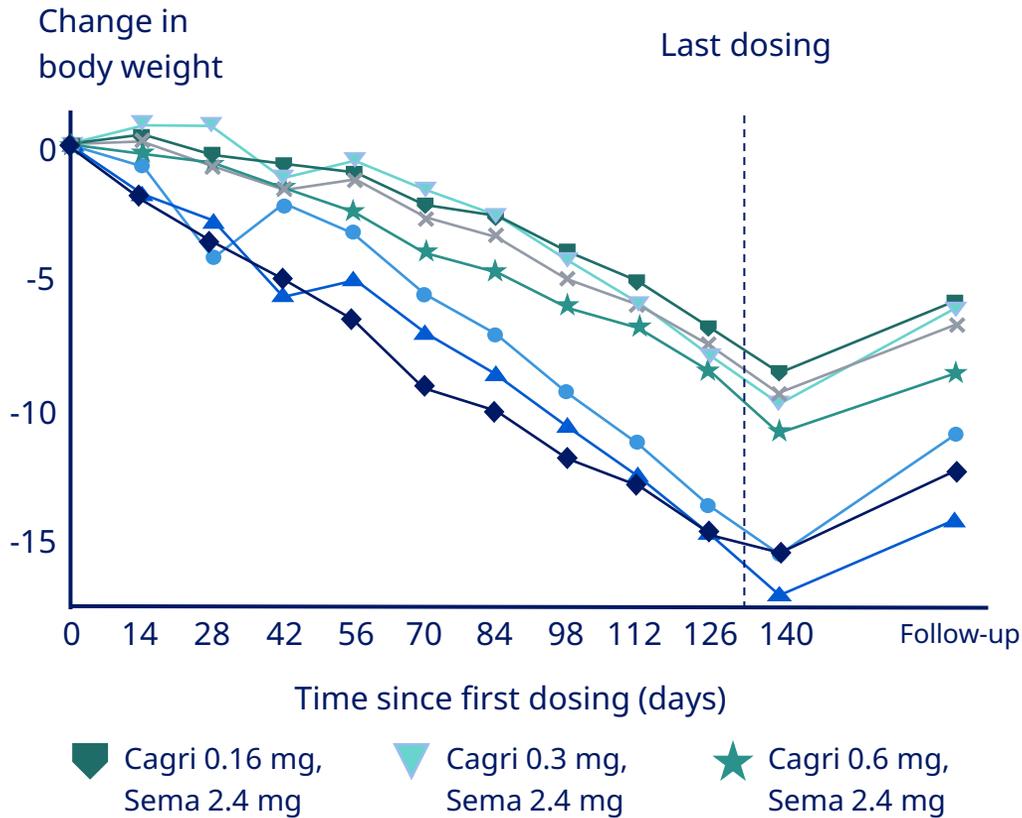
2023

2024

2025

In a 20-week phase 1 trial, CagriSema showed weight loss of 17% and appeared to have a safe and well tolerated profile

Weight loss for different doses of CagriSema in phase 1

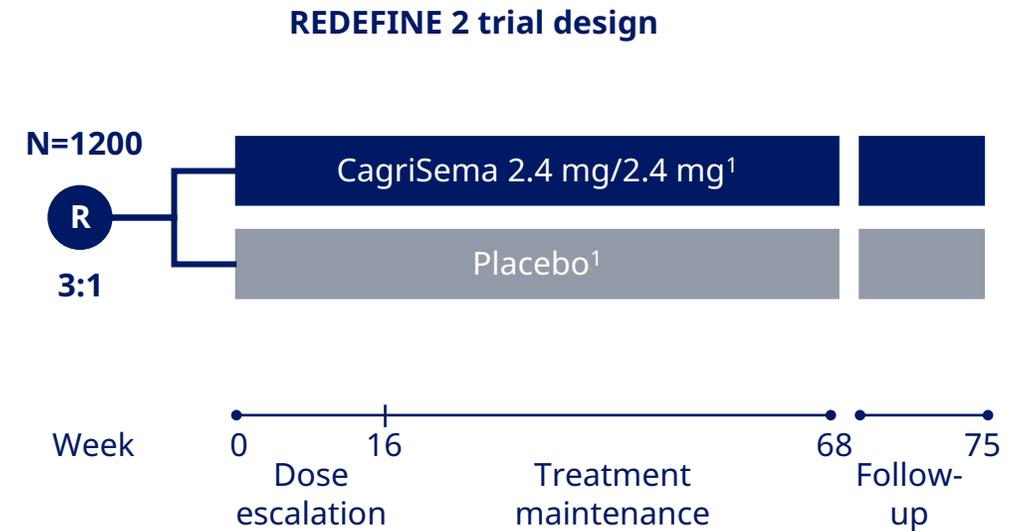
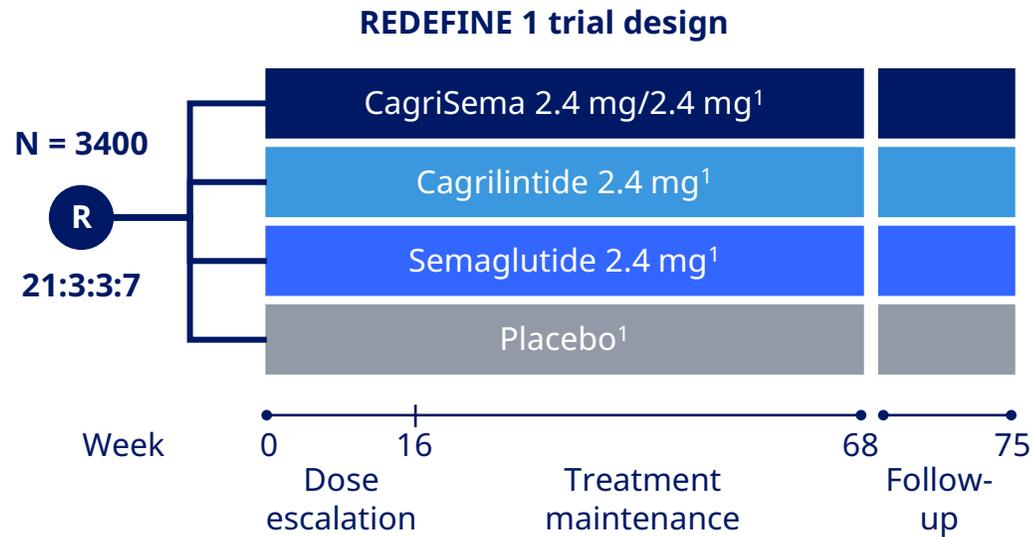


The GI profile appeared similar to semaglutide 2.4 monotherapy

	n=12	n=12	n=12	n=12	n=12	n=11	n=24
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
AEs	11 (92)	12 (100)	11 (92)	12 (100)	12 (100)	11 (100)	23 (96)
SAEs¹	0	0	0	1 (8)	0	0	0
AEs leading to withdrawal	1 (8)	0	0	1 (8)	0	0	0
GI disorders	7 (58)	10 (83)	7 (58)	10 (83)	11 (92)	9 (82)	19 (79)

¹The serious adverse event was meningitis
 CagriSema: Cagrilintide in combination with semaglutide; Cagri: Cagrilintide; Sema: semaglutide; SAE: Serious adverse events; GI: Gastro-intestinal; Change in body weight is analysed using a mixed model for repeated measurements, where all changes from baseline in body weight measurements enter as the dependent variables and treatment, visit and baseline body weight enter as fixed effects. Treatment and baseline body weight are nested within visit.
 Source: Adapted from Enebo et al. Lancet. 2021 May 8;397(10286):1736-1748.

The CagriSema phase 3 programme, REDEFINE, was initiated in the Q4 2022



Inclusion criteria

REDEFINE 1:

- BMI: $\geq 30 \text{ kg/m}^2$ or $\geq 27 \text{ kg/m}^2$ and ≥ 1 comorbidity
- Excludes diabetes diagnosis or $\text{HbA}_{1c} \geq 6.5\%$

REDEFINE 2:

- BMI: $\geq 27 \text{ kg/m}^2$
- Type 2 diabetes, $\text{HbA}_{1c} < 10\%$

Primary endpoints:

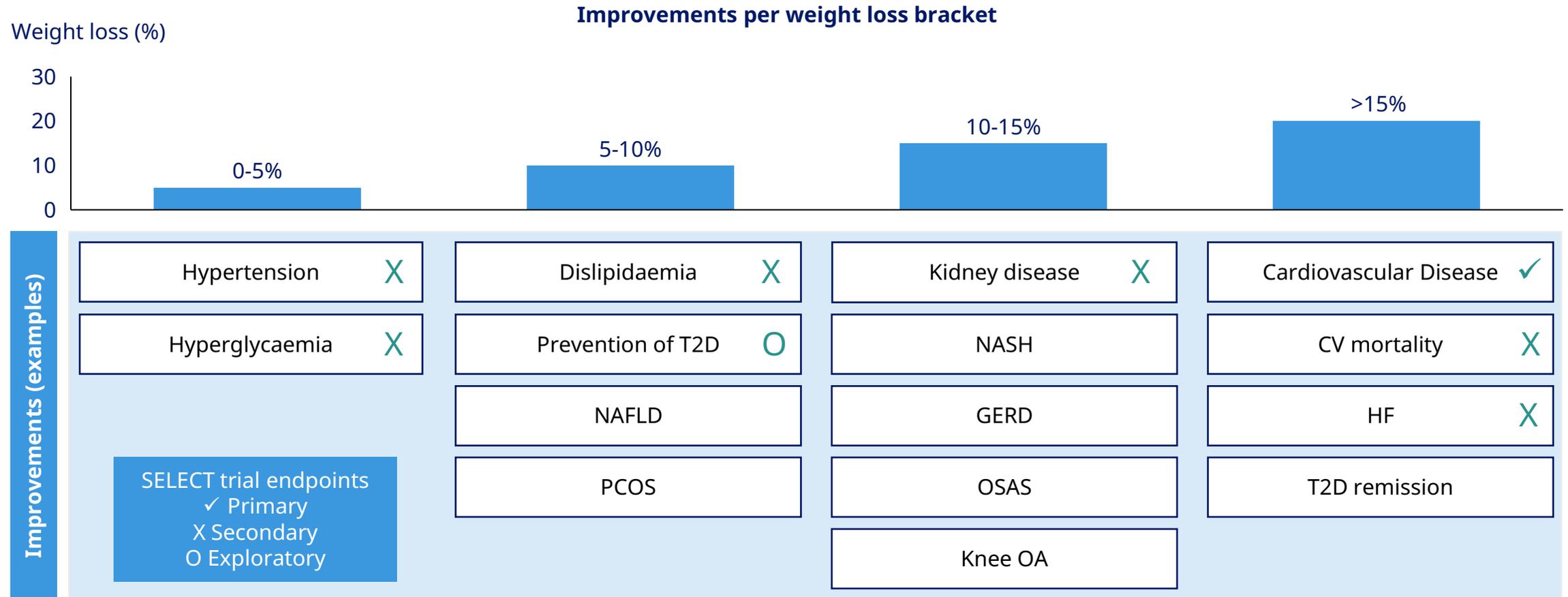
- Change in body weight (%)
- Achieve $\geq 5\%$ body weight reduction

Confirmatory secondary endpoints:

- Change in waist circumference
- HbA_{1c}
- Systolic blood pressure
- Patient reported outcomes²

¹As an adjunct to a reduced-calorie diet and increased physical activity in adults with obesity or overweight. ² Patient reported outcomes include (IWQoL-Lite-CT, SF-36v2, and Vitality score)
CagriSema: Cagrilintide in combination with semaglutide; T2DM: Type 2 diabetes; BMI: Body mass index; HbA_{1c} : Hemoglobin A_{1c}; IWQoL-Lite-CT: Impact of weight on quality of life - lite, clinical trials version; Short form 36v2

The cardiovascular trial, SELECT, addresses many comorbidities that can be improved with weight management



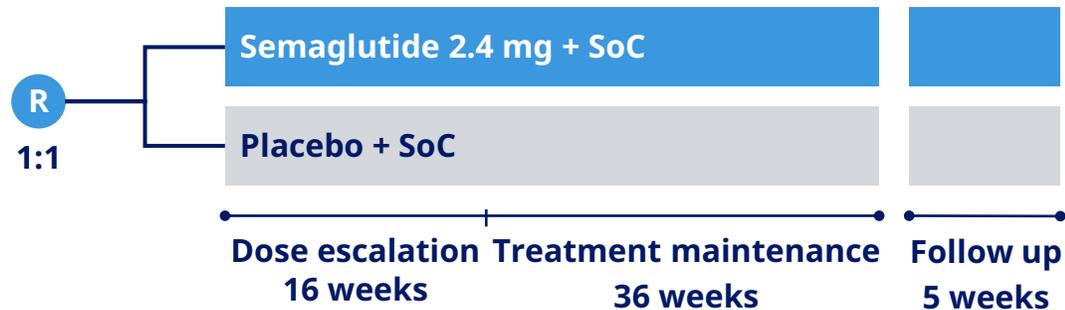
T2D: Type 2 diabetes; NAFLD: Non-alcoholic fatty liver disease; PCOS: Polycystic ovary syndrome; NASH: Non-alcoholic steatohepatitis; GERD: Gastroesophageal reflux disease; OSAS: Obstructive sleep apnea syndrome; OA: Osteoarthritis

HF: Heart failure

Sources: Garvey WT et al. Endocr Pract 2016;22(Suppl. 3):1-203; Look AHEAD Research Group. Lancet Diabetes Endocrinol 2016;4:913-21; Lean ME et al. Lancet 2018;391:541-5; Benraoune F and Litwin SE. Curr Opin Cardiol 2011;26:555-61; Sundström J et al. Circulation 2017;135:1577-85.; Morales E and Praga M. Curr Hypertens Rep 2012;14:170-176

Phase 3 trial STEP HFpEF with semaglutide 2.4 mg has been successfully completed in Q2 2023

STEP HFpEF trial with 529 people with obesity and HFpEF



STEP HFpEF

Objective:

- Evaluate the effect on HF specific symptoms, physical function and body weight compared with placebo

Dual primary endpoints:

- Change in KCCQ from baseline to week 52
- Change in body weight from baseline to week 52

Key secondary endpoints:

- Change in 6MWD from baseline to week 52
- Composite endpoint (all cause death, HHF, KCCQ, 6MWD) from baseline to week 52

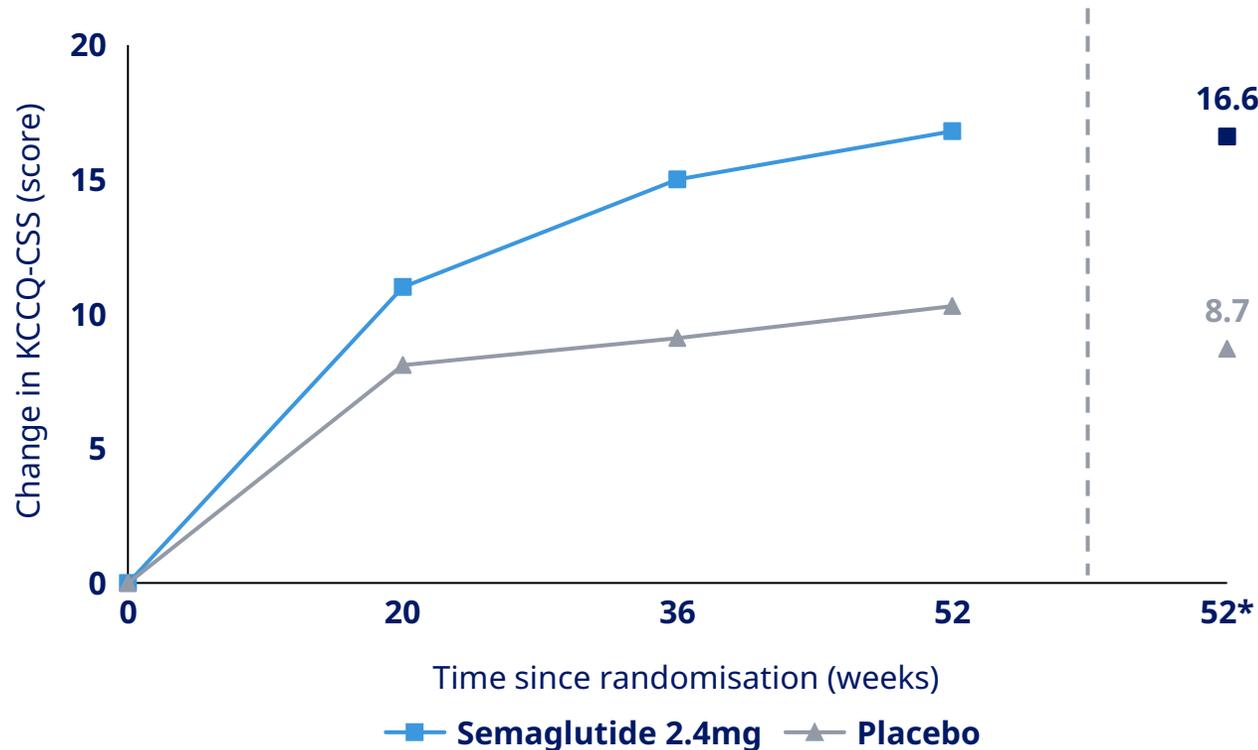
Inclusion criteria:

- BMI ≥ 30 kg/m²
- NYHA II-IV
- Ejection fraction $\geq 45\%$

Semaglutide 2.4 mg demonstrated superior improvement on the primary endpoint of KCCQ-CSS vs placebo

Superior improvement in KCCQ-CSS score in patients treated with semaglutide 2.4 mg

Mean baseline KCCQ-CSS score: 56.7



Key highlights

Primary endpoints:

- KCCQ-CSS estimated treatment difference between semaglutide 2.4 mg and placebo of 7.8

KCCQ in perspective

Clinicians' assessments of clinical change¹:

- Small: ±5 points
- Moderate-to-large: ±10 points
- Large-to-very large: ±20 points

Patients' self-classifications of improvements¹:

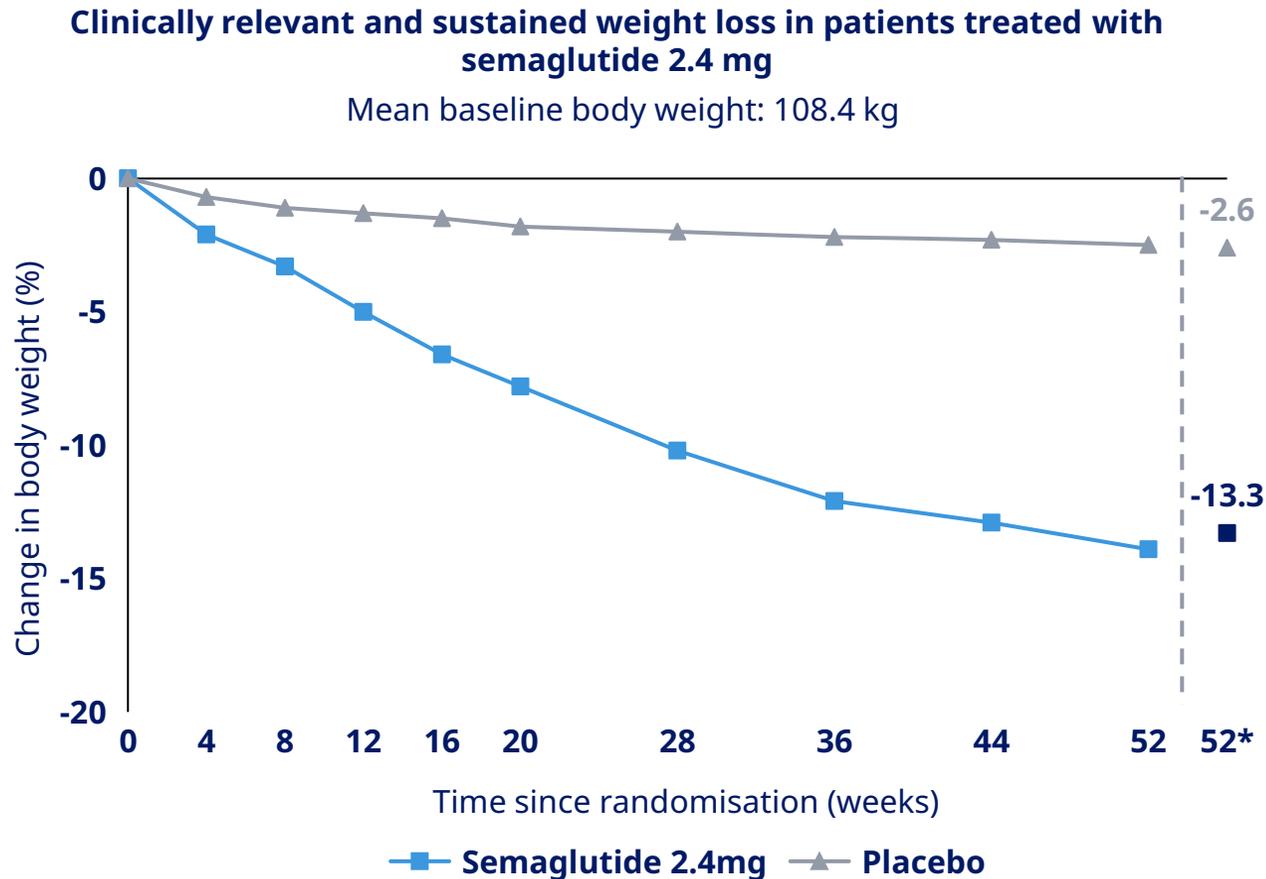
- Minimal clinically important difference for 'little improvement': 4.5 points

¹ Spertus JA, et al. JACC State-of-the-Art Review. J Am Coll Cardiol. 2020 Nov 17;76(20):2379-2390.

Note: Data shown is the treatment policy estimand. *Lines are based on observed data where the value denoted after 52 weeks is estimated mean value derived based on multiple imputation

KCCQ-CSS: Kansas City Cardiomyopathy Questionnaire Clinical summary score

Semaglutide 2.4 mg demonstrated superior reduction on the other primary endpoint of body weight vs placebo



Key highlights

Primary endpoint:

- Estimated treatment difference in body weight change between semaglutide 2.4 mg and placebo of -10.7%

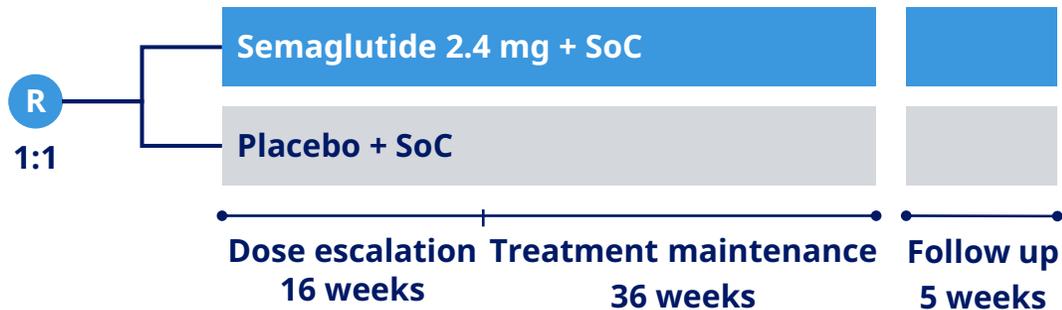
Safety:

- Overall, the safety profile in HFpEF patients is consistent with previous data for semaglutide 2.4 mg

Note: Data shown is the treatment policy estimand. *Lines are based on observed data where the value denoted after 52 weeks is estimated mean value derived based on multiple imputation
 HFpEF: Heart failure with preserved ejection fraction

The ongoing STEP HFpEF-DM trial is to be included in the regulatory submission

STEP HFpEF-DM trial with 610 people with obesity, HFpEF and T2D



Trial design and next steps

Dual primary endpoints:

- Change in KCCQ from baseline to week 52
- Change in body weight from baseline to week 52

Inclusion criteria:

- BMI ≥ 30 kg/m²
- NYHA II-IV
- Ejection fraction $\geq 45\%$
- HbA_{1c} $\leq 10.0\%$

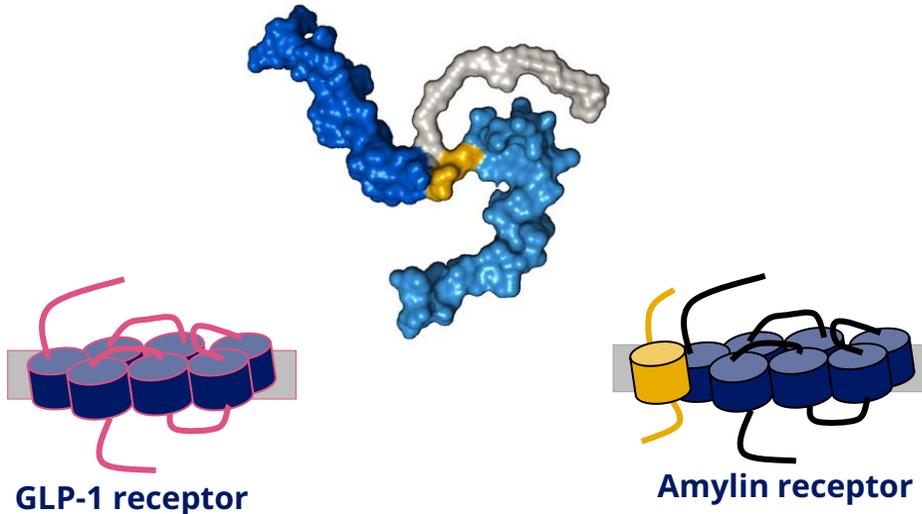
Next steps:

- Completion of STEP HFpEF-DM trial expected in H2 2023
- Combined regulatory submission of both trials in H1 2024
- Decision expected late 2024/early 2025

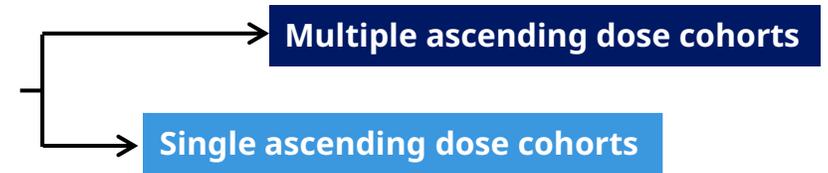
Oral amycretin entered phase 1 in Q2 2022, combining protein and peptide expertise with oral technology

Amycretin is a GLP-1 and amylin receptor co-agonist intended for oral delivery

Phase 1 single dose and multiple dose trial for oral amycretin in obesity initiated in 2022



People living with overweight or obesity, and otherwise healthy



Trial objectives

- Assess the safety and tolerability of oral amycretin
- Assess PK profile and explore PD effects

Trial initiation

- Phase 1 was initiated in Q2 2022

Utilising the SNAC technology

Rare disease

Rare disease background 83

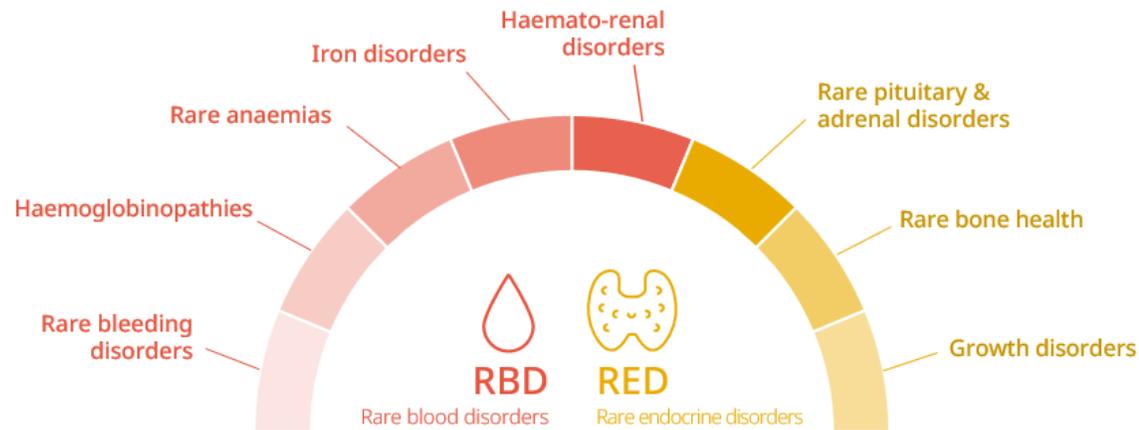
Rare disease innovation 86

SIERRA CLARK

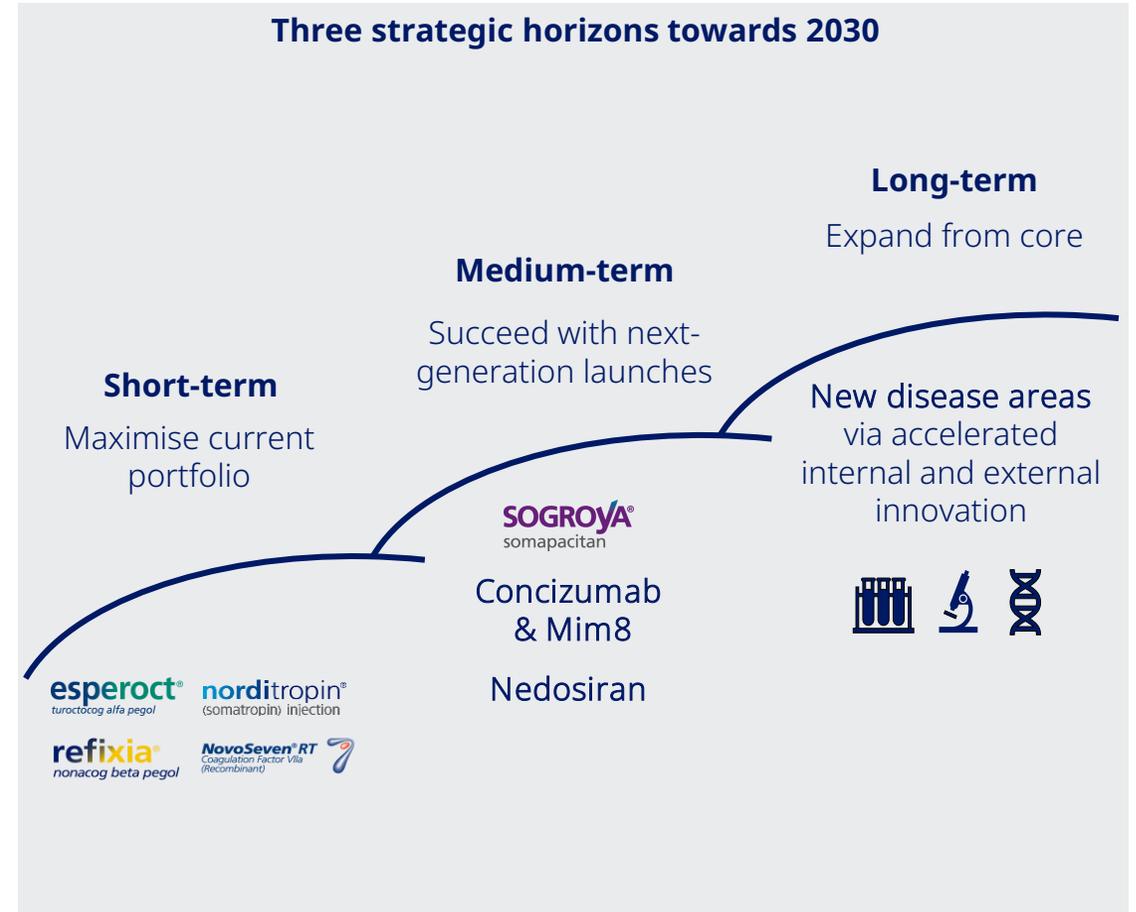
Sierra lives with Glanzmann-Thrombasthenia
Canada

Building upon a 40-year legacy to capture the Rare disease strategic opportunity

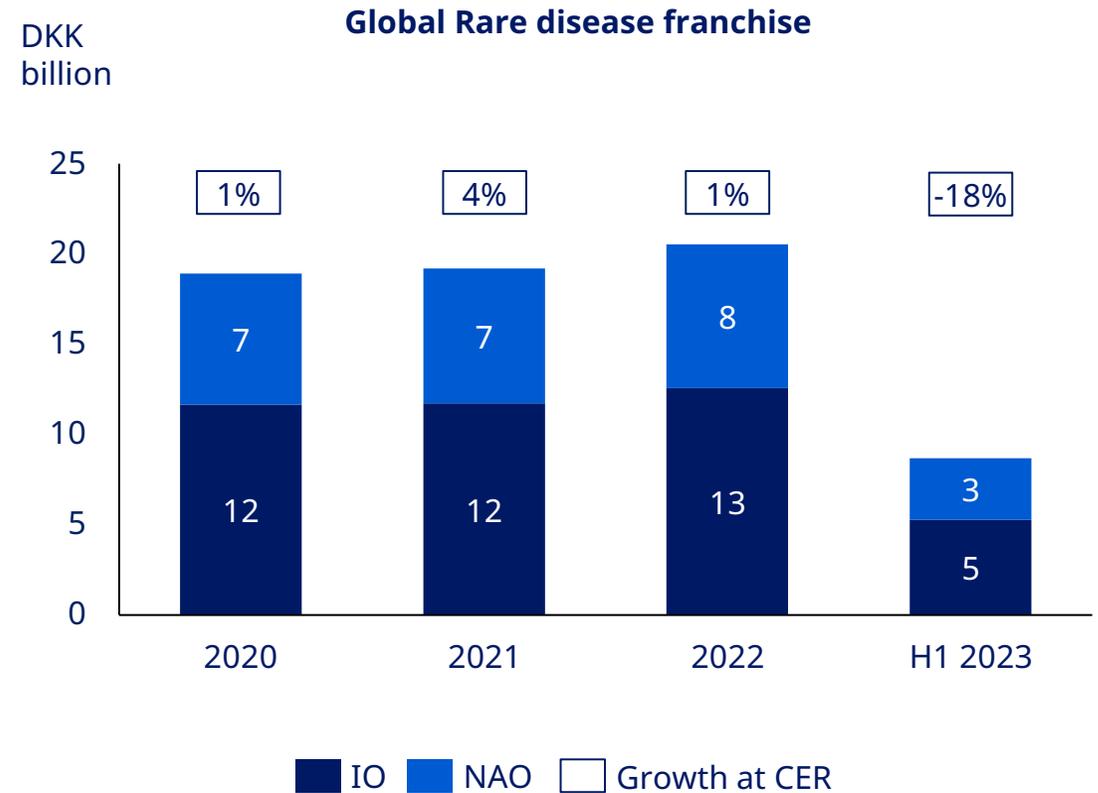
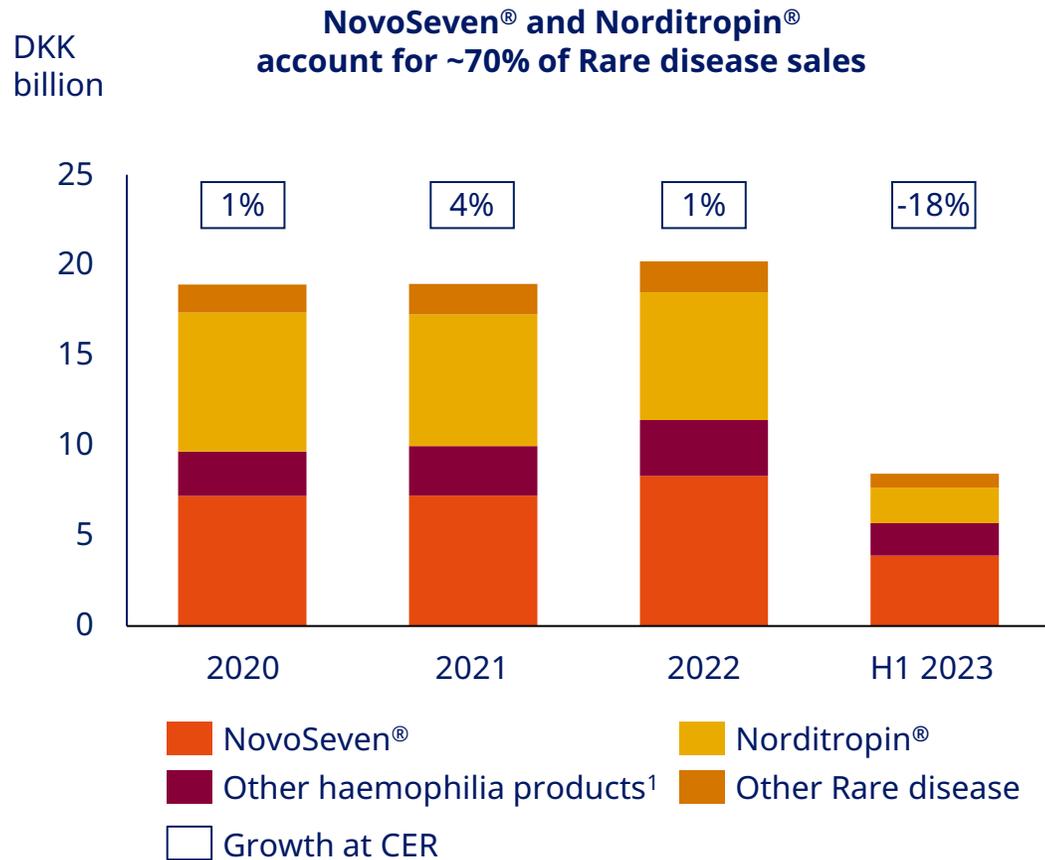
A strategy anchored in Rare blood and endocrine disorders



Three strategic horizons towards 2030



Rare disease sales decreased by 18%, impacted by Norditropin® supply constraints

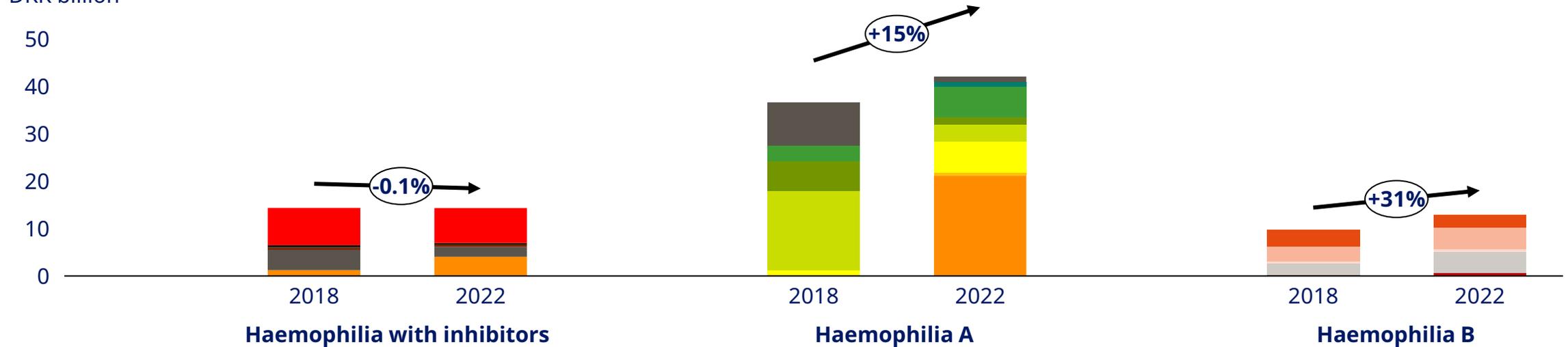


Note: Company reported sales; CER: Constant exchange rates; ¹Other haemophilia products primarily consists of Vagifem® and Activelle®

Haemophilia is a rare disease with severe unmet medical needs but the market is highly competitive

Recombinant haemophilia product sales

DKK billion



Patients¹

~ 7,000

~ 185,000

~ 38,000

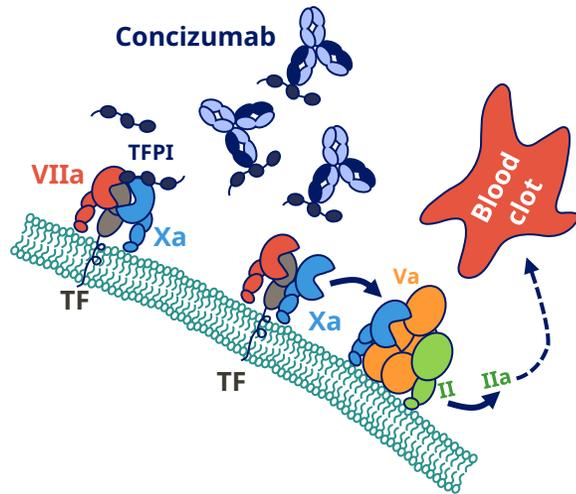


¹ Total diagnosed patients in segment, WFH annual survey 2021 (numbers may be understated as 118 out of 147 countries responded); ² Obizur only indicated for acquired haemophilia; ³ Plasma-derived; ⁴ Part of the Hemlibra sales is used for treatment of haemophilia A patients in 2021

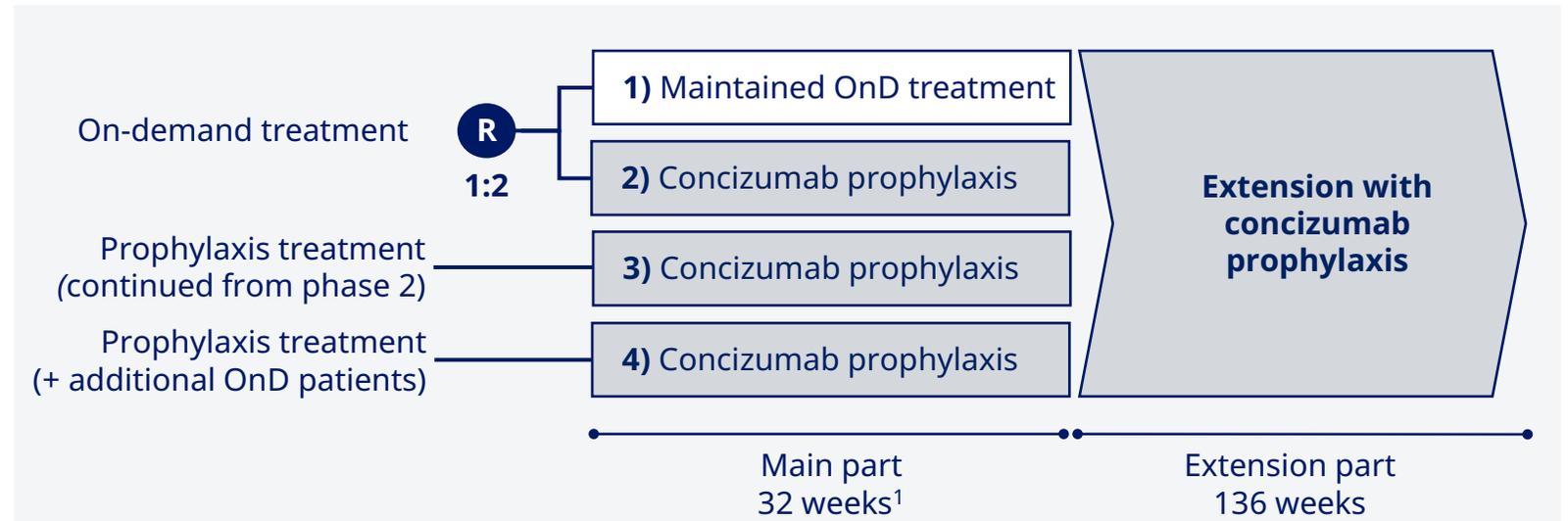
Source: Company reported sales and Evaluate Pharma

Explorer 7 trial evaluated safety and efficacy of concizumab in 132 haemophilia A and B patients with inhibitors

Concizumab binds TFPI, enabling thrombin generation and clot formation



Explorer 7 trial design



Trial Objective

Assess the efficacy of concizumab prophylaxis vs no prophylaxis in reducing number of bleeding episodes in adults and adolescents with haemophilia A and B with inhibitors

Primary endpoint

Number of treated bleeding episodes from start of treatment to the end of the main phase

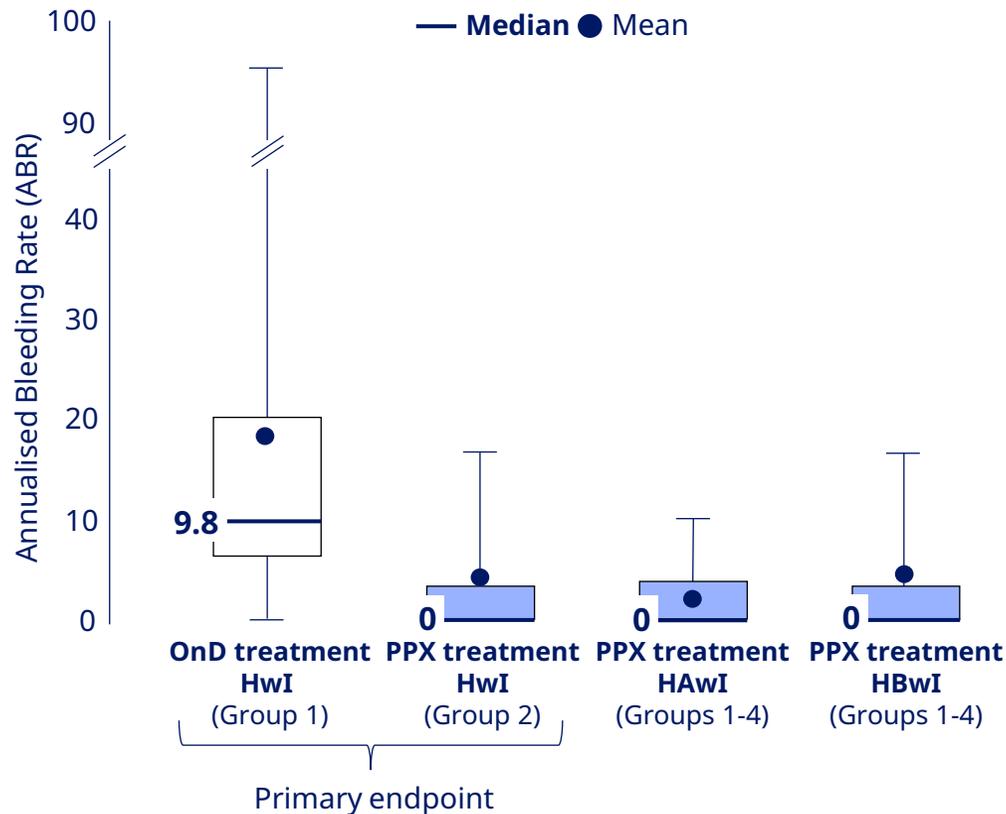
Key inclusion criteria

- Males ≥12 years with haemophilia and inhibitors, treated with bypassing agents within last 24 weeks
- For on-demand, minimum six bleeding episodes within last 24 weeks

¹At least 24 weeks for arm 1
 TF: Tissue factor; TFPI: Tissue factor pathway inhibitor; OnD: On-demand; R: Randomisation

In the Explorer 7 trial, concizumab reduced the number of bleeds in adults and adolescents with inhibitors

Explorer 7 trial results: Annualised bleeding rate per patient group



Key highlights

Efficacy

- **Median ABR was 0** for concizumab prophylaxis treatment, compared to 9.8 in the on-demand treatment group
- Estimated mean ABR was 1.7 for concizumab prophylaxis treatment, compared to 11.8 in the on-demand treatment group
- For patients on concizumab prophylaxis, **64% had 0 bleeds** in Group 2

Safety

- Concizumab appeared to have a **safe and well tolerated** profile

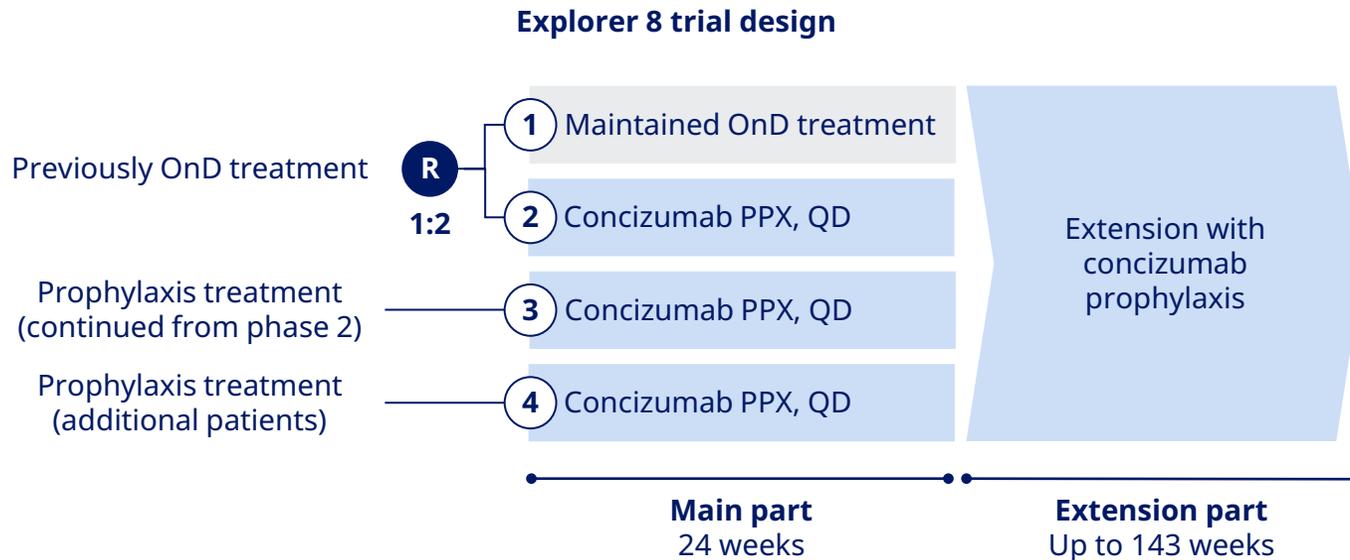
Status

- US Complete Response Letter for HwI received in Q2 2023, resubmission end of 2023 expected
- JP submission for HwI completed in Q3 2022
- Explorer8 in non-inhibitor patients was completed in Q3 2022

Note: The box represents Q1-Q3 (25th to 75th percentile). Whiskers are 5th and 95th percentile.

HA: Haemophilia A; HB: Haemophilia B; HAwI: Haemophilia A with inhibitors, HBwI: Haemophilia B with inhibitors; HwI: Haemophilia with inhibitors; OnD: On-demand; PPX: Prophylaxis; ABR annualised bleeding rate

Main part of the Explorer 8 trial with concizumab in people with HA or HB without inhibitors has been completed



<p>Key inclusion criteria:</p> <ul style="list-style-type: none"> Aged ≥12 years with haemophilia A or haemophilia B, patients mainly from phase 2 	<p>Objective:</p> <ul style="list-style-type: none"> Assess the efficacy of Concizumab PPX vs no PPX (OnD treatment) in reducing number of bleeding episodes 	<p>Endpoints:</p> <ul style="list-style-type: none"> Number of treated bleeding episodes (spontaneous/traumatic)
--	--	--

Key trial highlights

Efficacy

- The trial met its primary endpoint, confirming superiority of concizumab prophylaxis compared to no PPX (OnD treatment)
- The secondary confirmatory endpoint, confirming non-inferiority of concizumab PPX to previous PPX factor treatment was not met

Safety

- Concizumab appeared to have a safe and well-tolerated profile with no thromboembolic events reported after the treatment restart¹

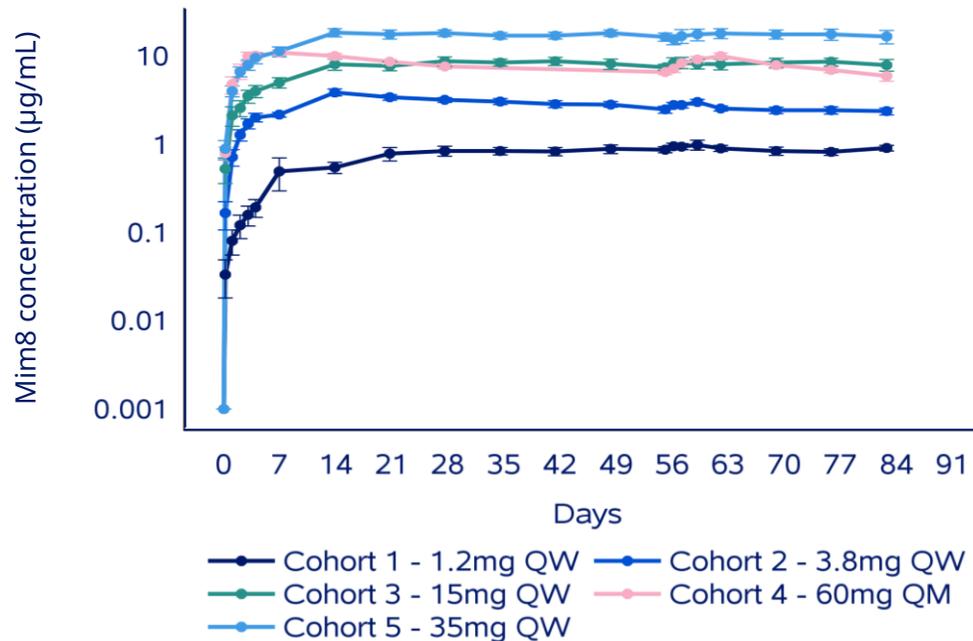
Next steps

- Initial commercial launch for concizumab is expected to be focused on HwI followed by Haemophilia B
- Further assessment of development opportunities and submissions based on the results from the explorer8 trial

¹ Restart refers to the start of treatment with the new concizumab dosing regimen, which was implemented after the treatment pause
 HA: Haemophilia A; HB: Haemophilia B; HwI: Haemophilia with inhibitors; Prophylaxis: PPX; OnD: On-demand, QD: Once-daily

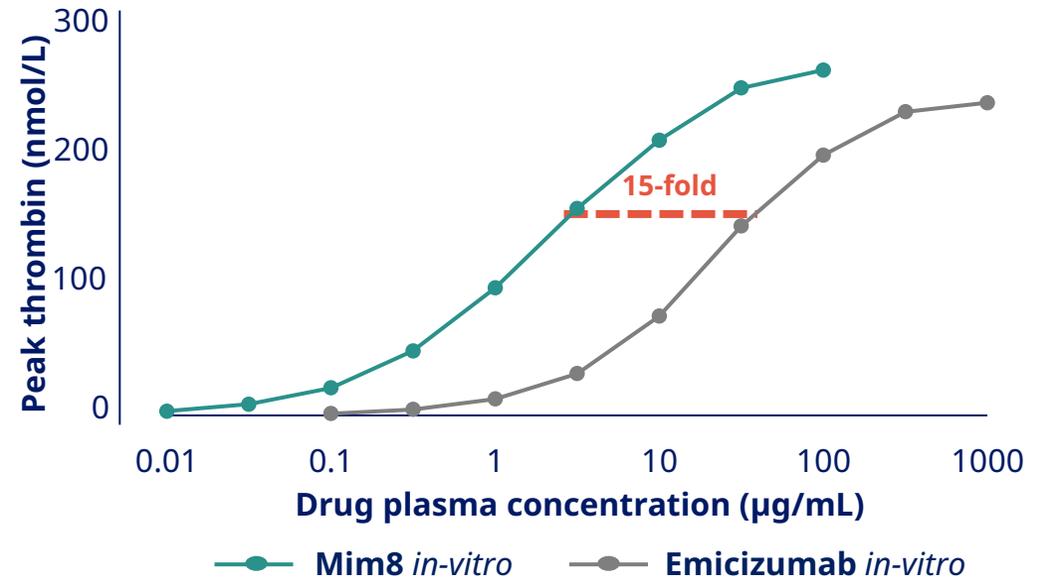
Interim data from Mim8 phase 1/2 show that PK/PD profiles support weekly to monthly low volume dosing

Mim8 pharmacokinetic properties support weekly and monthly dosing



- Mim8 concentration profiles increased with dose
- Mean concentrations at steady state were comparable for Cohort 3 (weekly dosing) and Cohort 4 (monthly dosing)

Higher potency of Mim8 vs emicizumab enabling a low dosing volume

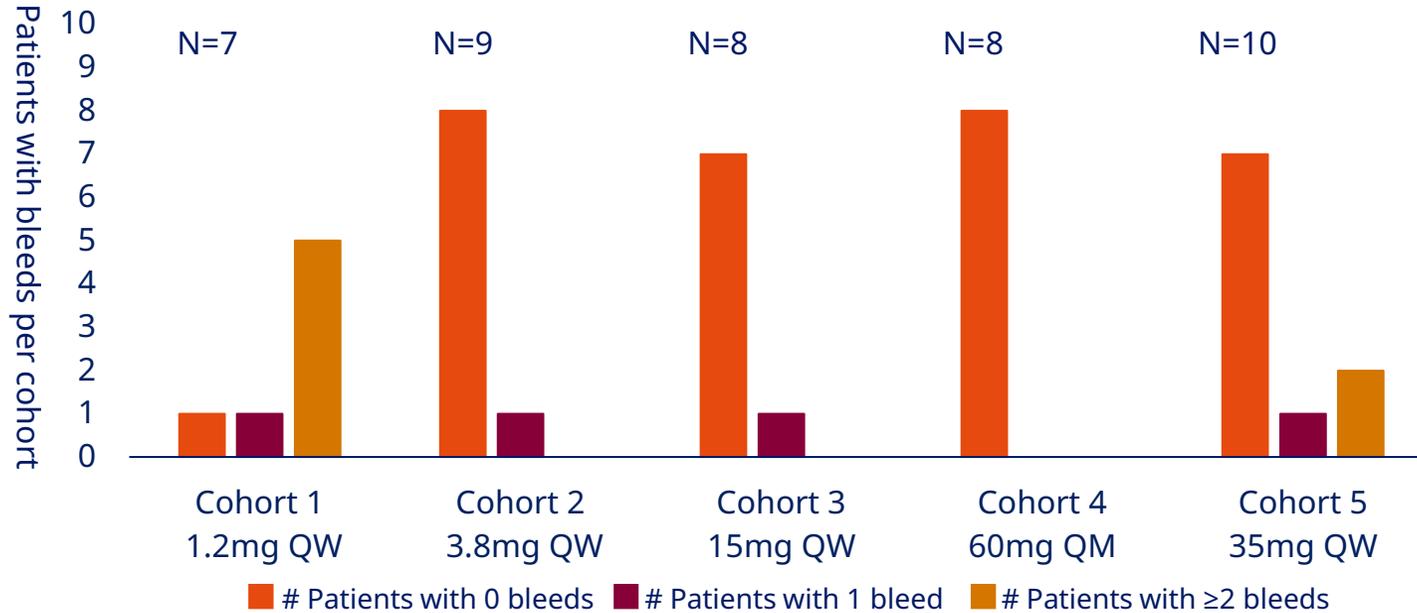


- The PD marker, peak thrombin generation, increased with Mim8 dose
- *In-vitro* exposure-response curves in haemophilia A-like plasma show a 15-fold higher potency of Mim8 compared to emicizumab

The peak thrombin plot represents *in-vitro* data: human plasma samples from the healthy participants of the SAD cohort were made HA-like with anti-FVIII antibodies, and spiked with different concentrations of Mim8 or commercially available emicizumab. PK: Pharmacokinetics; PD: Pharmacodynamics; QW: Once-weekly; QM: once-monthly
 Reference: FRONTIER 1, 12-week main phase cohort 1-5. Chowdary P, et al. FRONTIER1: A Phase 1/2 Dose Escalation Study of a Novel Factor VIIIA Mimetic Bispecific Antibody, Mim8, for Evaluation of Safety, Pharmacokinetics, and Efficacy. Abstract presented at ISTH 2022; Windyga J, et al. Mim8 is associated with improved thrombin generation vs. emicizumab in patients with haemophilia A, with and without inhibitors. Abstract presented at ISTH 2022; Novo Nordisk data on file

In the phase 1/2 trial, Mim8 appeared to have a well tolerated safety profile and read out with exploratory efficacy

Low number of patients with treated bleeds after cohort 1



Exploratory analysis implied that >70% of patients enrolled had no bleeds in the 12 weeks

Mim8 safety characteristics

Adverse events

- No dose-dependency on rates, causality, type or severity of adverse events
- No thromboembolic events
- Three serious AEs deemed unrelated to trial product and two hypersensitivity reactions
- Injection site reactions in only 1% of injections (6 events of ~600 injections given)

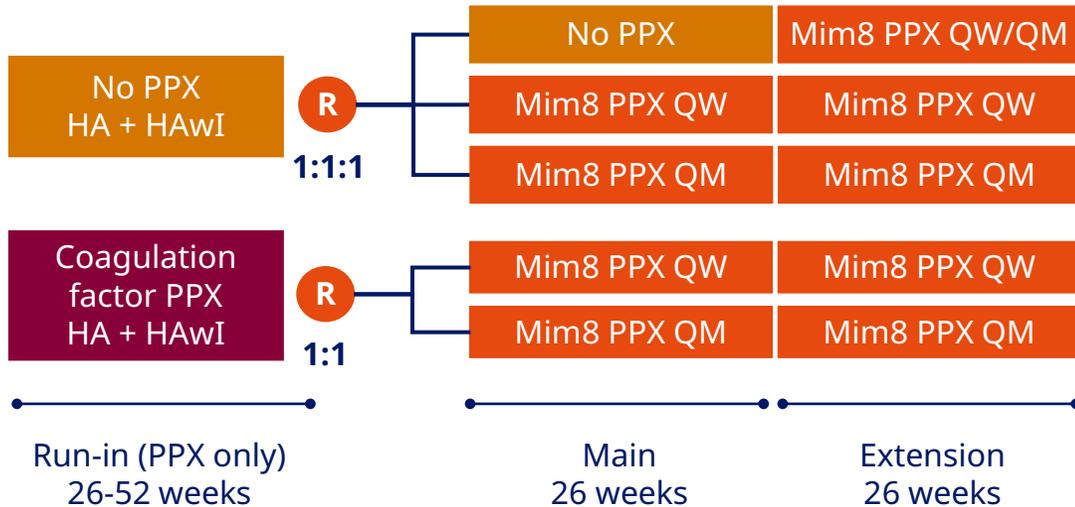
Anti-Mim8 antibodies

- No occurrence of anti-Mim8 antibodies detected

Overall, no safety concern observed

The pivotal phase 3 trial with Mim8 was initiated in Q4 2022

FRONTIER 2: Mim8 phase 3 pivotal trial in ~260 adults & adolescents



Trial design

- Novel and accelerated design minimising time from phase 2 into phase 3. Dosing started in Q4 2022
- Testing of weekly and monthly Mim8 prophylaxis treatment for previously on-demand or coagulation factor prophylaxis patients

Trial objective

- On demand: Superiority of Mim8 prophylaxis vs no prophylaxis
- Prophylaxis: Superiority of Mim8 prophylaxis vs coagulation factor prophylaxis run-in period

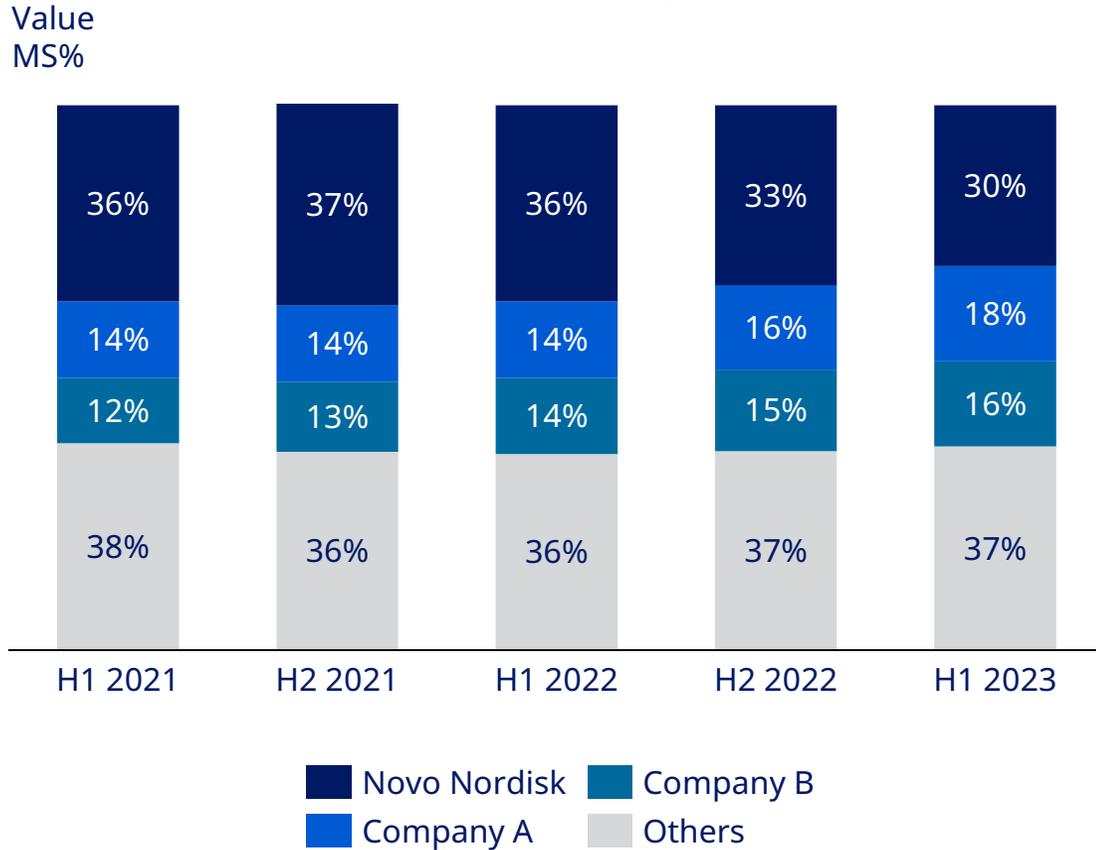
Key trial endpoints

- ABR for treated bleeds over 26 weeks of treatment
- Overall safety of Mim8 prophylaxis including occurrence of anti-Mim8 antibodies and injection site reactions

The second phase 3a trial, FRONTIER3, was initiated in Q4 2022

While Norditropin® is the market leader within GHD market, Sogroya® represents an opportunity for patients

Novo Nordisk leadership in competitive hGH market



A portfolio offering across markets

Sogroya® strategy

- Once-weekly efficacious treatment on par with Norditropin®
- Simple and easy-to-use device
- Phase 3 trials toward broad range of indications (e.g. SGA, Turner, Noonan, ISS) to expand the market
- Approved for GHD in US, EU and Japan

SOGROYA®
somapacitan

Norditropin® strategy

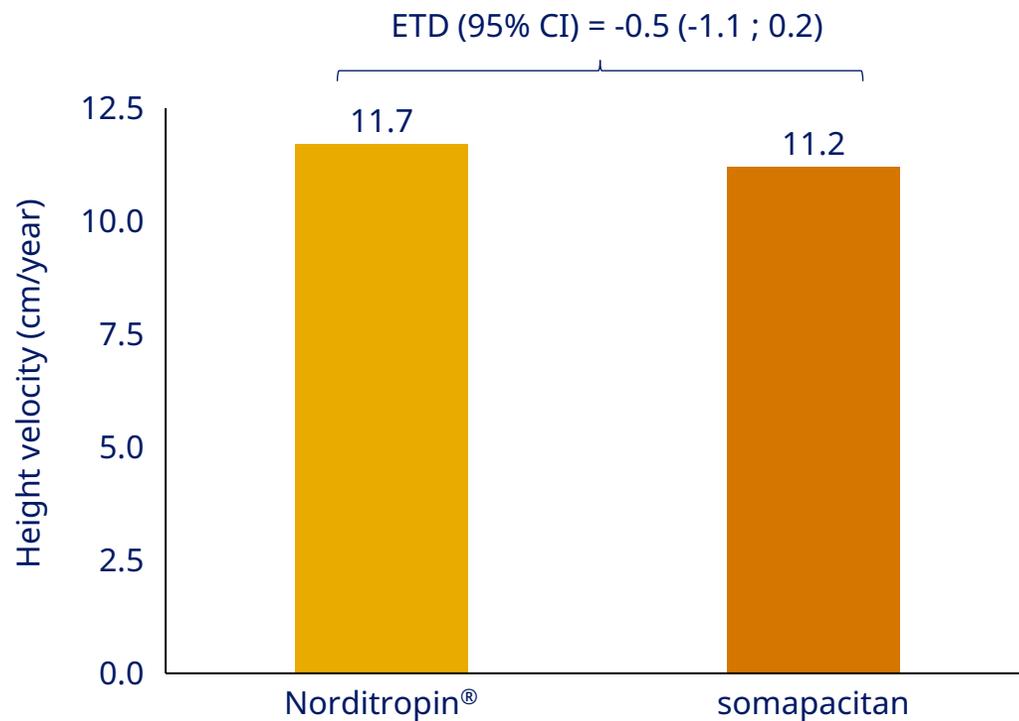
- Apply a market-fit approach to support specific markets and patient groups
- Broad label across eight indications

norditropin®
(somatropin) injection

hGH: Human growth hormone; SGA: Small for gestational age, ISS: Idiopathic short stature
 Source: IQVIA, MAT May 2023. Due to contractual obligations competitor names are not disclosed. Company A and B represent actual companies

Sogroya® was approved for paediatric growth hormone deficiency in US, EU and Japan in Q2 2023

Phase 3a trial results in children with GHD



Key highlights

Efficacy

- Non-inferiority versus Norditropin® for the primary endpoint, height velocity, at week 52 was confirmed
- IGF-I SDS, bone age and glucose metabolism were all similar between somapacitan and Norditropin®

Safety and tolerability

- Overall the safety profile of somapacitan appeared to be similar to the well-known safety profile of daily GHD treatment
- No local tolerability issues were identified

Other treatment parameters

- Significantly reduced treatment burden¹ compared to Norditropin®

Status

- Adult GHD: Approved by the US, EU and JP
- Paediatric GHD: Approved by the US, EU and JP

¹ Measured using patient reported outcome TB-CGHD-P (Treatment burden measure - child growth hormone deficiency - parent)

ETD: Estimated treatment difference; IGF-I SDS: Insulin growth factor-1 standard deviation score; GHD: Growth hormone deficiency; IGF-I SDS: Insulin growth factor-1 standard deviation score; US: United States; EU: European Union; JP: Japan

Novo Nordisk and 2seventy bio extend partnership in next-generation genome editing for people with haemophilia A

Lifelong correction via a unique modality

 Potentially lifelong correction of FVIII deficiency

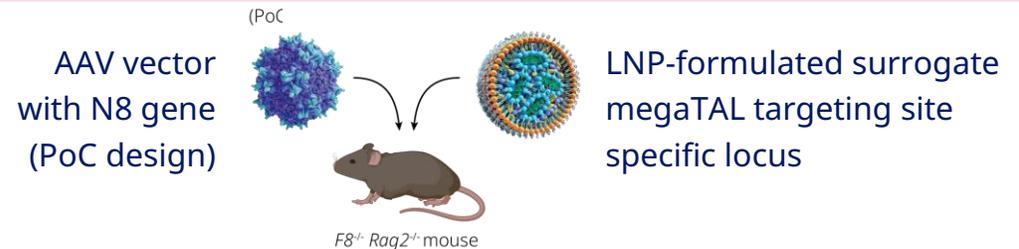
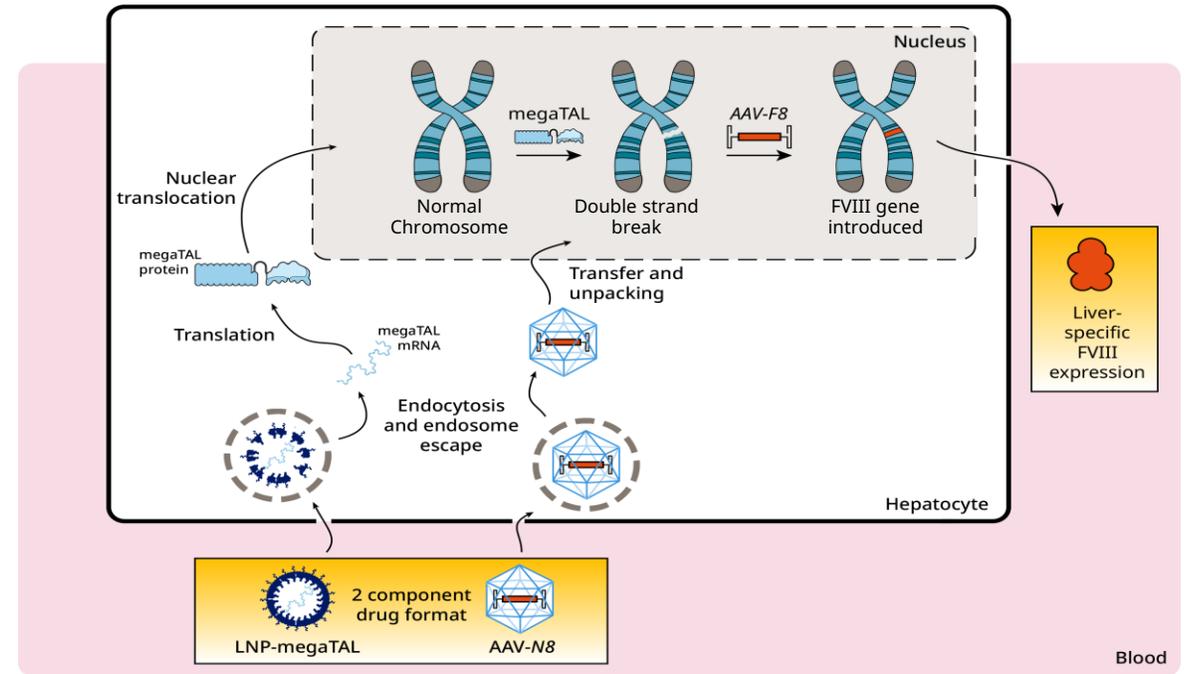
 FVIII gene engineered and packed in an AAV vehicle

Utilising the skills of both 2seventy bio and Novo Nordisk

 Utilisation of **megaTAL™** technology, in-vivo mRNA manufacturing/purification platform, and gene editing know-how

 **Haemophilia A** understanding and protein and molecular engineering capabilities

Mode of action



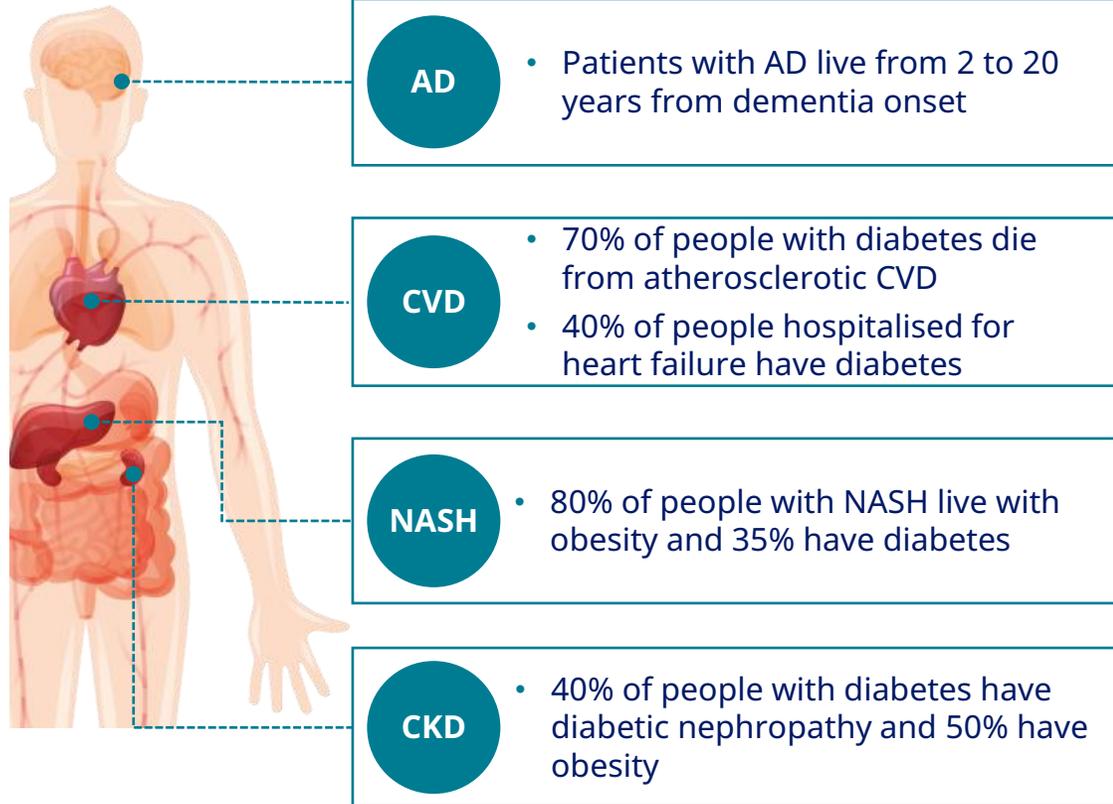
Other serious chronic diseases

The unmet needs	96
Cardiovascular disease	98
Non-alcoholic steatohepatitis	102
Alzheimer's disease	107
Stem cells	110



Novo Nordisk is expanding into other serious chronic diseases

Serious chronic diseases are associated with diabetes and obesity



New therapeutic areas represent patient populations with high unmet medical needs

	Estimated patients	
AD	~85 million	
	Estimated patients	Number of related deaths
CVD	~420 million	~20 million annually
	Estimated patients	Diagnosis rate
NASH	~15-40 million ¹	~20% ²
CKD	~200 million	~20%

¹ Internal forecast comprising the USA, Europe and Japan; ² Diagnosis rate is considered a major uncertainty to the forecast
 CVD: Cardiovascular disease; NASH: Non-alcoholic Steatohepatitis; CKD: Chronic kidney disease; AD: Alzheimer's Disease
 Sources: Alzheimer's Association report: 2020 Alzheimer's disease facts and figures, 2020 (16:391-460), Diabetes Care 2005 Jan; 28(1): 164-176; Abera SF et al. Global, Regional, and National Burden of Cardiovascular Diseases for 10 Causes, 1990 to 2015, 2017; Heart Disease and Stroke Statistics, American Heart Association, 2017; Williams CD et al. Prevalence of nonalcoholic fatty liver disease and nonalcoholic steatohepatitis among a largely middle-aged population utilizing ultrasound and liver biopsy, 2011; Addressing the global burden of chronic kidney disease through clinical and translational research, 2014

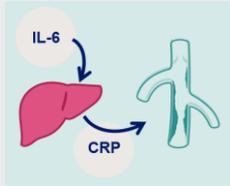
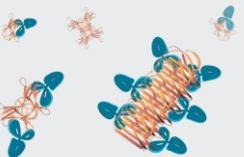
Large patient overlaps between diabetes, obesity, and CVD have guided the focused approach in CVD

Population overlap between T2D, obesity and CVD

ILLUSTRATIVE



Focused approach in CVD

Atherosclerosis 	Heart failure 	
<p>ASCVD</p> 	<p>Heart failure with preserved ejection fraction (HFpEF)</p>  <p>Treatments investigated</p>	<p>Transthyretin amyloid cardiomyopathy (ATTR-CM)</p> 
<p>Ziltivekimab</p>	<p>Semaglutide 2.4 mg Ziltivekimab</p>	<p>PRX004</p>

T2D: Type 2 diabetes, CVD: Cardiovascular disease; ASCVD: Atherosclerotic cardiovascular disease; HF: Heart failure; ATTR-CM: Transthyretin Amyloid Cardiomyopathy; LDL-C: Low-density lipoprotein cholesterol; hsCRP: High-sensitivity C-reactive protein
Sources: IDF Diabetes Atlas 2021, internal estimate based on European Cardiovascular Disease Statistics, 2017 edition, WHO obesity and overweight fact sheet, 9 June 2021

Innovative late-stage CVD pipeline provides opportunities to make a difference for many patients

Focus areas

Near-term
Leverage broader CV indications to establish presence with Cardiologists and build an adequate PCP footprint for entry of stand-alone CVD product
Medium-term
Utilise leading scientific and commercial capabilities to launch first CVD stand-alone product
Long-term
Expand pipeline with differentiated MoAs through leading discovery and translational capabilities

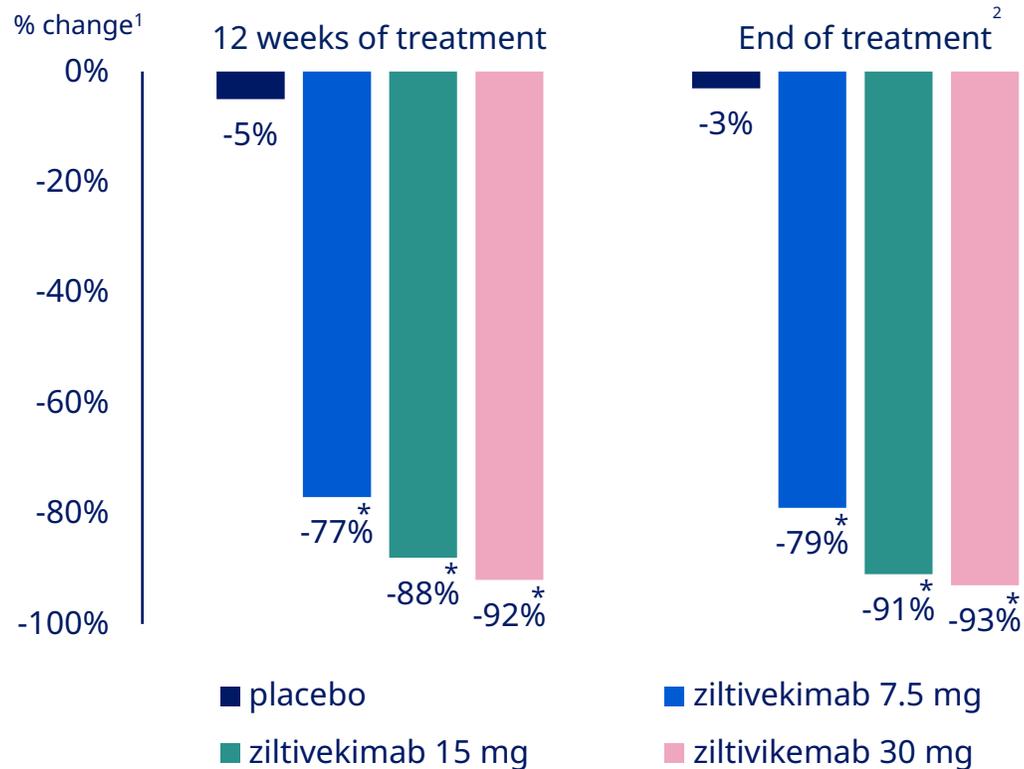
Examples of unmet needs in CVD pipeline

Category	Broader indications		Stand-alone CVD
Study Current phase	HFpEF Phase 3 Sema 2.4mg	PAD Phase 3 Sema 1.0mg	ATTR-CM Phase 2 NNC6019
Global unmet need (people)	~26m ¹	~200m	No consensus (estimated 0.1-2.8 cases per 10,000 in EU)
Potential differentiators	1 st in class indication ²	First and only for T2D	Reverse disease pathology
Potential launch year	2024	2024/25	2028

¹HFpEF and BMI>27 ²Specifically for a functional outcomes trial in an obese patient population
 PCP: Primary Care Physician; CV(D): Cardiovascular Disease; MoA: Mode of Action; HFpEF: Heart failure with preserved ejection fraction; PAD: Peripheral arterial disease; ATTR-CM: Transthyretin Amyloid Cardiomyopathy; T2D: Type 2 Diabetes
 Sources: HFpEF: Groenewegen A et al. Eur J Heart Fail 2020;22:1342-13561; Gurwitz JH et al. Am J Med 2013;126:393-400; Haass M et al. Circulation 2011;4:324-331; Kitzman DW, et al. J Am Coll Cardiol 2016;68:200-203; PAD: Shu J, Santulli G. Update on peripheral artery disease: Epidemiology and evidence-based facts, 22 May 2018; ATTR-CM: Orphan Maintenance Assessment Report for tafamidis, EMA, 17 February 2020

Ziltivekimab phase 2b RESCUE trial was successfully completed

In the RESCUE trial, ziltivekimab QM showed reduction in hsCRP at all dose levels



Data from RESCUE trial

- Ziltivekimab QM showed **reductions in inflammation biomarkers**³
- Ziltivekimab QM appeared to have a **safe and well-tolerated profile**
- **Addressing the residual risk** of CVD for more than 5 million patients with ASCVD, CKD, and inflammation⁴
- The **phase 3 cardiovascular outcomes trial** was initiated in Q3 2021

¹ Primary endpoint was the median percent change in hsCRP, * Indicates statistical significance, p < .0001

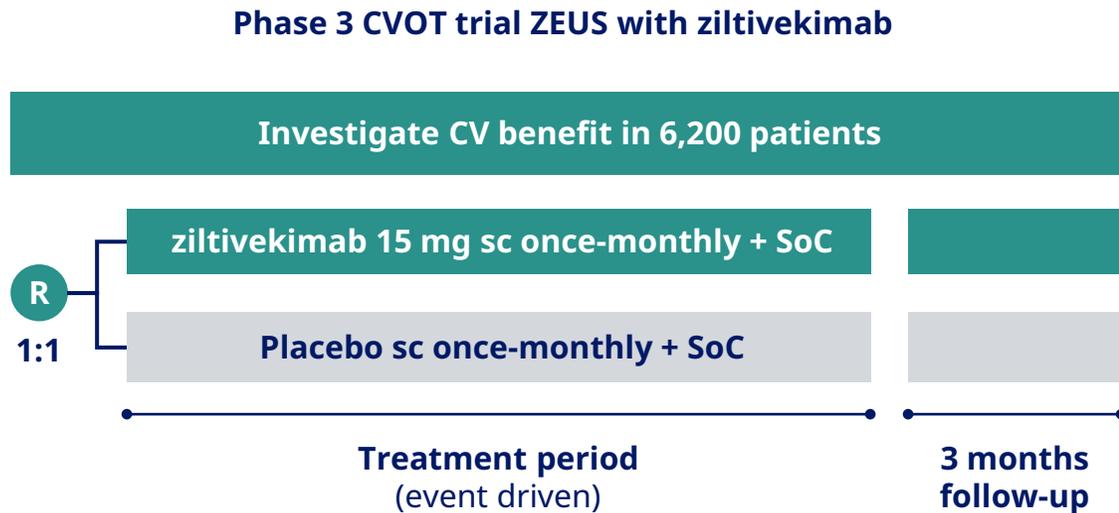
² End of treatment is defined as the average of values at week 23 and week 24

³ Inflammation biomarkers include: Fibrinogen, serum amyloid A, haptoglobin and NTproBNP

⁴ Inflammation is defined as c-reactive protein levels greater than 2

Zilti: Ziltivekimab; QM: Once-monthly; hsCRP: High-sensitivity c-reactive protein; CVD: Cardiovascular disease; ASCVD: Atherosclerotic cardiovascular disease; CKD: Chronic kidney disease

ZEUS trial with ziltivekimab aims to validate the link between inflammation and major adverse cardiovascular events



Objective

- To investigate the cardiovascular benefit of ziltivekimab in the treatment of patients with established ASCVD, CKD and systemic inflammation

Primary endpoints

- Time to the first occurrence of 3-point MACE (CV death, non-fatal MI or non-fatal stroke)

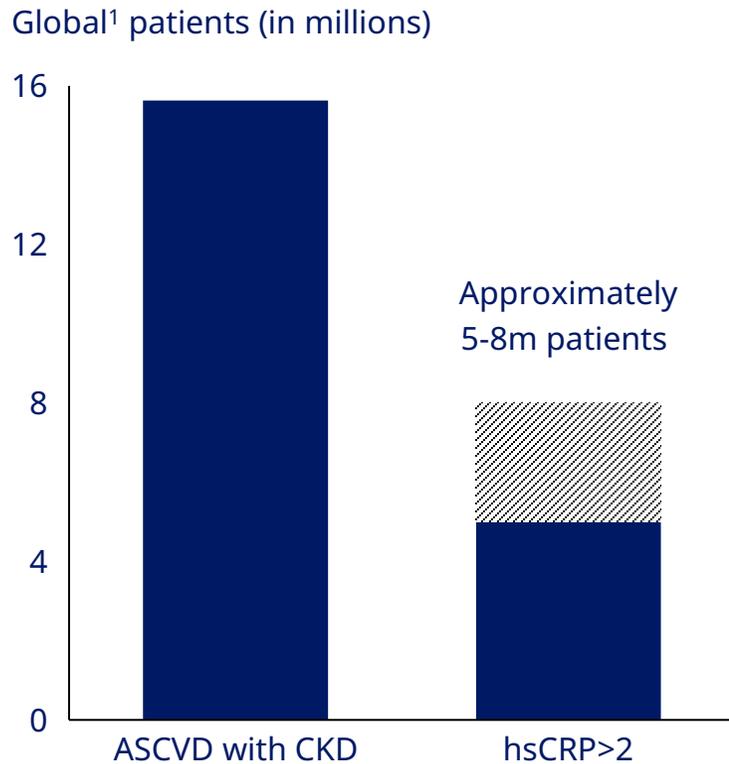
Secondary confirmatory endpoints

- Time to first occurrence of expanded MACE¹
- Number of hospitalisations for HF or urgent HF visit
- Time to occurrence of all-cause mortality
- Time to first occurrence of a composite CKD endpoint

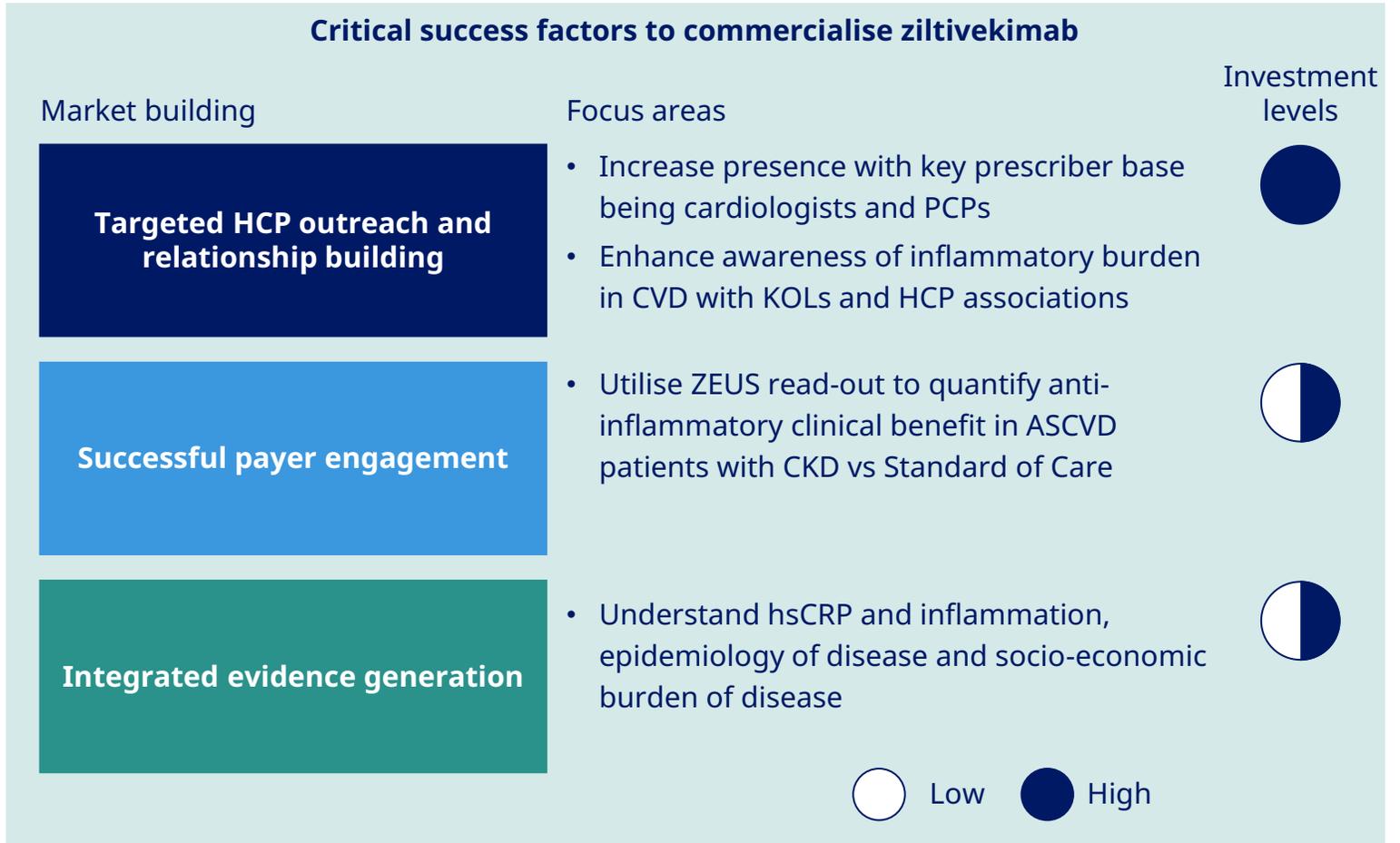
¹ MACE includes CV death, non-fatal MI or non-fatal stroke, Expanded MACE includes: (CV death, non-fatal MI, non-fatal stroke or hospitalisation for unstable angina pectoris requiring urgent coronary revascularisation)
 hsCRP: High-sensitivity C-reactive protein; CVOT: Cardiovascular outcome trial; CV: Cardiovascular; sc: Subcutaneous; SoC: Standard of care; HF: Heart failure; CKD: Chronic kidney disease
 Source: Ridker PM, et al., IL-6 inhibition with ziltivekimab in patients at high atherosclerotic risk (RESCUE): a double-blind, randomised, placebo-controlled, phase 2 trial, 17 May 2021

Ziltivekimab aspires to address an unmet need in more than 5 million people in patients with ASCVD, CKD and inflammation

Ziltivekimab aspires to reduce MACE in people with ASCVD and CKD

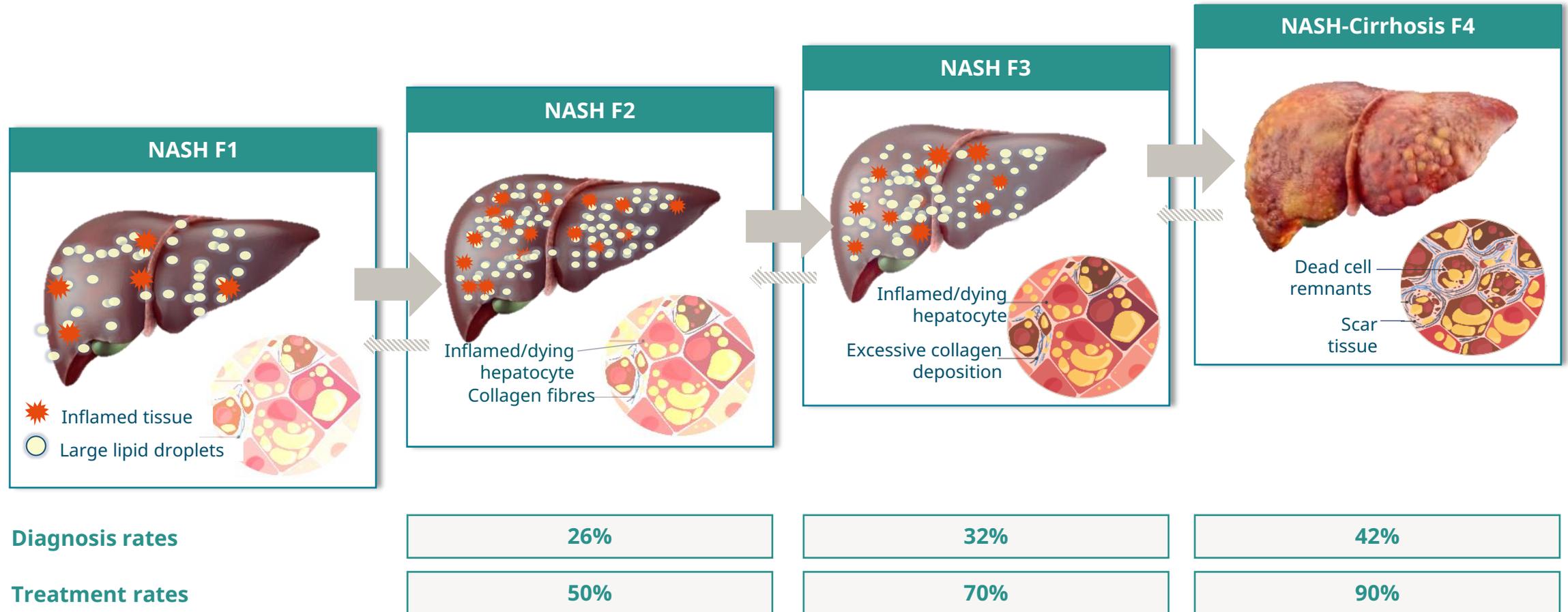


Critical success factors to commercialise ziltivekimab



¹ Includes US, EU5 (Germany, France, Spain, Italy, United Kingdom) and Japan
 MACE or major adverse cardiovascular events includes CV death, non-fatal MI or non-fatal stroke; ASCVD: Atherosclerotic cardiovascular disease; CKD: Chronic kidney disease; HCP: Healthcare professional; PCP: Primary care physician
 KOL: Key opinion leader; hsCRP: High-sensitivity C-reactive protein

NASH is a progressive disease with no approved treatment and low diagnosis rates today

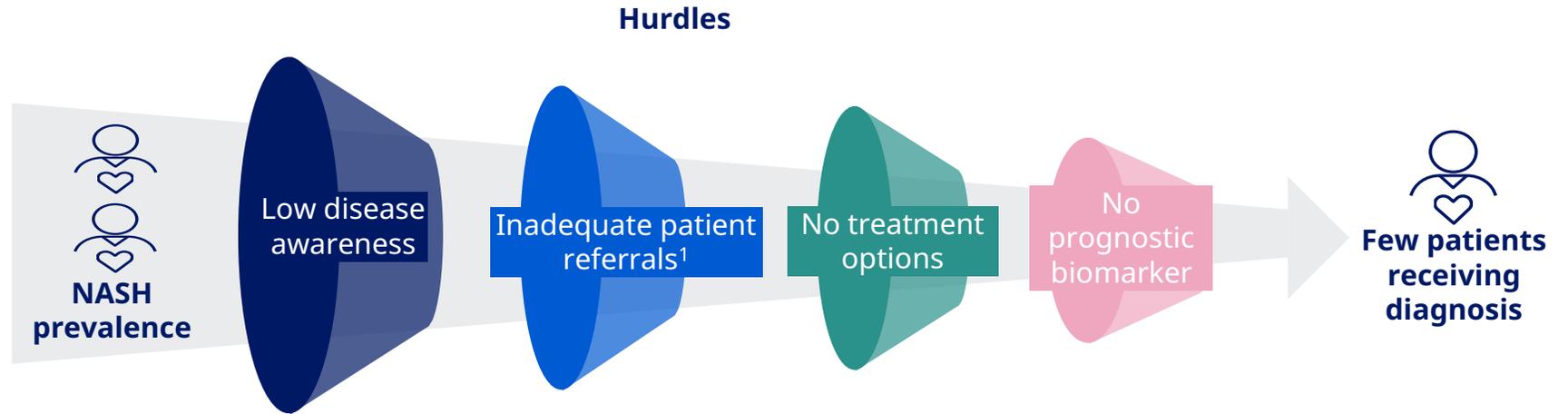
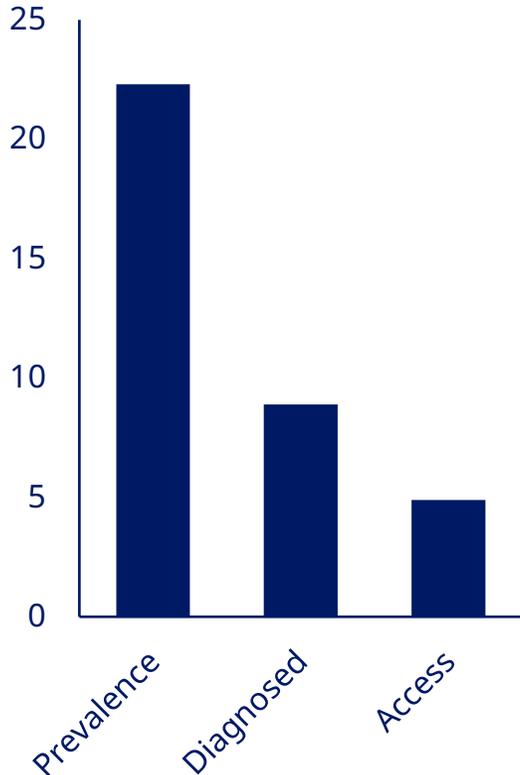


Source: Novo Nordisk estimates

NASH patient journey underscores key barriers to overcome for Novo Nordisk to be successful

~22 million people are expected to live with NASH F2-F4c by 2030

Global patients (in millions)



Market preparation priorities

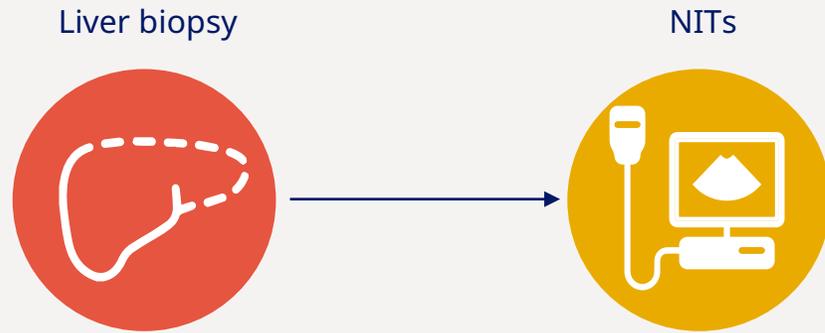
<p>Build strong presence ●</p> <ul style="list-style-type: none"> Create urgency to treat in NASH Build strong speciality-referral process Engage Endos, Hepas and PCPs 	<p>Increase diagnosis rate ◐</p> <ul style="list-style-type: none"> Momentum towards NITs in clinical practice and guidelines NITs for diagnosis, screening and monitoring 	<p>Evidence generation ◐</p> <ul style="list-style-type: none"> Build understanding of importance of addressing underlying cause of disease Stop clinical progression amongst physicians and payers
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● High expected investment level ○ Low expected investment level

NASH: Non-alcoholic steatohepatitis; Endos: endocrinologist; PCP: primary care physician; NIT: Non-invasive tests; ¹Referrals and identification; Hepas: hepatologists; F: Fibrosis stage
 Source: Estes C, Modeling the epidemic of nonalcoholic fatty liver disease demonstrates an exponential increase in burden of disease, Hepatology, 2018

Novo Nordisk is supporting use of non-invasive tests for NASH diagnosis

Development and adoption of non-invasive tests (NITs)



Guidelines: NITs represented in guidelines

Practitioners: ~80% of HCPs perform NASH diagnostics with use of various NITs, while biopsies are seldomly used

NIT development: Several available NITs in clinical practice. ELF test is first prognostic tool to be granted FDA *De Novo* marketing authorisation

Pharma companies: Embedding validation of NITs in clinical trials

Novo Nordisk activities supporting non-invasive tests in NASH diagnosis

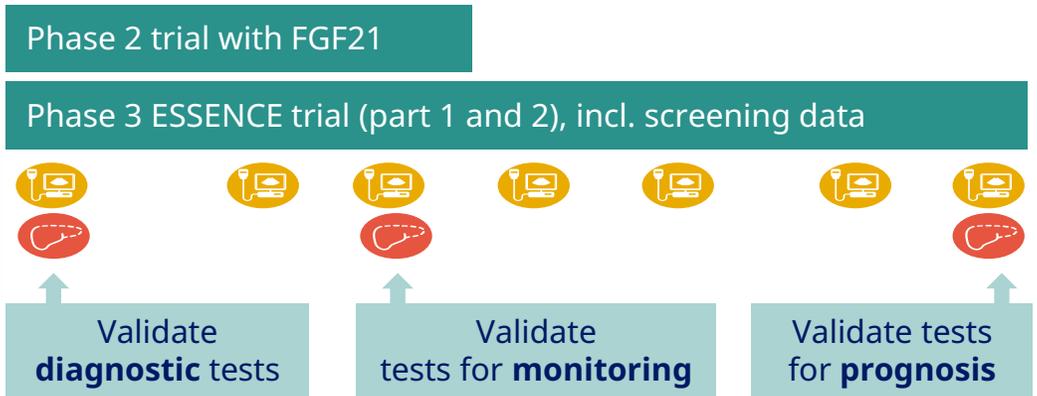
Real world

- Linking biomarkers and liver histology to outcomes
- Disease understanding

External

- Consortia
- Collaborations with academia and other healthcare companies

NN Development

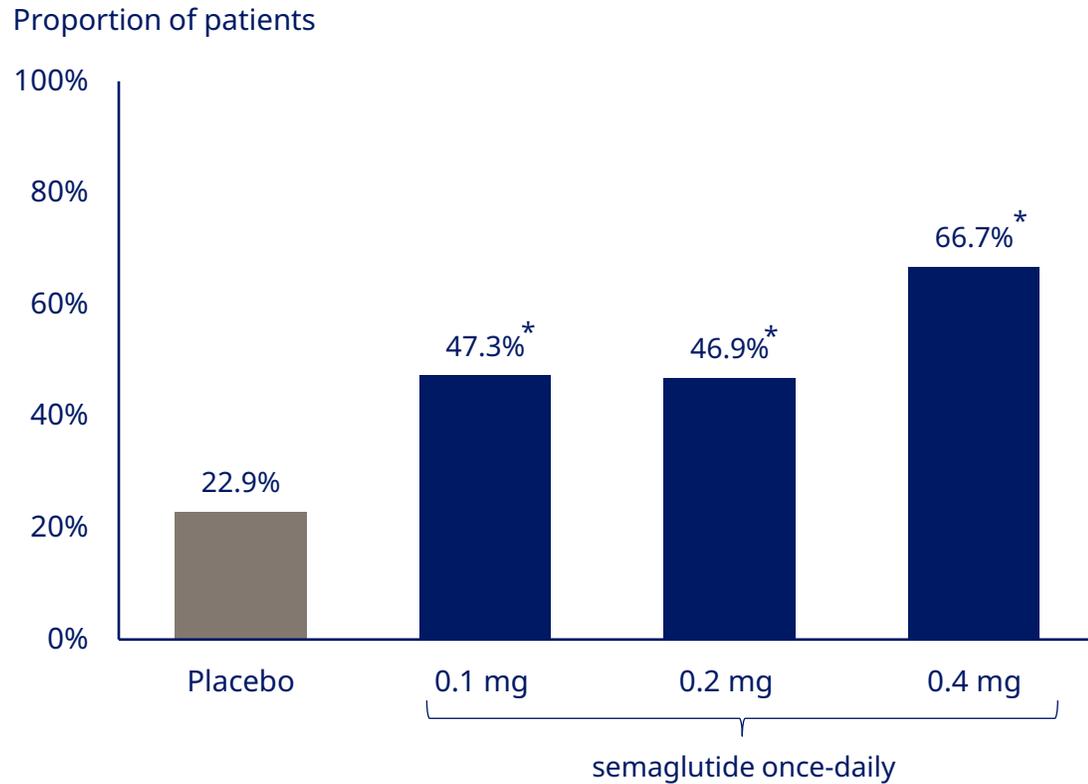


Note: FDA De Novo provides a marketing pathway to classify novel medical devices for which general controls alone, or general and special controls, provide reasonable assurance of safety and effectiveness for the intended use, but for which there is no legally marketed predicate device.

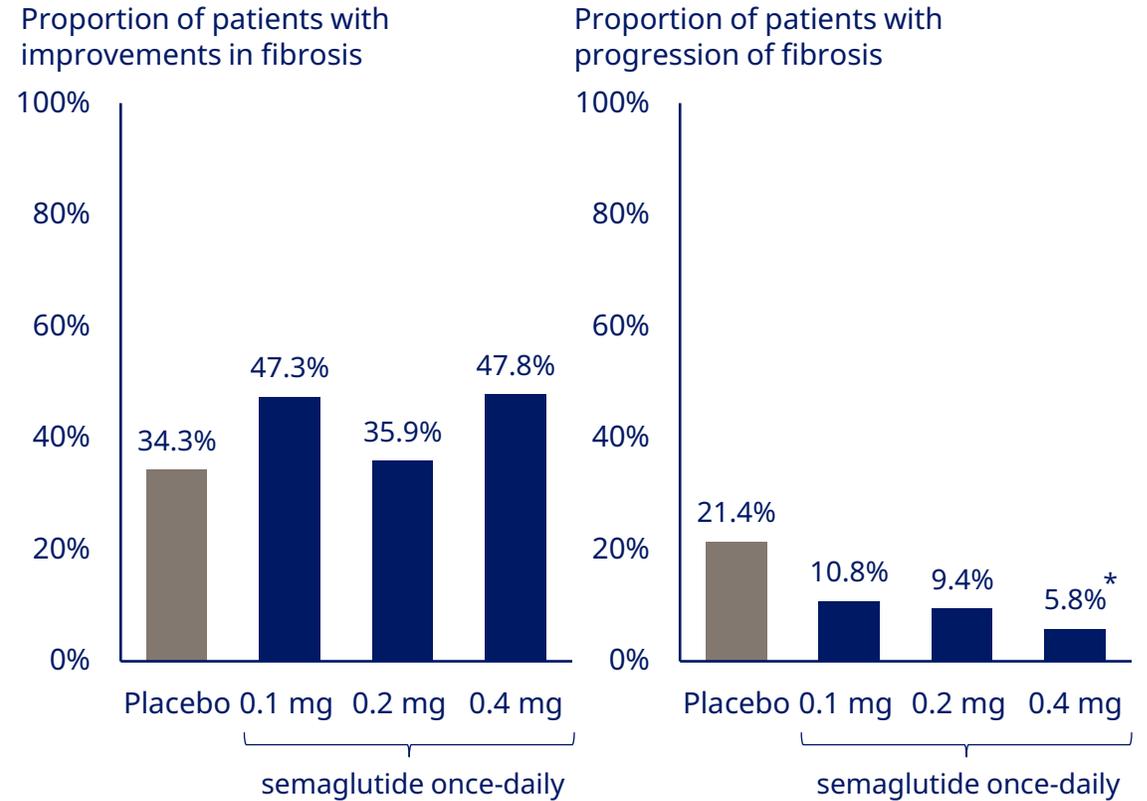
NITs: Non-invasive tests; NASH: Non-alcoholic hepatitis; HCPs: Healthcare professionals; FDA: the US Food and Drug Agency; NN: Novo Nordisk; ELF: Enhanced liver fibrosis

In phase 2, semaglutide showed significant improvements in NASH resolution

Semaglutide showed resolution of NASH with no worsening of fibrosis versus placebo in the phase 2 trial¹



Semaglutide showed numerical improvements in fibrosis and fewer patients had progression of fibrosis vs placebo in phase 2 trial¹



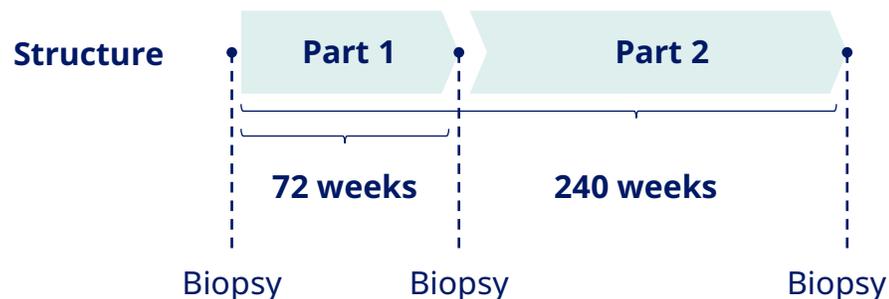
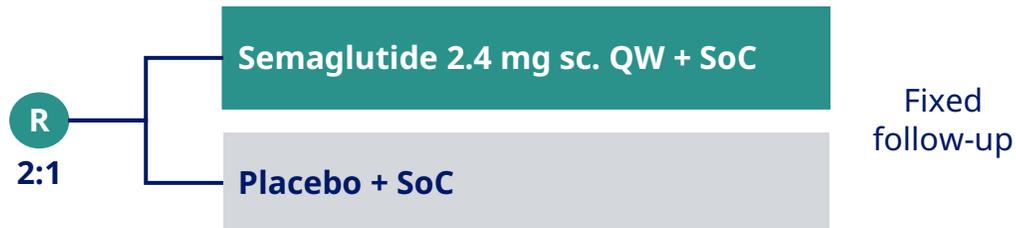
Note: *statistically significant at 72 weeks (p<0.05 vs placebo).¹Based on a complete case analysis, using people with an evaluable biopsy at end of trial. Analysis included patients with fibrosis stage 1, 2, or 3 at baseline. Data is from the semaglutide in NASH phase 2 trial. NASH: non-alcoholic steatohepatitis

Phase 3a trial ESSENCE with semaglutide 2.4 mg for the treatment of NASH was initiated in Q1 2021

The phase 3a ESSENCE trial in NASH

ESSENCE trial | NASH F2–F3 patients

N = 1,200



Primary objectives and endpoints for Part 1 and 2

Part 1 | Improves liver histology vs placebo

Two binary histology endpoints at week 72:

- Resolution of NASH and no worsening of liver fibrosis
- Improvement in liver fibrosis and no worsening of NASH

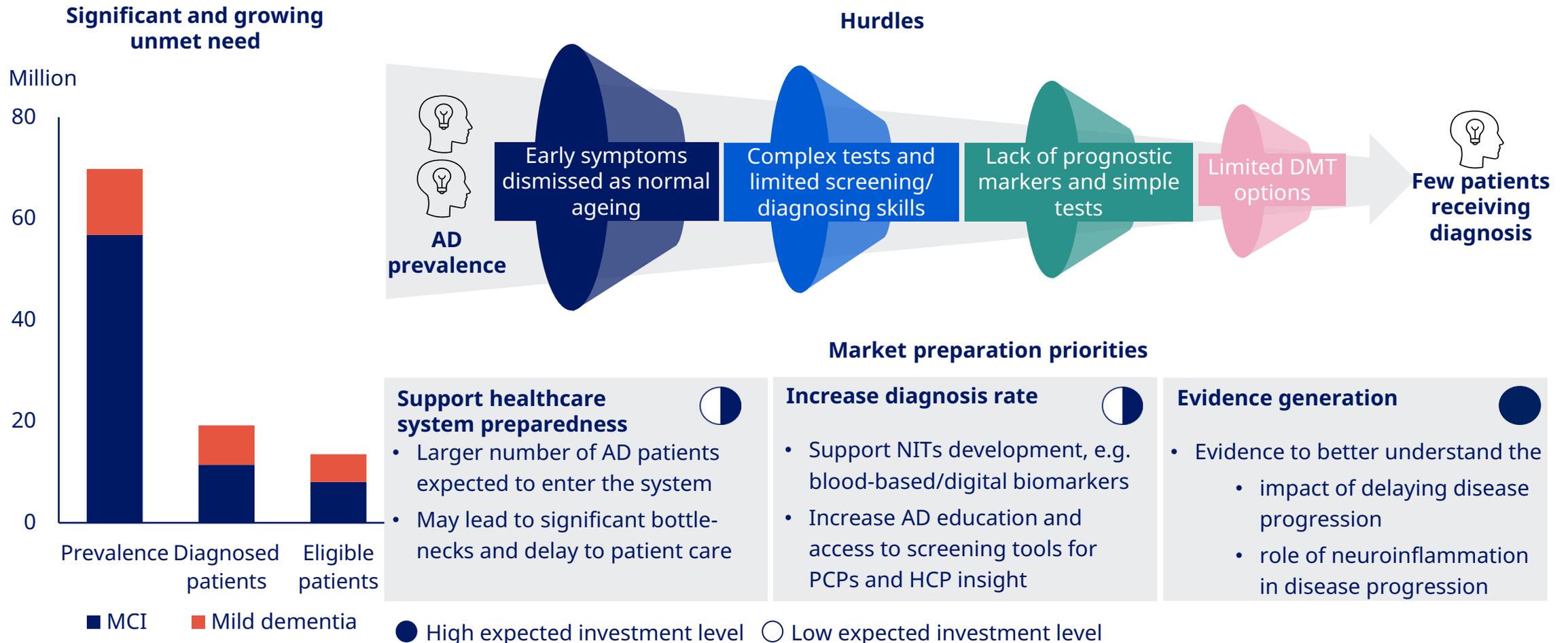
Part 2 | Lowers the risk of liver-related clinical events vs placebo

Time to first outcome (composite endpoints) at week 240:

- Histological progression to cirrhosis
- Death (all cause)
- Liver-induced MELD score ≥ 15
- Liver transplant
- Hepatic decompensation events

Regulatory submission is expected to be based on part 1 of the trial combined with the results of the already completed phase 2 trial

Alzheimer’s disease patient journey is complex and underscores key barriers to overcome for Novo Nordisk to be successful



Note: MCI and Mild dementia in the graph are both due to AD.
 AD: Alzheimer’s disease; QD: Once-daily; MCI: mild cognitive impairment; DMT: Disease-modifying treatment; PCP: primary care physicians; NITs: Non-invasive diagnostics; HCP: Healthcare professional
 Source: Alzheimer’s Association report: 2020 Alzheimer’s disease facts and figures, 2020 (16:391-460)

Entering phase 3 development of semaglutide in Alzheimer's disease was based on a number of data points



Real world evidence trials

Four RWE studies show reduced risk of dementia or AD with GLP-1

Danish registry¹

- **11%** lower risk of dementia per year of GLP-1 exposure

TRUVEN claims database¹

- **31%** lower risk of dementia after >2 years of GLP-1 exposure

Danish registry²

- **42%** lower odds of dementia after GLP-1 exposure

FAERS (FDA database)³

- **64%** lower odds of Alzheimer's disease after liraglutide exposure



Randomised controlled trials

53% lower risk of dementia diagnosis with liraglutide/semaglutide in NN's CVOTs in T2D⁴

Less decline in cerebral glucose metabolism (FDG-PET) with liraglutide in AD⁵

Reduced incidence of **major adverse CV events** in T2D with semaglutide incl. stroke⁶

Systemic anti-inflammatory effects with semaglutide^{7,8}

Short-term **memory improvement** with liraglutide in people with obesity⁹

Reduced cognitive decline with dulaglutide in patients with T2D¹⁰



Pre-clinical studies

Improved memory function with GLP-1¹¹ incl. semaglutide¹²

Reduced phospho-tau accumulation¹³

Reduced neuroinflammation with GLP-1^{14,15} incl. semaglutide¹⁶

Reduced atherosclerosis with liraglutide and semaglutide¹⁷

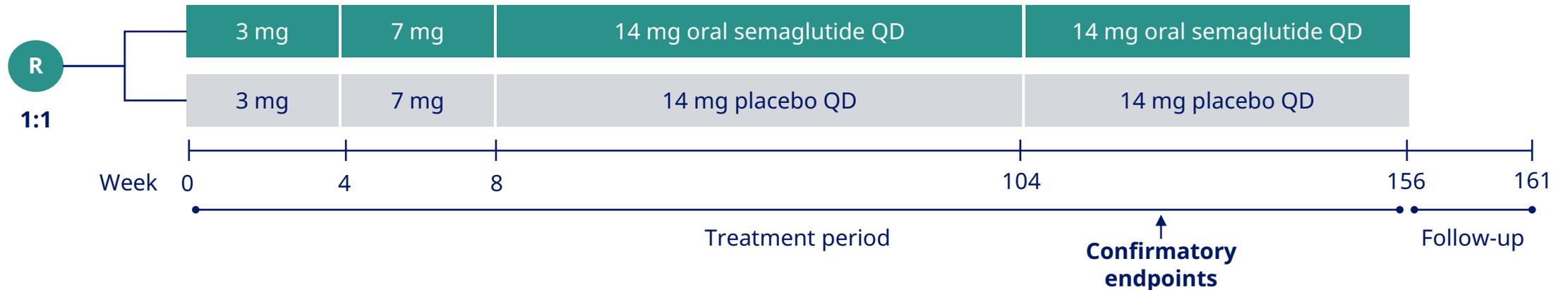
Systemic **anti-inflammatory** effects with semaglutide¹⁷

AD: Alzheimer's disease; CI: confidence interval; RWE: Real world evidence

¹NN data on file, Danish register: Dementia cases based on diagnosis (ICD10) or treatment (anticholinesterases, memantine) codes; TRUVEN: Dementia cases based on SNOMED ids for all diagnoses (ICD-10) or treatment (anticholinesterases, memantine); ²Wium-Andersen IK et al. Eur J Endocrinol. 2019;181(5):499-507; ³Akimoto H et al. Am J Alzheimers Dis Other Demen. 2020;35:1-11; ⁴Ballard et al. Presented online at the Alzheimer's Association International Conference (AAIC), 27-31 July 2020; ⁵Gejl M et al. Front Aging Neurosci 2016;8:108; ⁶Husain M et al. Diabetes Obes Metab 2020;22:442-451; ⁷Aroda VR et al. Diabetes Care 2019;42:1724-1732; ⁸Rodbard HW et al. Diabetes Care 2019;42:2272-2281; ⁹Vadini F et al. Int J Obes (Lond) 2020;44:1254-1263; ¹⁰Cukierman-Yaffe T et al. Lancet Neurol 2020;19:582-590 ¹¹Hansen HH et al. J Alzheimers Dis 2015;46:877-888; ¹²Preliminary data in NN ongoing pre-clinical studies; ¹³Hansen HH et al. Brain Res 2016;1634:158-170; ¹⁴Brundin L et al. Nature Med 2018;24:900-902; ¹⁵Yun SP et al. Nature Med 2018;24:931-938; ¹⁶Secher A et al. Oral presentation at Virtual Alzheimer's Disease/Parkinson's Disease International Conference, 9-14 March 2021; ¹⁷Rakipovski G et al. JACC Basic Transl Sci 2018;3:844-857

evoke and evoke+ trials are ongoing with expected completion in 2025

evoke and evoke+ trials have been initiated with 1,840 patients in each trial with a total of 3,680 patients



Objective

To confirm superiority of oral semaglutide vs placebo on the change in cognition and function in people with early Alzheimer’s disease

Primary endpoint

Change in the Clinical Dementia Rating – Sum of Boxes (CDR-SB) score from baseline to end of 104 weeks of treatment

Inclusion criteria

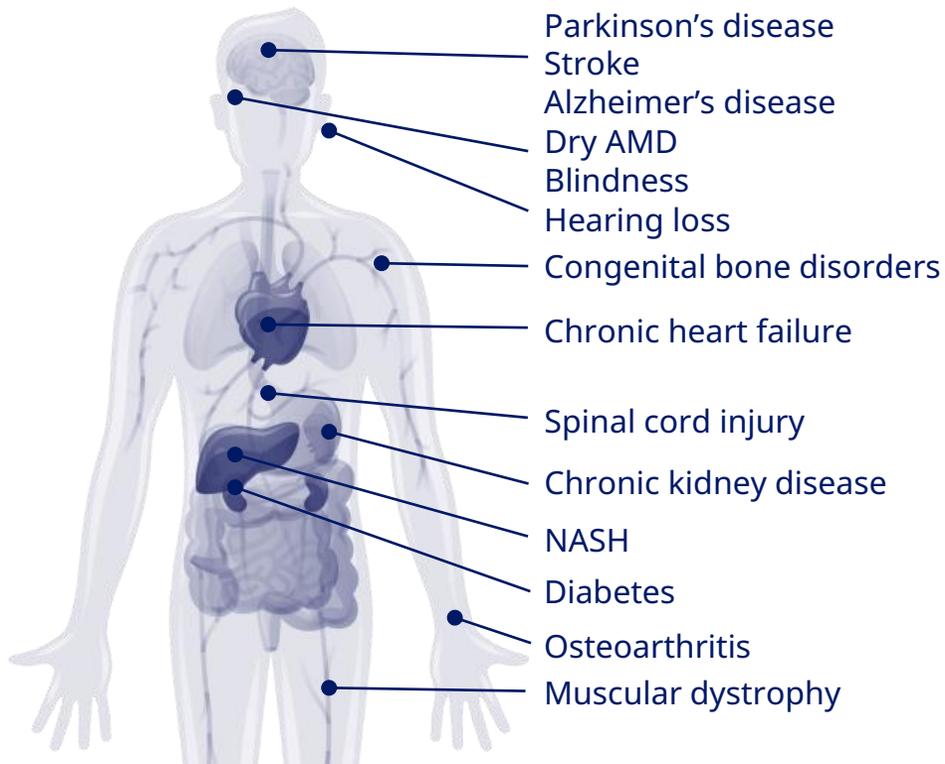
- Early Alzheimer’s disease (mild cognitive impairment or mild dementia)
- Mini-Mental State Examination (MMSE) \geq 22/30
- Age between 55-85 years
- evoke+ has at least 20% with small vessel pathology

AD: Alzheimer’s disease; QD: Once-daily; MCI: mild cognitive impairment; QD: once-daily.

Note: CDR-SB ratings are utilising in six domains are summed to provide a clinical measure = Sum of Boxes. These are: memory, orientation, judgment and problem solving, community affairs, home and hobbies, personal care. CDR-SB Scores range from 0 to 18 with higher scores representing greater impairment

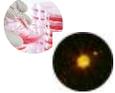
There is broad potential for cell therapies and Novo Nordisk has capabilities to explore the potential

Broad potential for clinical use of cell therapies



Multiple sites: Cancers and wound healing

Maturing the platform to enable development of competitive cell therapies

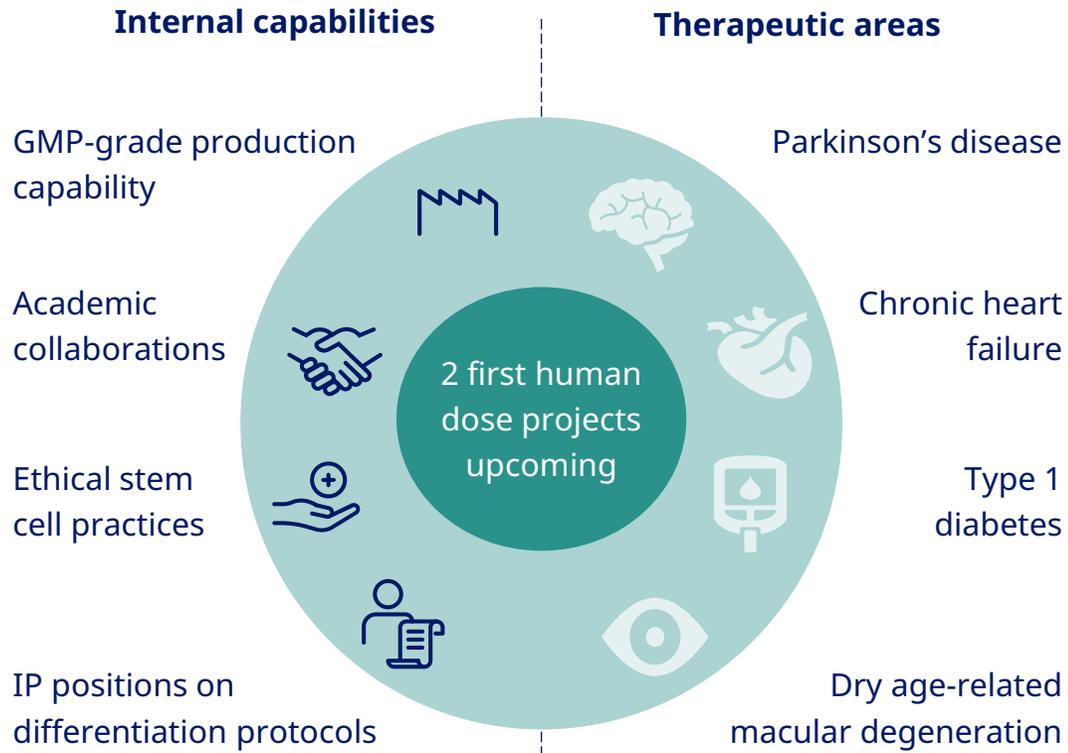
Focus area	Novo Nordisk capabilities
 Pluripotent stem cell	In-depth know-how on embryonic pluripotent stem cells
 Bank of several undifferentiated stem cells	Exploitation of quality controlled stem cells
 Differentiated to specific cell types	IP-protected protocols for differentiation
 Upscaling, manufacturing and delivery/devices	GMP-grade cell manufacturing and development of cell delivery devices ¹
 Clinical development and regulatory affairs	Early interactions with regulators Clinical trial experience

¹In collaboration with academia and industrial partners
 Dry AMD: Dry age-related macular degeneration; NASH: Non-alcoholic steatohepatitis; IP: Intellectual property; GMP: Good manufacturing practices

First human dose with cell therapy in collaboration with Heartseed and others achieved in Q1 2023

Utilise internal capabilities and disease understanding for stem cell development

Accelerate innovation through partnerships



- iPSC derived cardiomyocyte spheroids for direct injection into heart
- Heart failure
- FHD in February 2023



- hESC derived dopaminergic progenitor neurons for placing into the brain
- Parkinson's disease
- FHD in February 2023



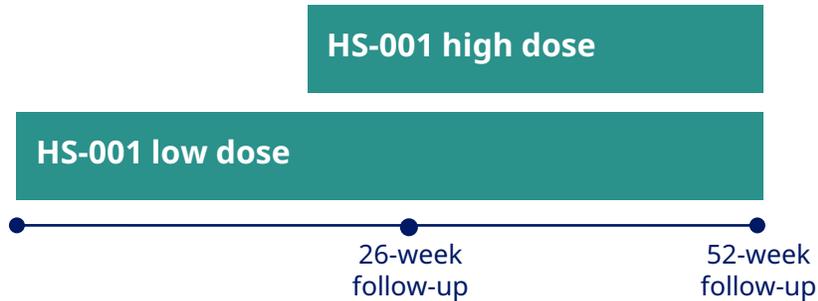
- Novo Nordisk scientists embedded at UCSF lab
- Process development, manufacturing, QA/QC, facilities and operations at Fremont site

First efforts to combine Novo Nordisk and partner competencies in cell therapies start with heart failure and Parkinson’s disease

Heartseed: Phase 1/2 trial in patients with severe heart failure

10 patients with

- Resting LVEF $\leq 40\%$
- NYHA cardiac function classification grade $\geq II$

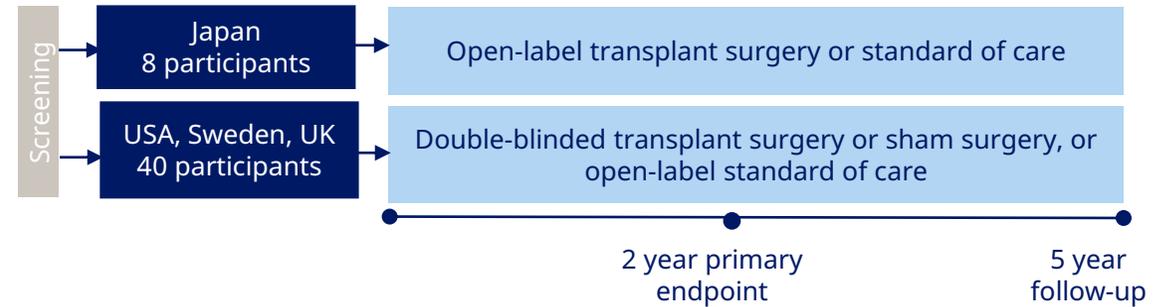


Objectives to evaluate:

- Safety of cardiomyocytes spheroids
- Efficacy and dose-response
- Feasibility of transplantation procedures

A **follow-up phase 2 trial** is planned to investigate further dose increase and catheter delivery as route of administration

TRANSCEND 1 and 2 trials to evaluate stem cells impact on quality of life for people with moderate Parkinson’s disease



TRANSCEND 1: observational study of patients with moderate PD aiming at identifying potential candidates to the interventional TRANSCEND 2 trial

TRANSCEND 2: in combination with **Lund University** trial, a phase 1/2 trial investigating the treatment of Parkinson’s disease

Primary endpoint: Number of treatment-emergent adverse events 2 years after dosing

International Operations

International Operations	114
EMEA	120
Region China	125
Rest of World	130



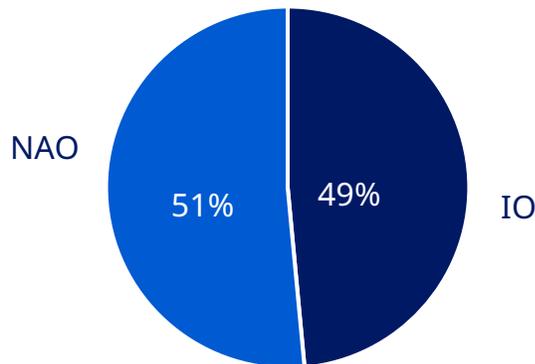
Growth momentum has increased driven by demographics and utilisation of full product portfolio

International Operations is diverse and covers 190 markets

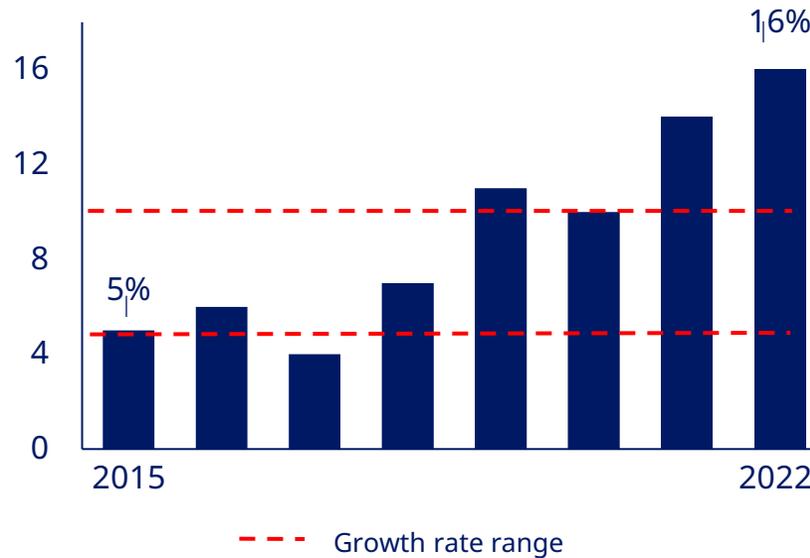
>487m live with diabetes

>600m live with obesity

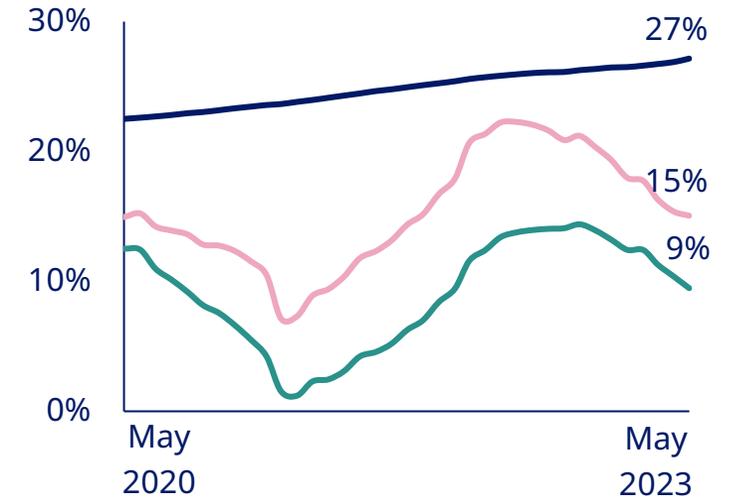
IO's share of revenue FY 2022



Historic growth has been in the range of 5-10%



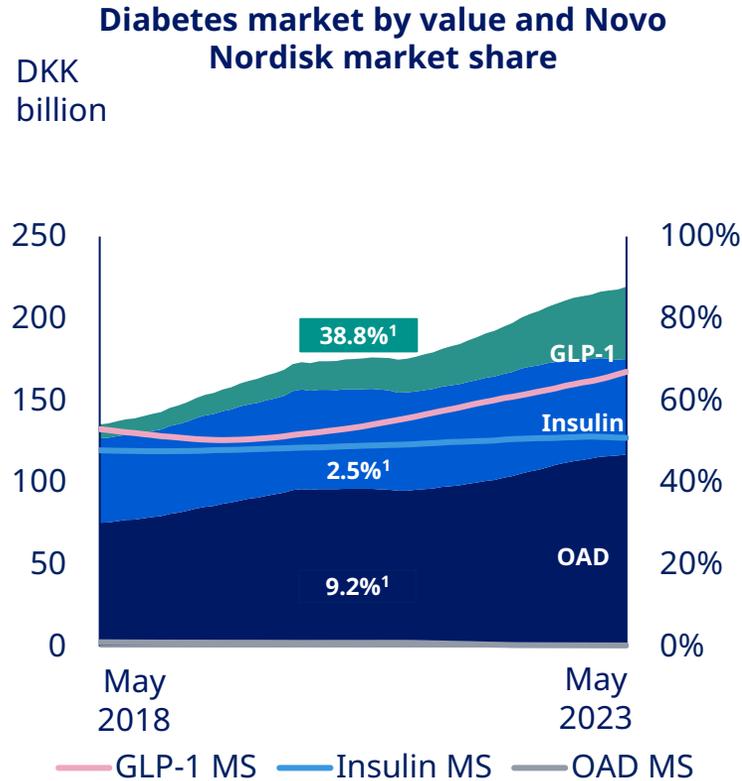
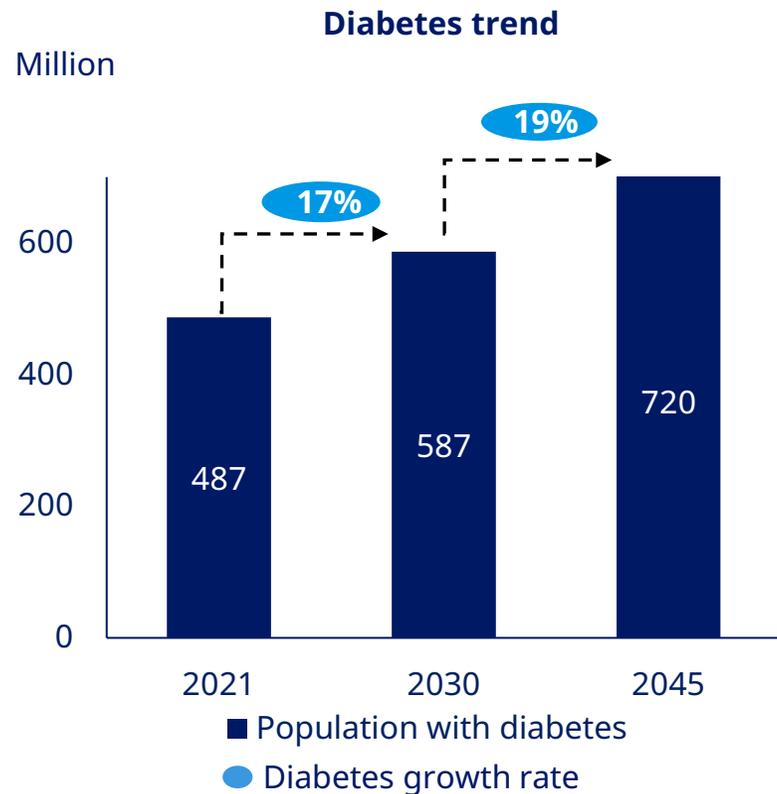
Growth momentum in IO



- NN Diabetes market share
- Market growth
- NN Diabetes growth

NAO: North America Operations; IO: International Operations; Share of Growth not depicted due to high numbers; FY: Full Year
 Source (RHS): IQVIA May 2023, Value, MAT

International Operations at a glance



Novo Nordisk reported sales

First half of 2023	Sales (mDKK)	Growth ²
Injectable GLP-1 ³	15,531	46%
Rybelsus®	3,411	214%
Total GLP-1	18,942	62%
Total insulin⁴	19,413	-2%
Other Diabetes care ⁵	1,095	-18%
Diabetes care	39,450	20%
Obesity care ⁶	3,989	66%
Diabetes & Obesity care	43,439	24%
Rare disease ⁷	5,268	-17%
Total	48,707	17%

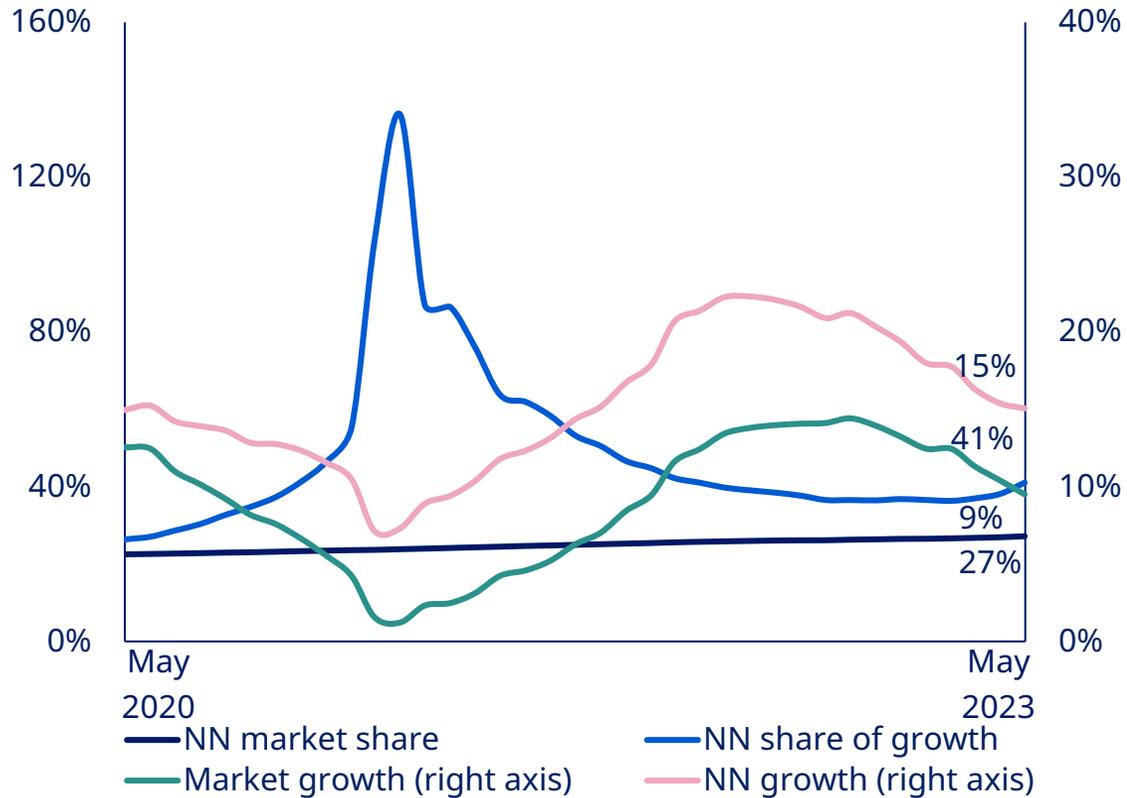
Diabetes trend estimates based on the following International Diabetes Federation defined regions: Africa, Europe, Middle East and North Africa, South and Central America, South East Asia and Western Pacific; Source: International Diabetes Federation: Diabetes Atlas 10th Edition 2021

¹ CAGR calculated for 5-year period; Competitor insulin value market shares, as of May 2023: Novo Nordisk 51%, Others 49%; Competitor GLP-1 value market shares, as of May 2023: Novo Nordisk 67%, Other 33%; OAD: Oral anti-diabetic; MS: Market share; Source: IQVIA MAT, May 2023 value figures

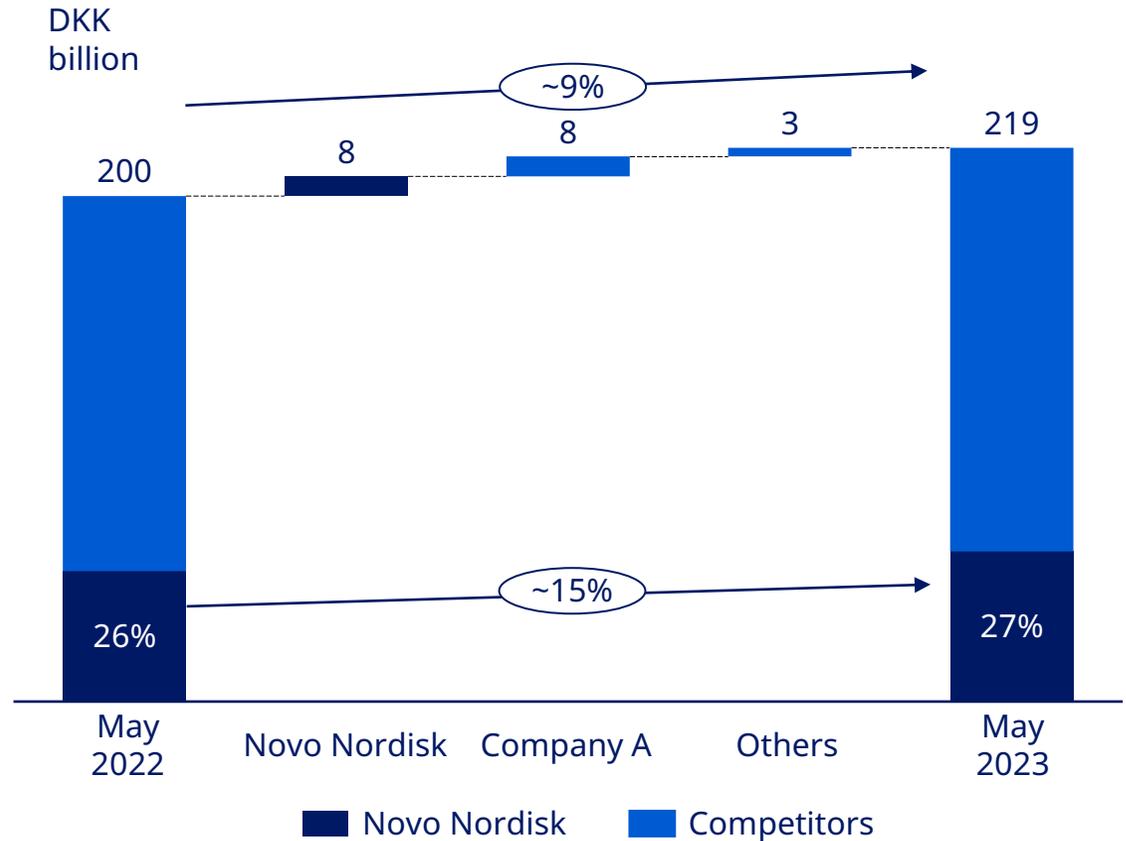
² At Constant exchange rates; ³ Comprises Victoza®, Ozempic®; ⁴ Comprises Tresiba®, Xultophy®, Levemir®, Ryzodeg®, NovoMix®, Fiasp® and NovoRapid®; ⁵ Comprises NovoNorm® and needles; ⁶ Obesity care comprises Saxenda® and Wegovy®; ⁷ Comprises primarily NovoSeven®, NovoEight®, NovoThirteen®, Refixia®, Esperoct®, Norditropin®, Vagifem® and Activelle®

Diabetes market share and market growth in International Operations

Diabetes market growth and Novo Nordisk market share



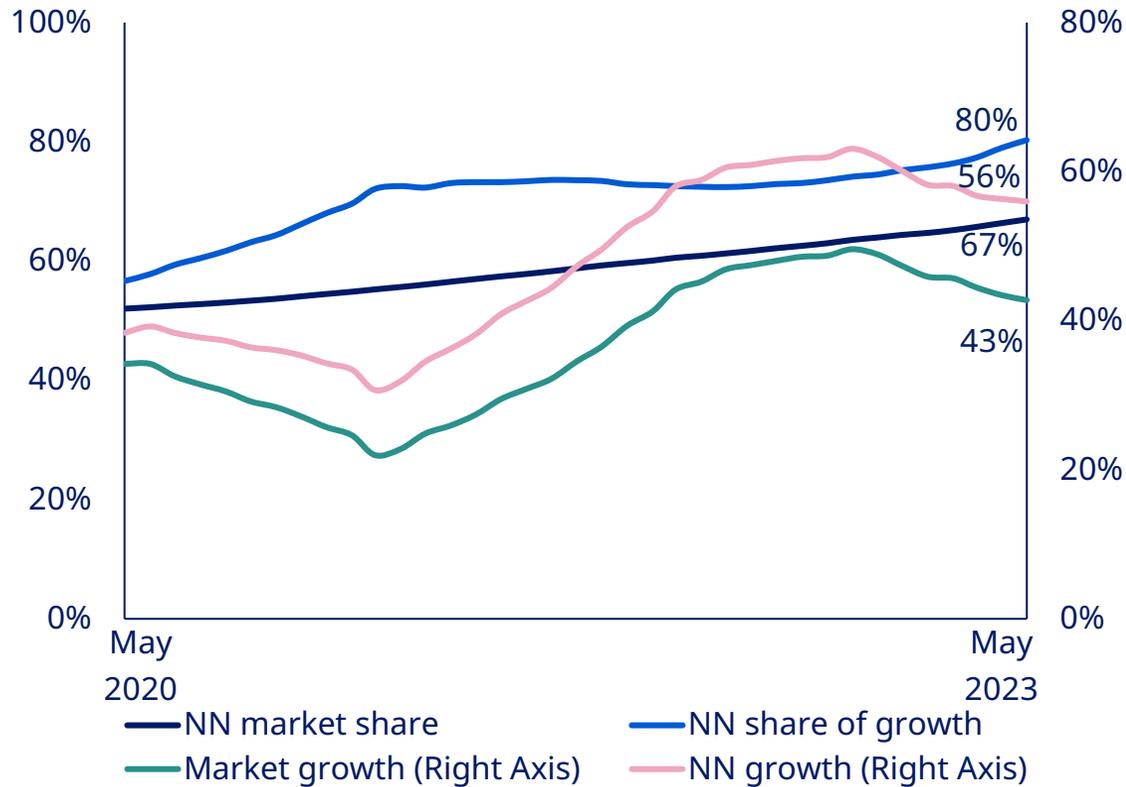
Diabetes market size and growth



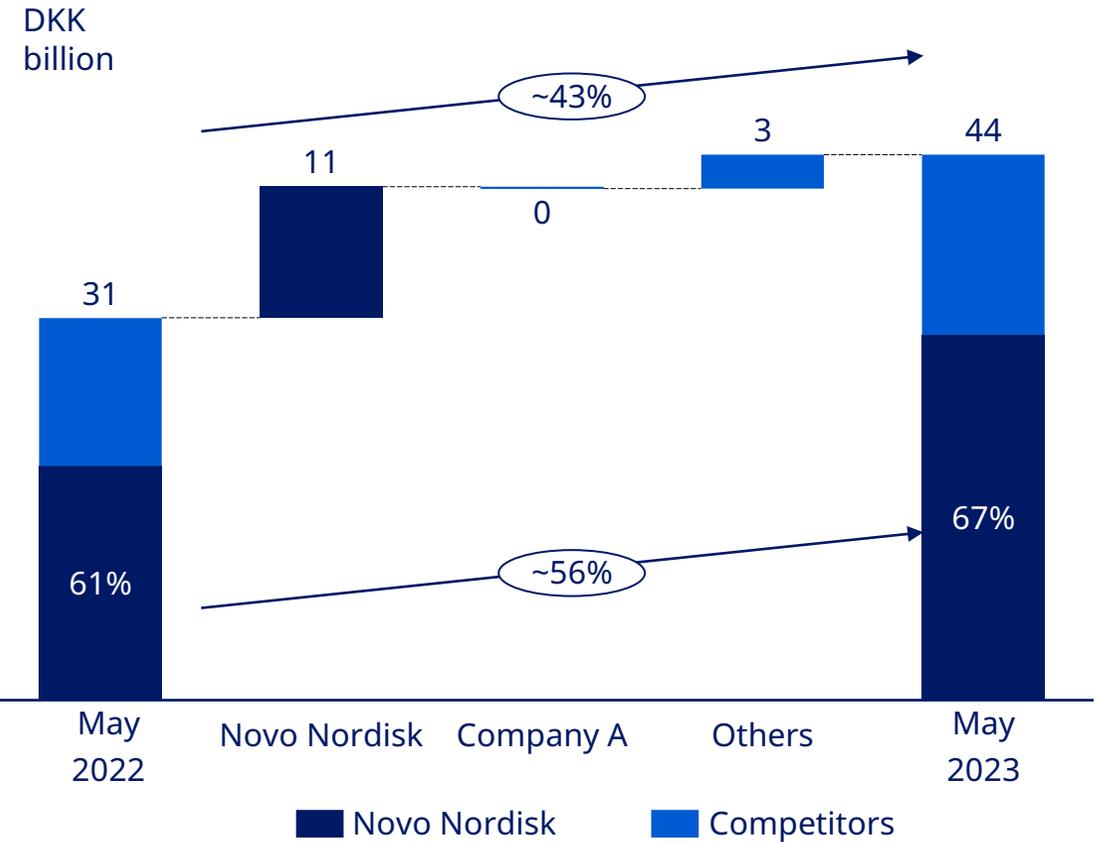
Source: IQVIA, May 2023, Value, MAT, all countries; Due to contractual obligations competitor names are not disclosed. Company A represents an actual company. NN: Novo Nordisk

GLP-1 market share and market growth

GLP-1 market growth and Novo Nordisk market share

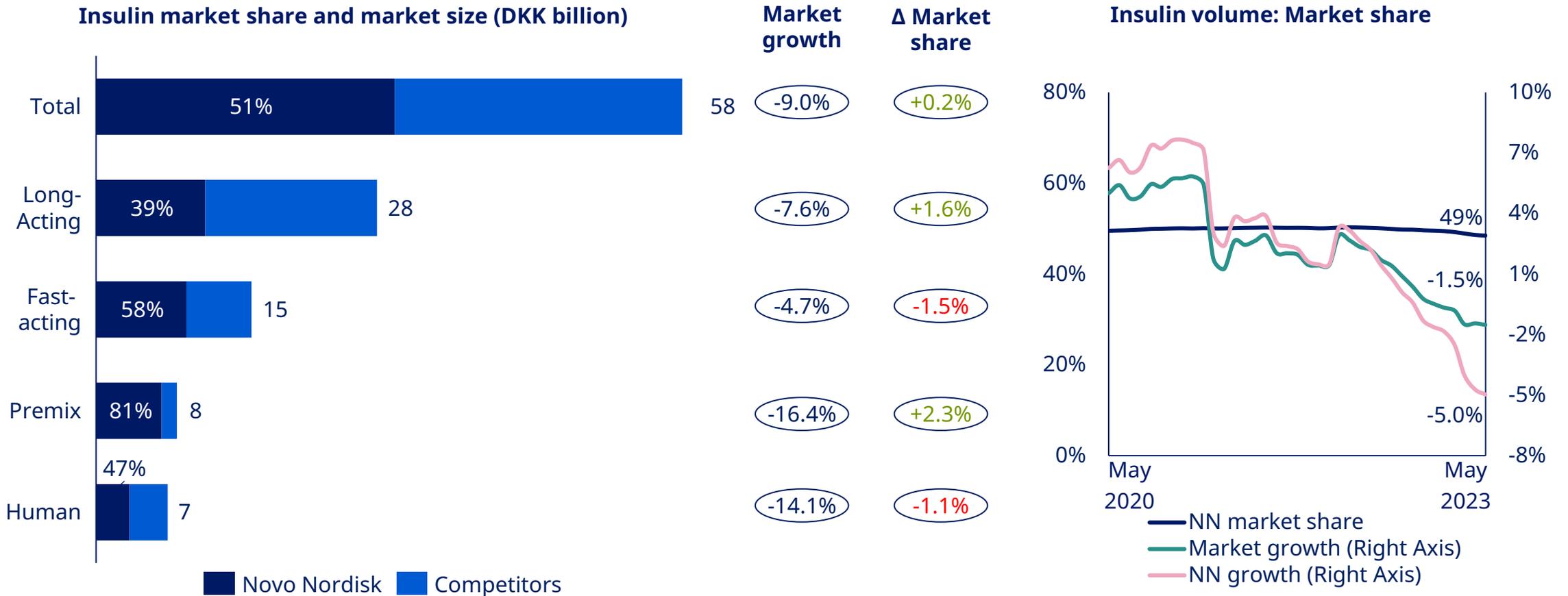


GLP-1 market size and growth



Source: IQVIA, May 2023, Value MAT, all countries; Due to contractual obligations competitor names are not disclosed. Company A represents an actual company. NN: Novo Nordisk

Insulin market size and volume share of growth and market share in International Operations



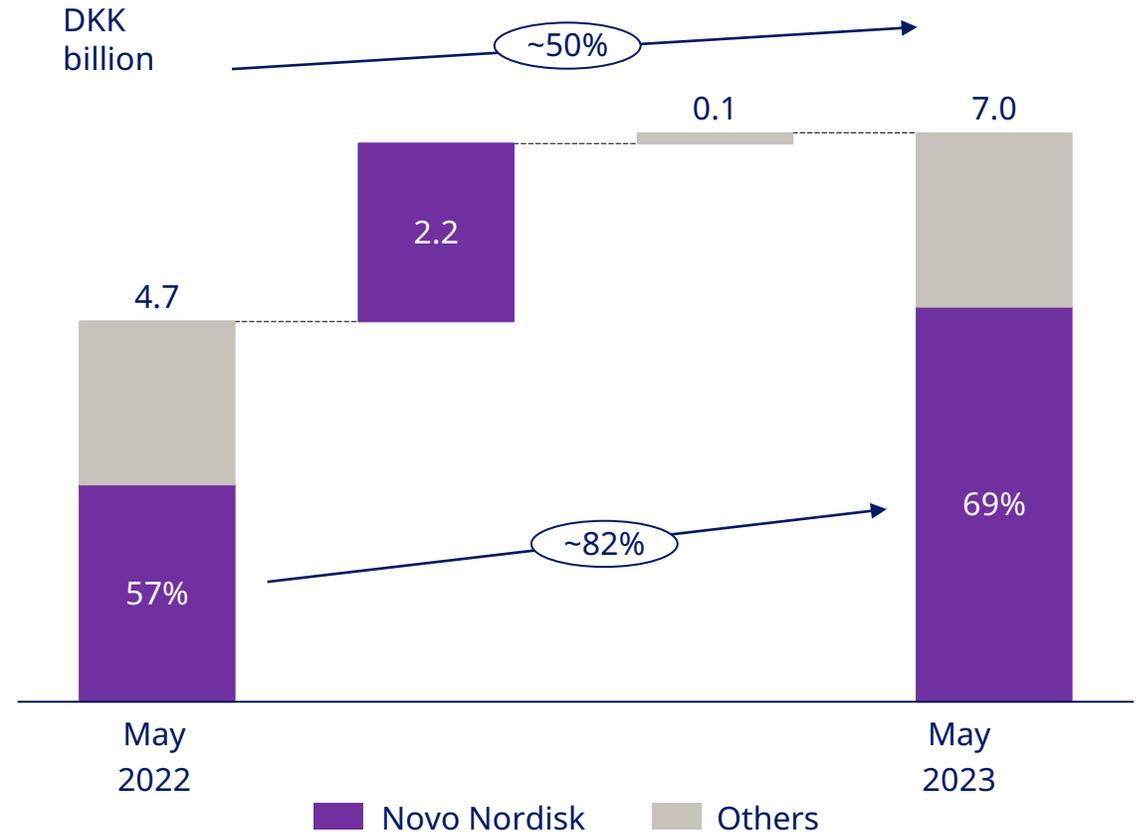
Source: IQVIA, May 2023, LHS graph - Value, RHS Graph - Volume, MAT, all countries; Share of growth not depicted due to too high numbers; NN: Novo Nordisk

Obesity market share and market growth in International Operations

Obesity market growth and Novo Nordisk market share



Obesity market size and growth

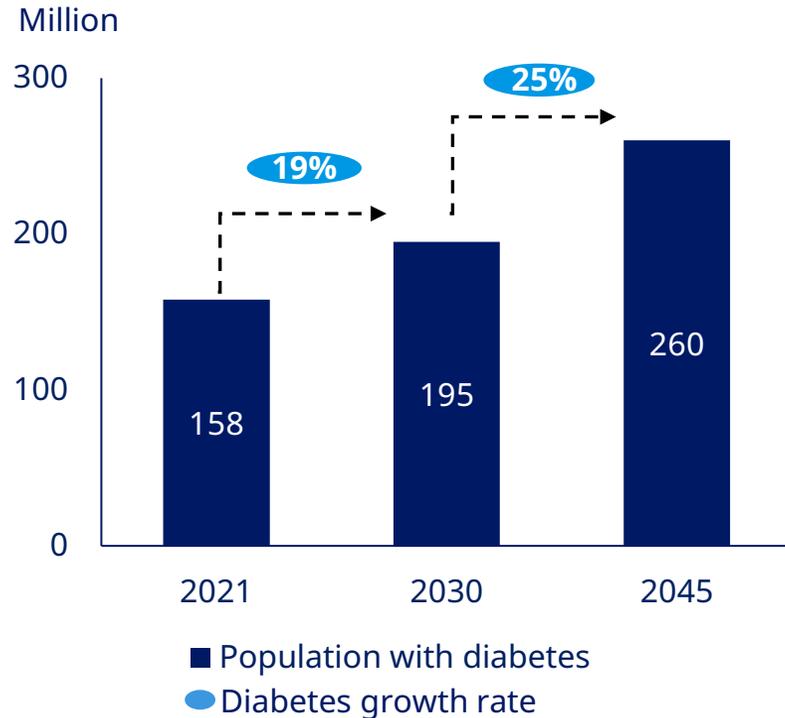


Source: IQVIA, May 2023, Value MAT, all countries

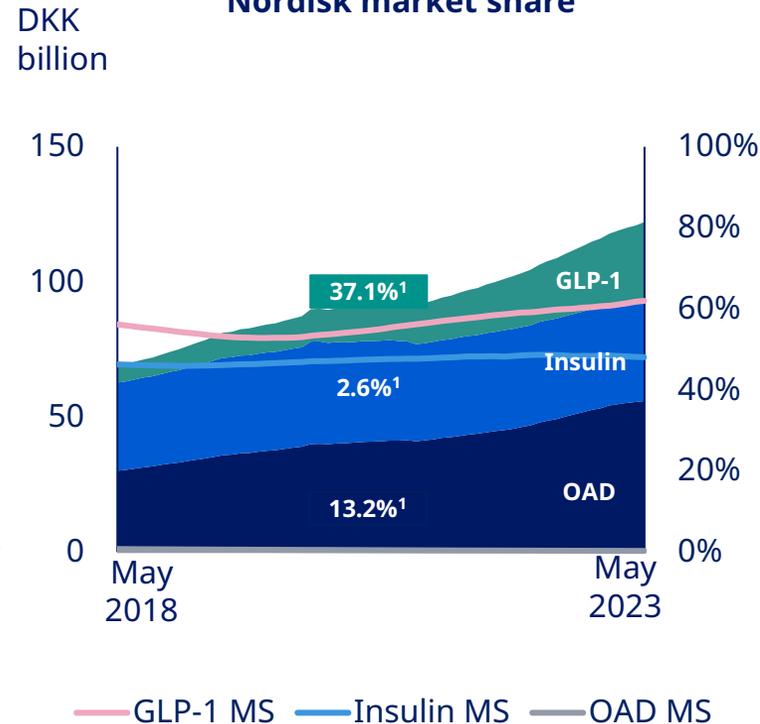


EMEA at a glance

Diabetes trend



Diabetes market by value and Novo Nordisk market share



Novo Nordisk reported sales

First half of 2023	Sales (mDKK)	Growth ²
Injectable GLP-1 ³	8,434	36%
Rybelsus [®]	1,973	268%
Total GLP-1	10,407	55%
Total insulin⁴	9,383	-1%
Other Diabetes care ⁵	324	-12%
Diabetes care	20,114	21%
Obesity care ⁶	2,640	79%
Diabetes & Obesity care	22,754	26%
Rare disease ⁷	2,844	-18%
Total	25,598	19%

Diabetes trend estimates based on the following International Diabetes Foundation defined regions: Africa, Europe, Middle East and North Africa, South and Central America, South East Asia and Western Pacific Source: International Diabetes Federation: Diabetes Atlas 10th Edition 2021; EMEA: Europe, Middle East and Africa

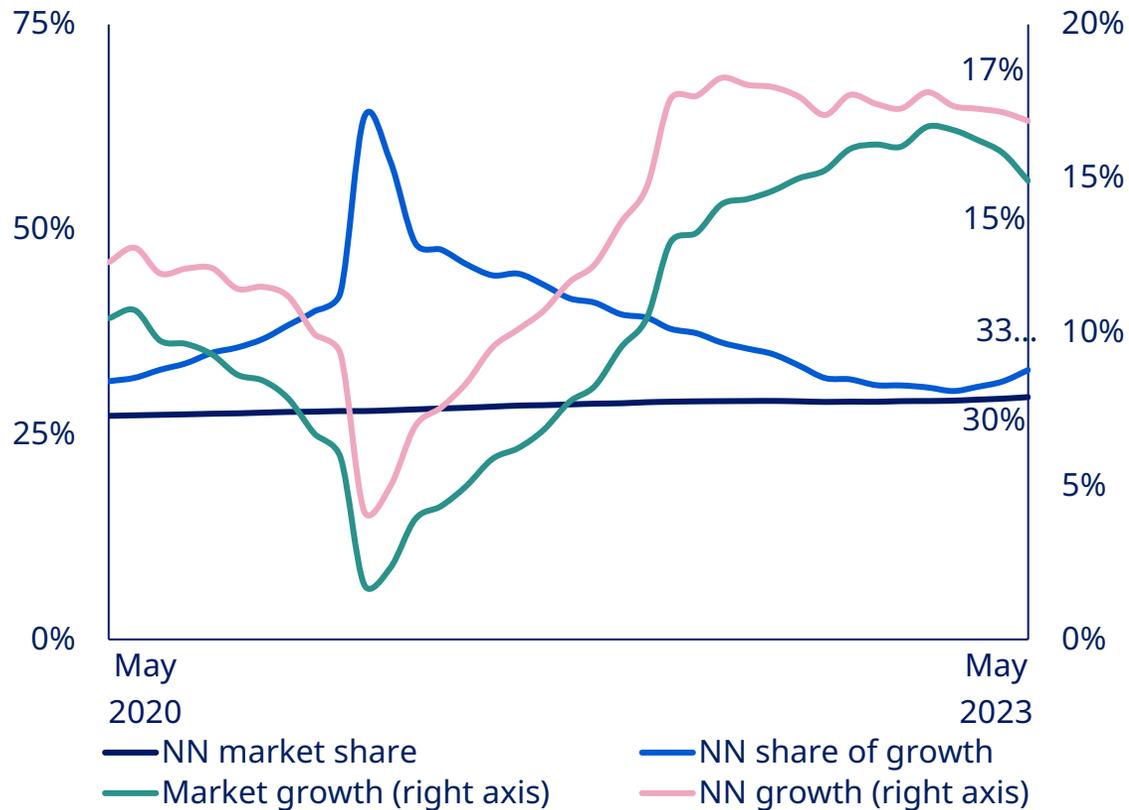
¹ CAGR calculated for 5-year period; Competitor insulin value market shares, as of May 2023: Novo Nordisk 48%, Others 52%; Competitor GLP-1 value market shares, as of May 2023: Novo Nordisk 62%, Others 38%. OAD: Oral anti-diabetic; MS: Market share; Source: IQVIA MAT, May 2023 value figures

² At Constant exchange rates; ³ Comprises Victoza[®], Ozempic[®]; ⁴ Comprises Tresiba[®], Xultophy[®], Levemir[®], Ryzodeg[®], NovoMix[®], Fiasp[®] and NovoRapid[®]; ⁵ Comprises NovoNorm[®] and needles; ⁶ Obesity care comprises Saxenda[®] and Wegovy[®]; ⁷ Comprises primarily NovoSeven[®], NovoEight[®], NovoThirteen[®], Esperoct[®], Refixia[®], Norditropin[®], Vagifem[®] and Activelle[®]

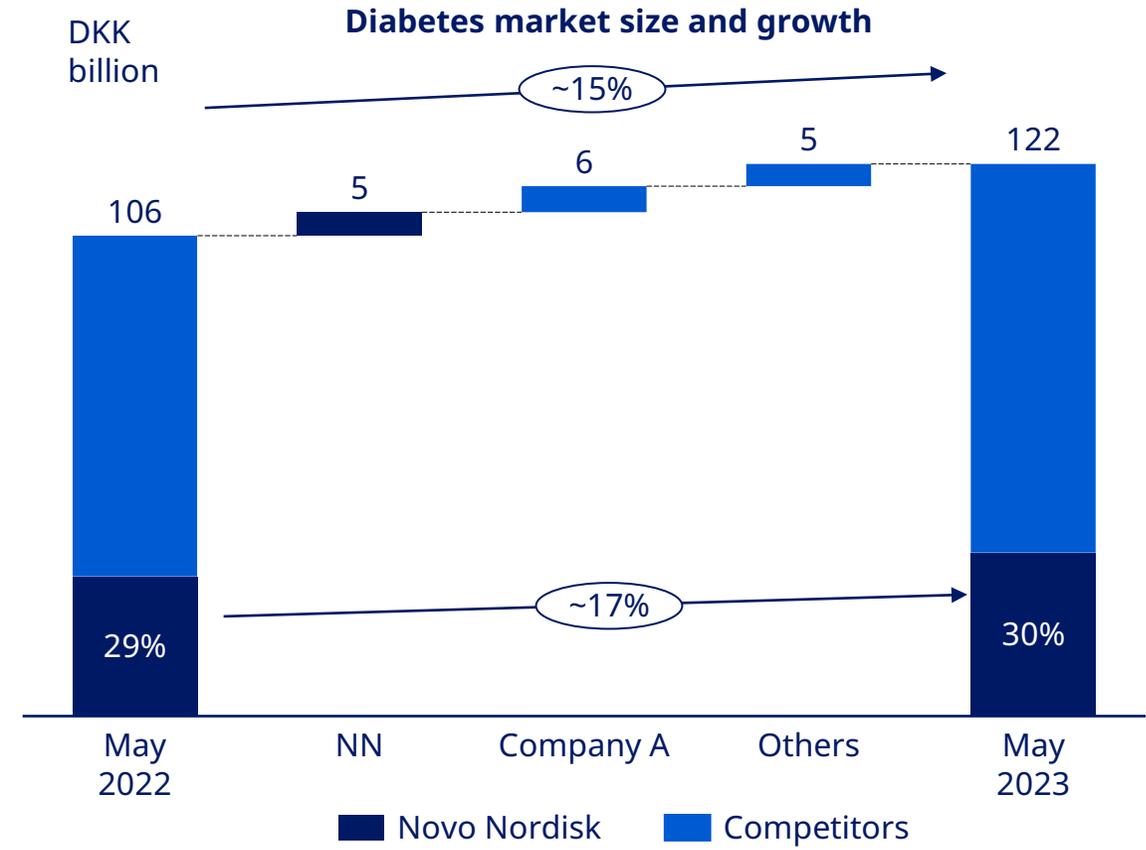


Diabetes market share and market growth in EMEA

Diabetes market growth and Novo Nordisk market share



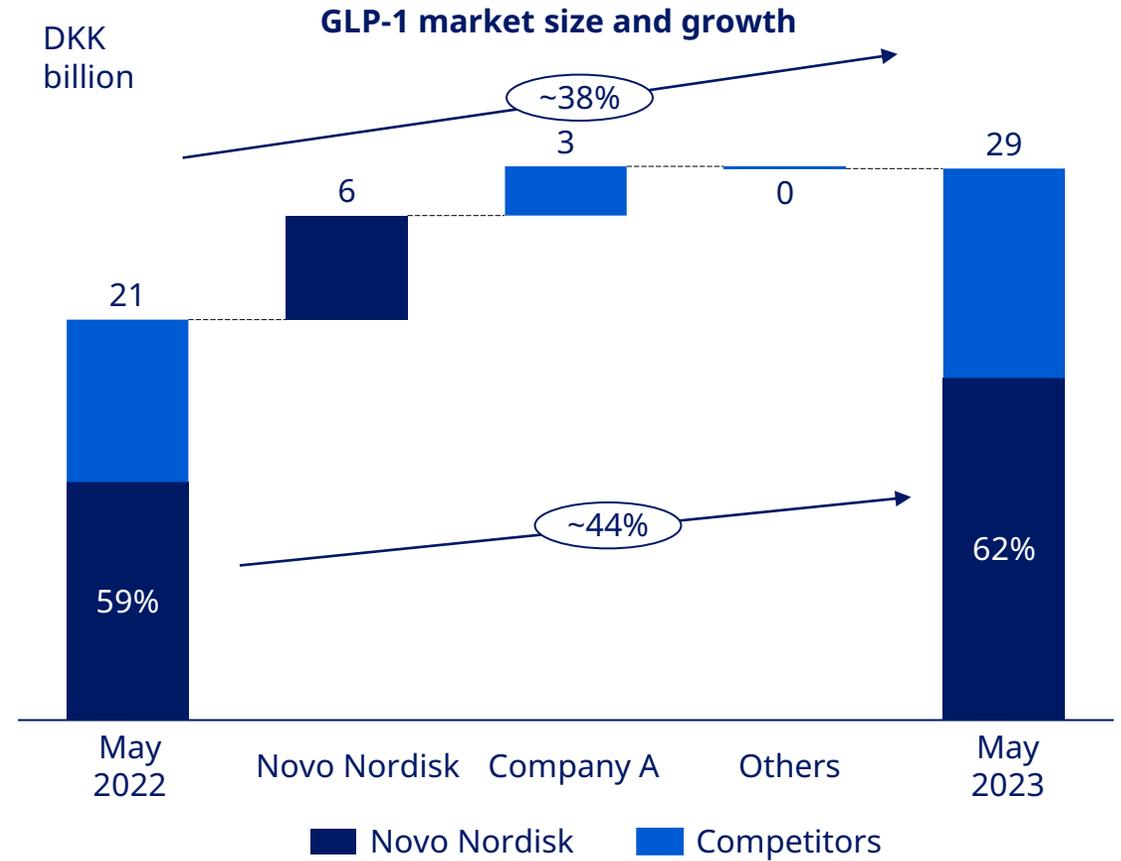
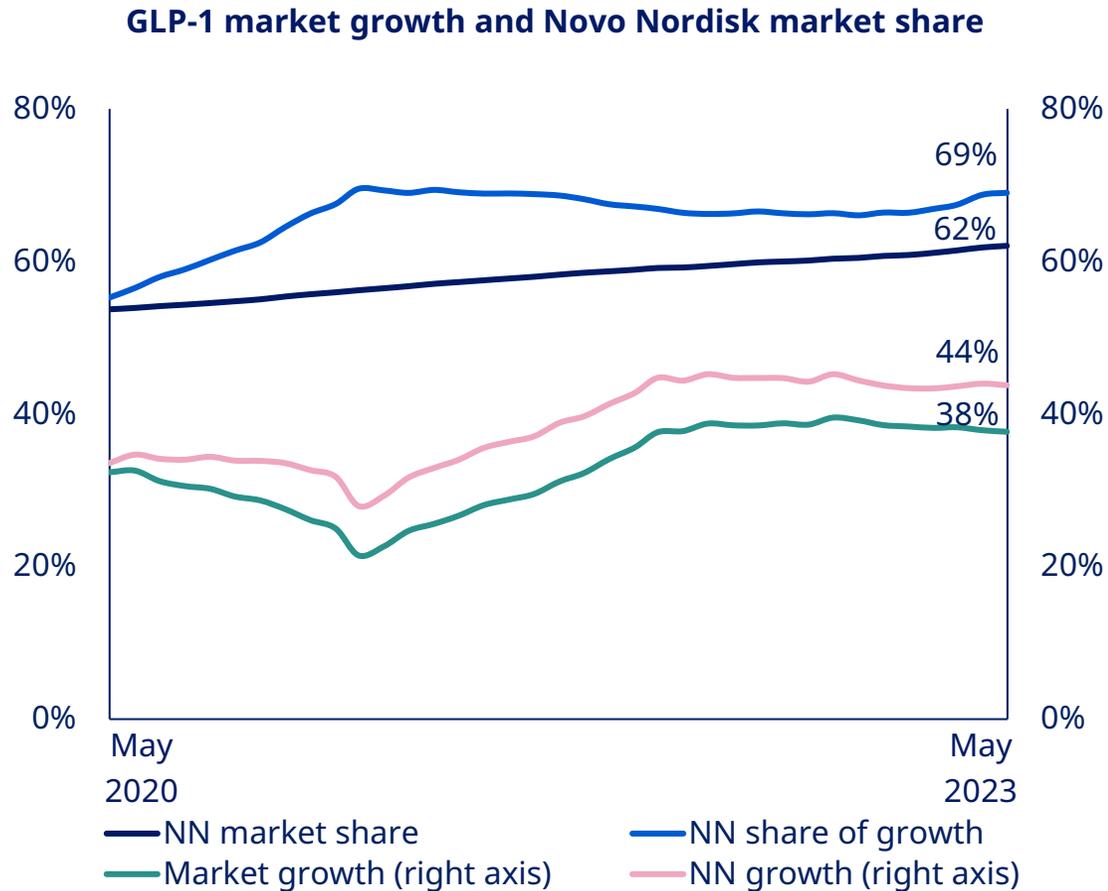
Diabetes market size and growth



Source: IQVIA, May 2023, Value, MAT; Due to contractual obligations competitor names are not disclosed. Company A represents an actual company. EMEA: Europe, Middle East and Africa; NN: Novo Nordisk



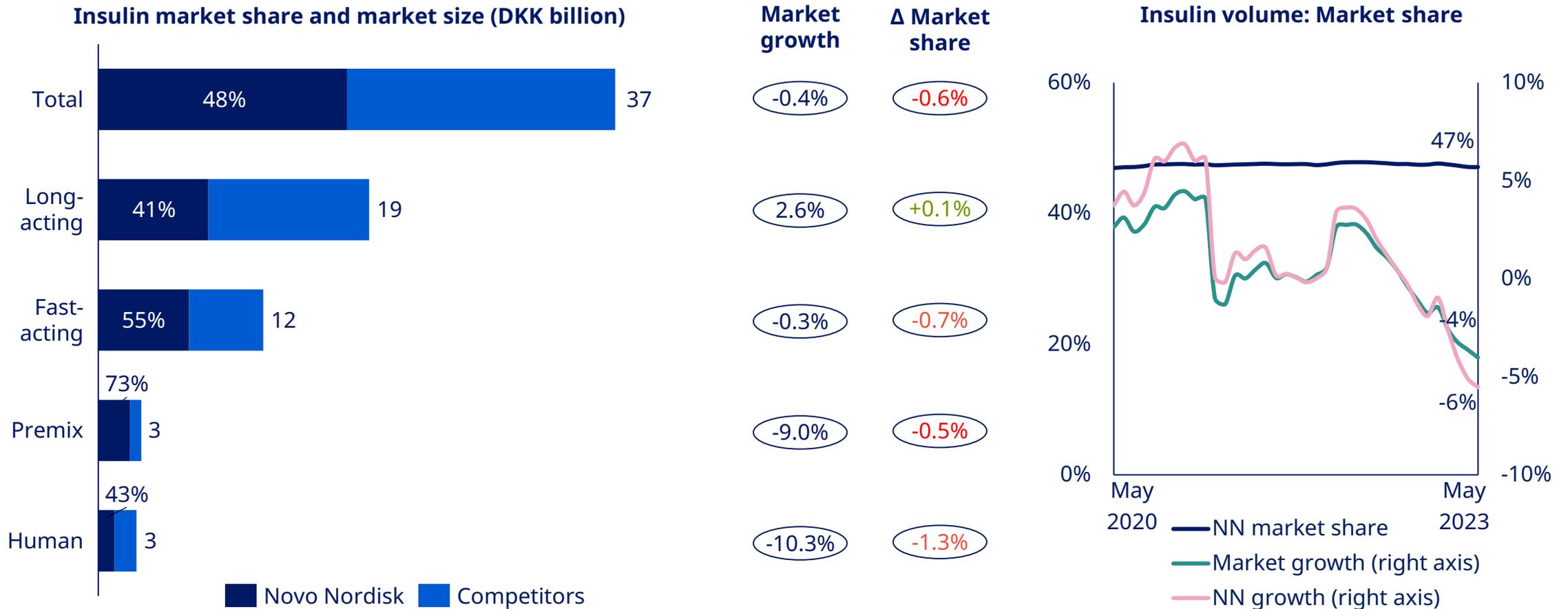
GLP-1 market share and market growth in EMEA



Source: IQVIA, May 2023, Value, MAT; Due to contractual obligations competitor names are not disclosed. Company A represents an actual company. EMEA: Europe, Middle East and Africa; NN: Novo Nordisk



Insulin market size and volume market share in EMEA

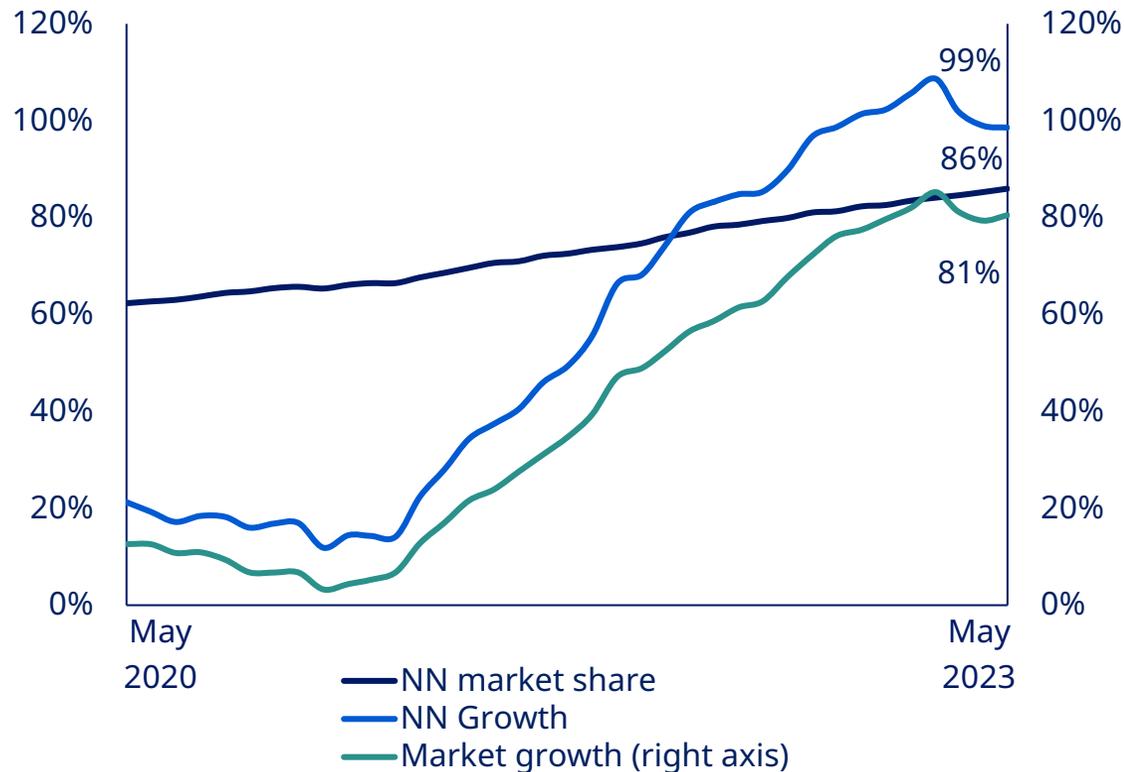


Source: IQVIA, May 2022/23 LHS graph - Value, RHS Graph - Volume, MAT, Europe, Middle East & Africa, Share of growth not depicted due to too high numbers; NN: Novo Nordisk

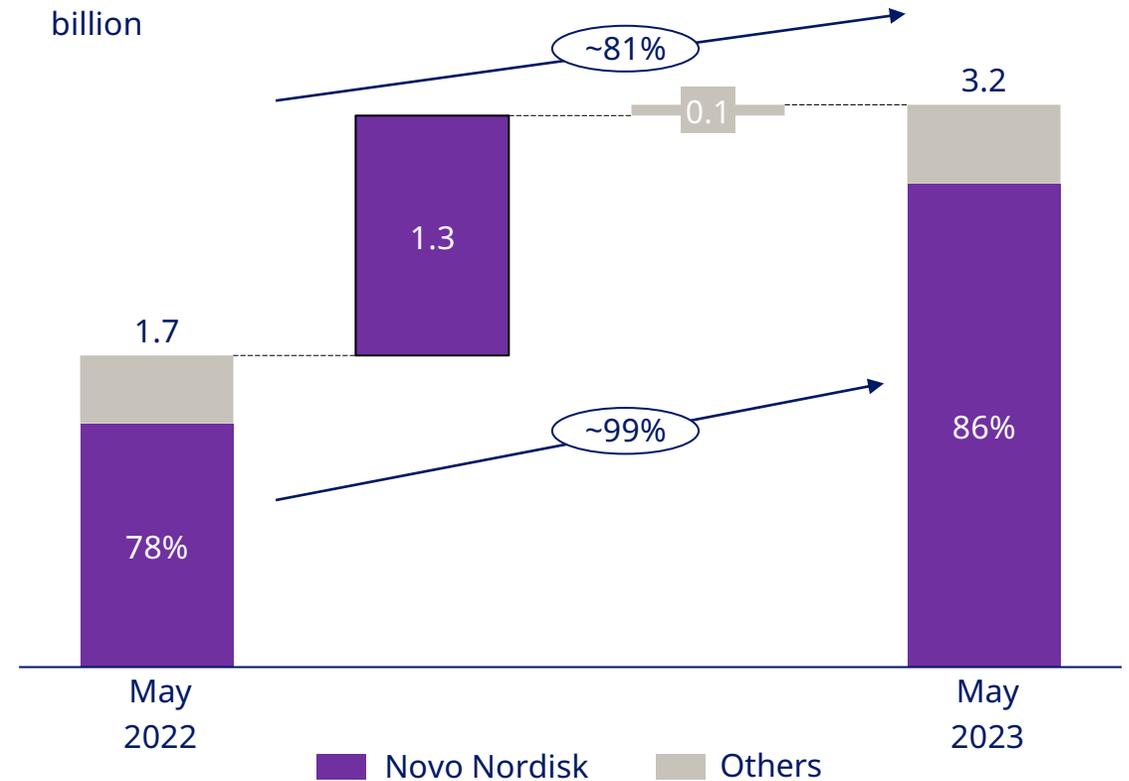


Obesity market share and market growth in EMEA

Obesity market growth and Novo Nordisk market share



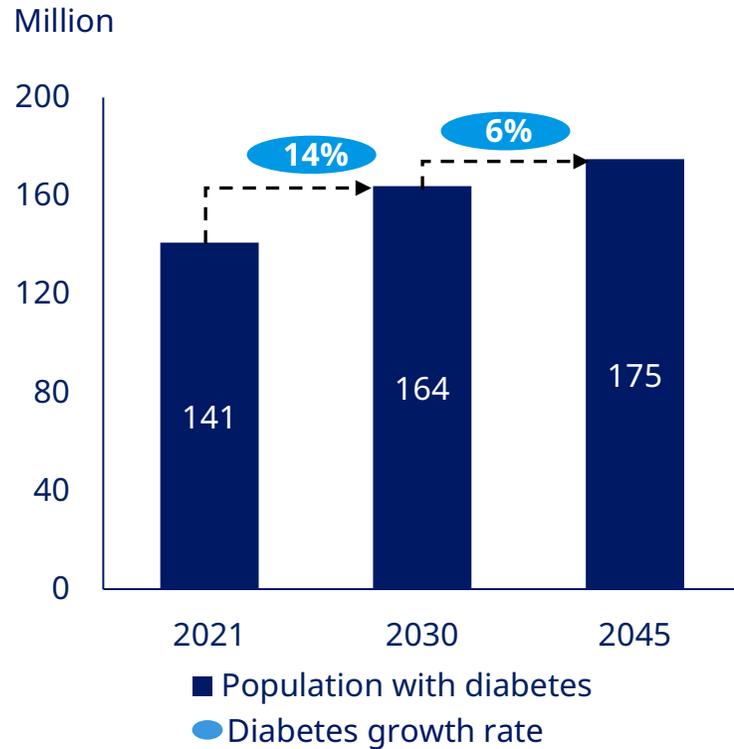
Obesity market size and growth
DKK billion



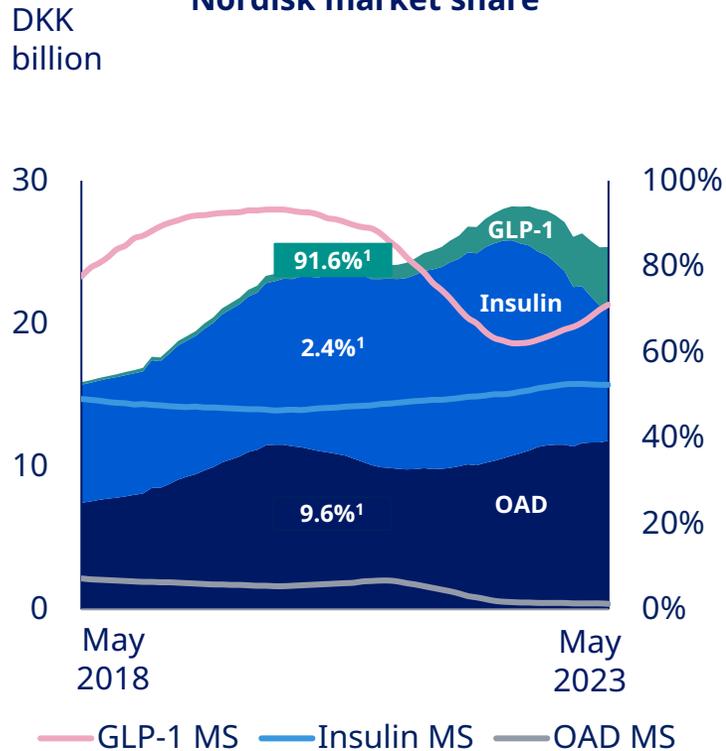


Region China at a glance

Diabetes trend



Diabetes market by value and Novo Nordisk market share



Novo Nordisk reported sales

First half of 2023	Sales (mDKK)	Growth ²
Injectable GLP-1 ³	3,051	95%
Rybelsus [®]	67	204%
Total GLP-1	3,118	97%
Total insulin⁴	4,783	-11%
Other Diabetes care ⁵	544	-17%
Diabetes care	8,445	11%
Obesity care ⁶	100	33%
Diabetes & Obesity care	8,545	11%
Rare disease ⁷	383	35%
Total	8,928	12%

Source: International Diabetes Federation: Diabetes Atlas 10th Edition 2021
Region China covers Mainland China, Taiwan, and Hong Kong

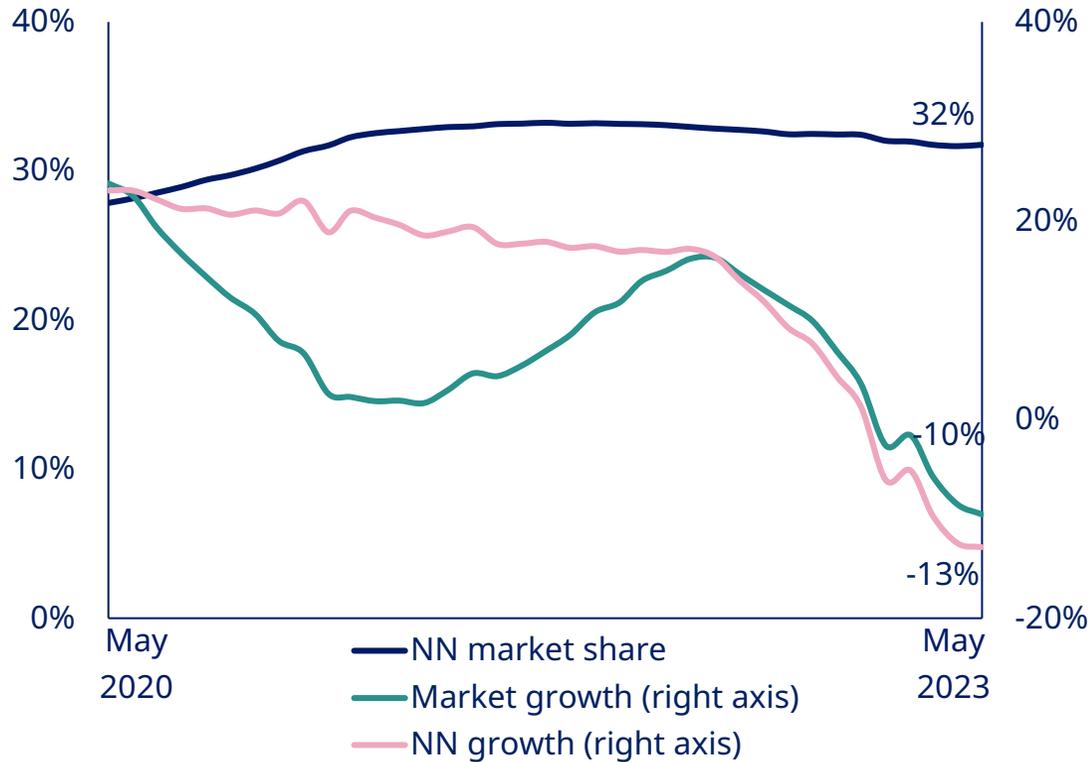
¹ CAGR calculated for last 5-year period
Competitor insulin value market shares, as of May 2023: Novo Nordisk 52%, Others 48%; Competitor GLP-1 value market shares, as of May 2023: Novo Nordisk 71% and Others 29% OAD: Oral anti-diabetic; MS: Market Share;
Source: IQVIA MAT, May 2023 value figures

² At constant exchange rates; ³ Comprises Victoza[®] and Ozempic[®]; ⁴ Comprises Tresiba[®], Xultophy[®], Levemir[®], NovoMix[®], Ryzodeg[®], NovoRapid[®]; ⁵ Comprises NovoNorm[®] and needles; ⁶ Comprises Saxenda[®]; ⁷ Comprises primarily NovoSeven[®], NovoEight[®] and Norditropin[®]

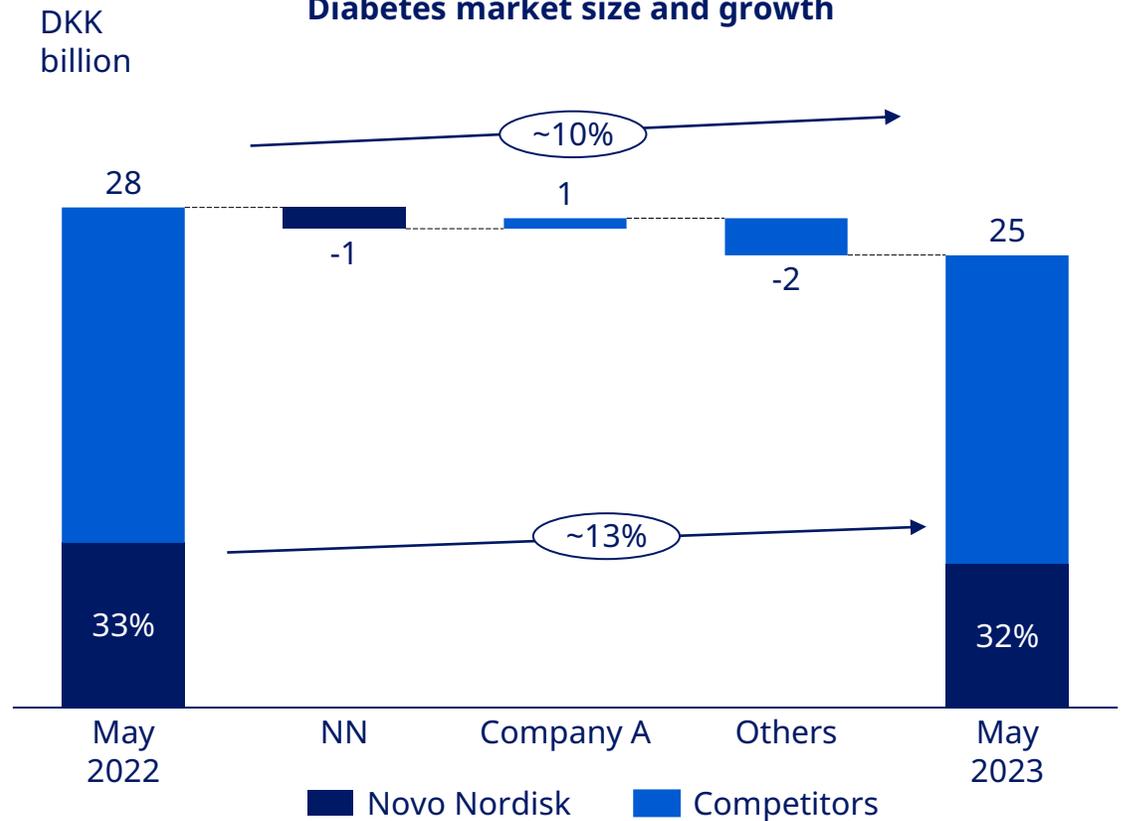


Diabetes market share and market growth in Region China

Diabetes market growth and Novo Nordisk market share



Diabetes market size and growth

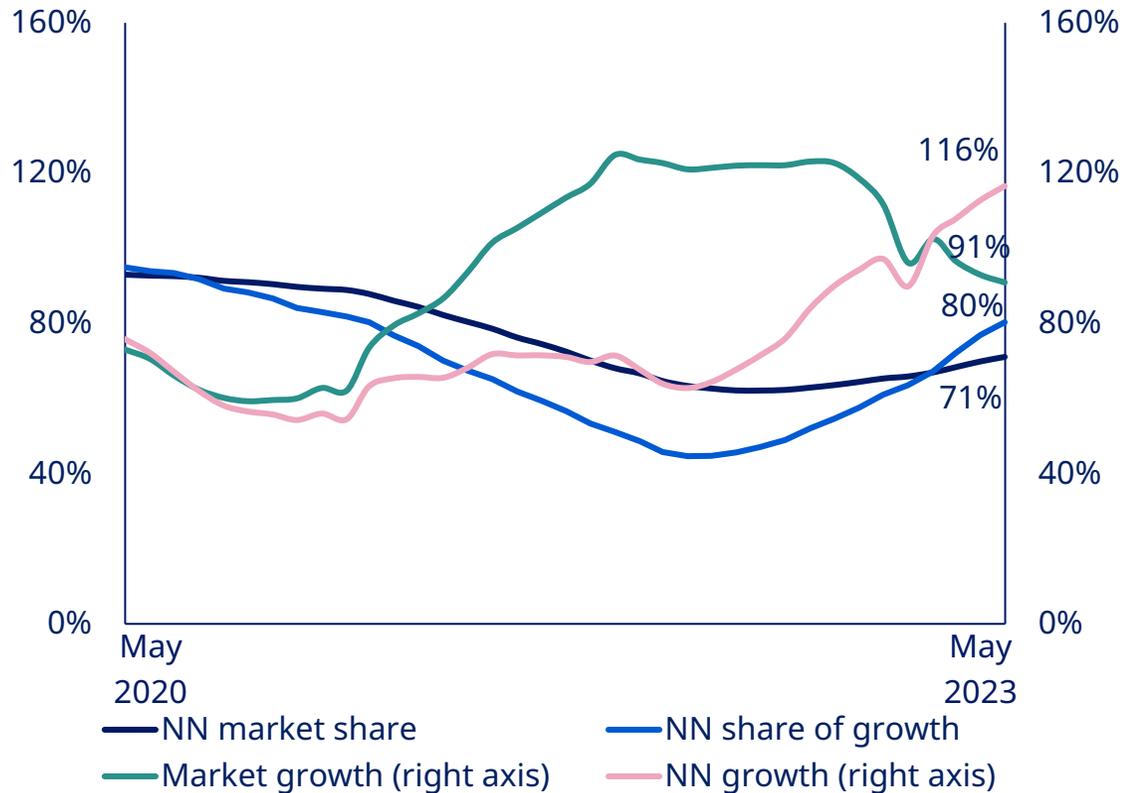


Source: IQVIA, May 2023, Value, MAT; Due to contractual obligations competitor names are not disclosed. Company A represents an actual company. NN: Novo Nordisk Region China covers Mainland China, Taiwan, and Hong Kong

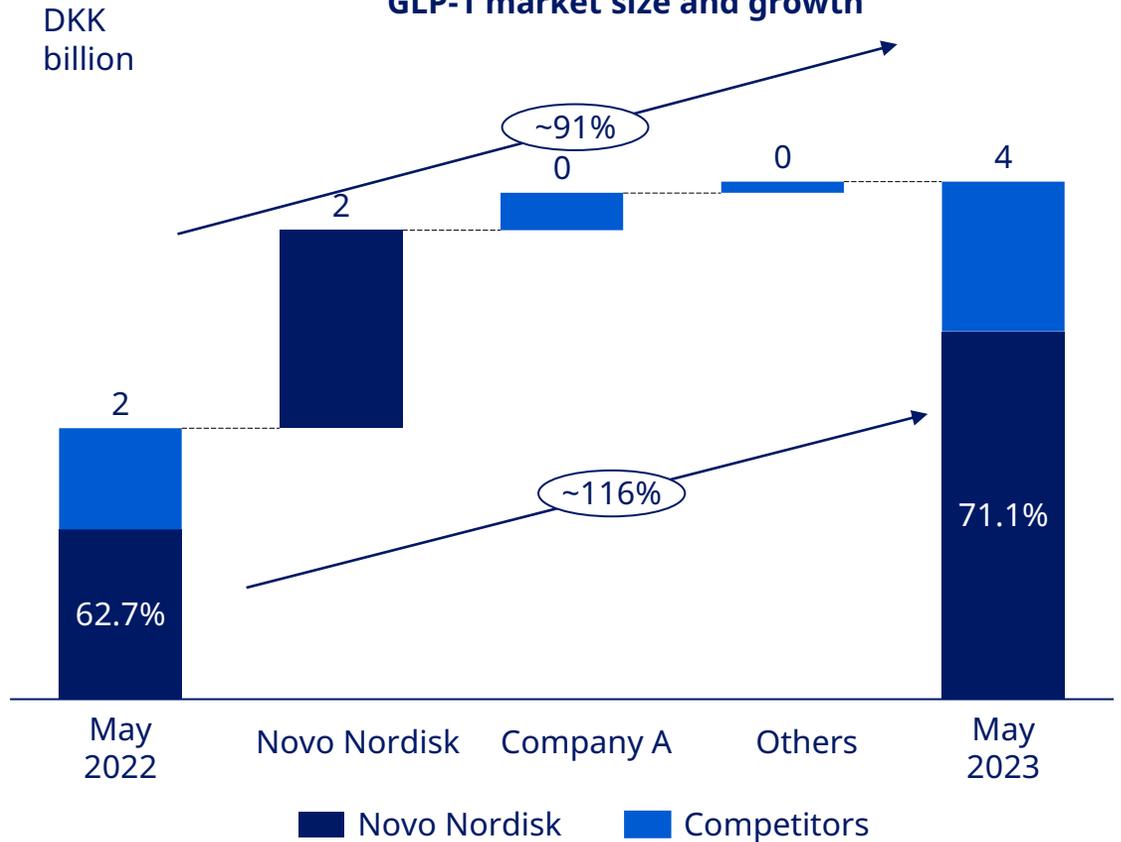


GLP-1 market share and market growth in Region China

GLP-1 market growth and Novo Nordisk market share



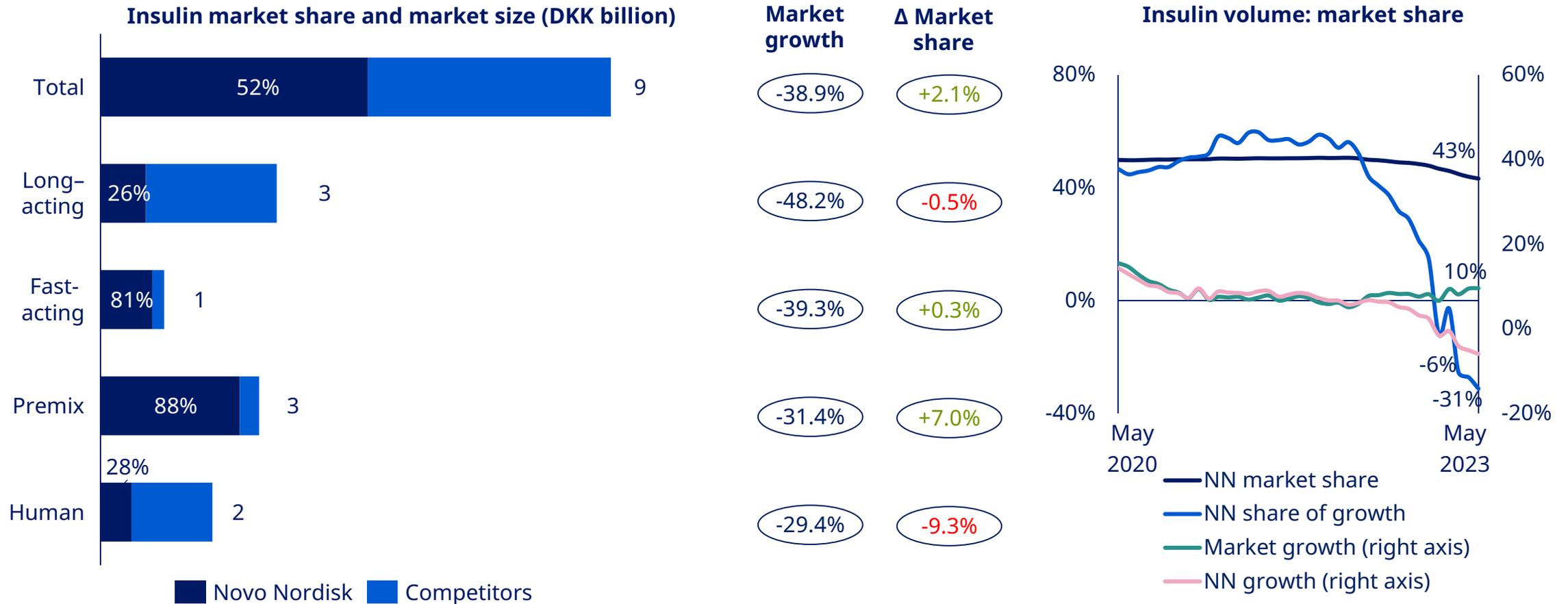
GLP-1 market size and growth



Source: IQVIA, May 2023, Value, MAT; Due to contractual obligations competitor names are not disclosed. Company A represents an actual company. NN: Novo Nordisk; Region China covers Mainland China, Taiwan, and Hong Kong



Insulin market size and volume share of growth and market share in Region China

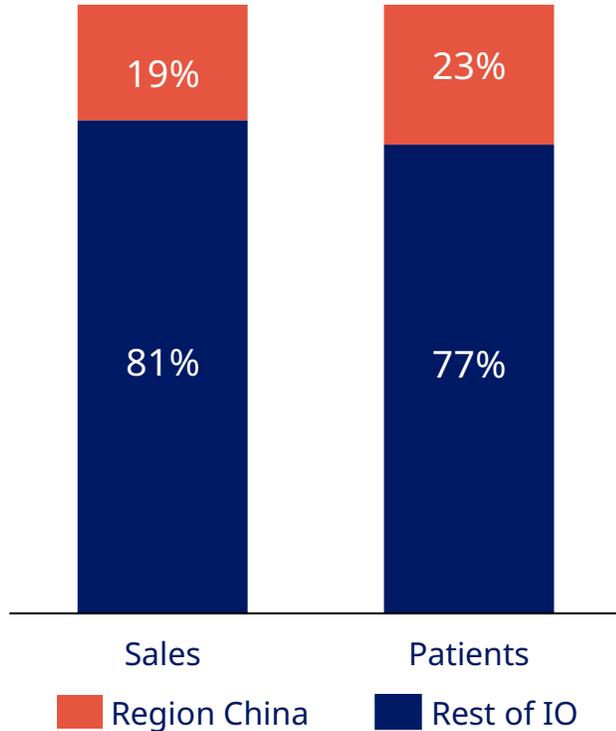


Source: IQVIA, May 2023, LHS graph – Value, RHS Graph - Volume, MAT; NN: Novo Nordisk; Region China covers Mainland China, Taiwan, and Hong Kong



Region China remains a key strategic opportunity

Region China is a large market with ~140 million people living with diabetes



Outcome of VBP insulin in China

- Price cuts ~40-50% as a result of VBP
- Keeps ~50% of own brand volume in scope
- Resource re-allocation towards growth products



Opportunities and strategic priorities Large growing diabetes market



- Market of 28 bDKK mainly consisting of OAD and insulin
- Diabetes market growth of ~10%

Bring innovation faster to market



- **Diabetes:** Rybelsus® and Icodec
- **Rare disease:** Across portfolio

Treat more patients



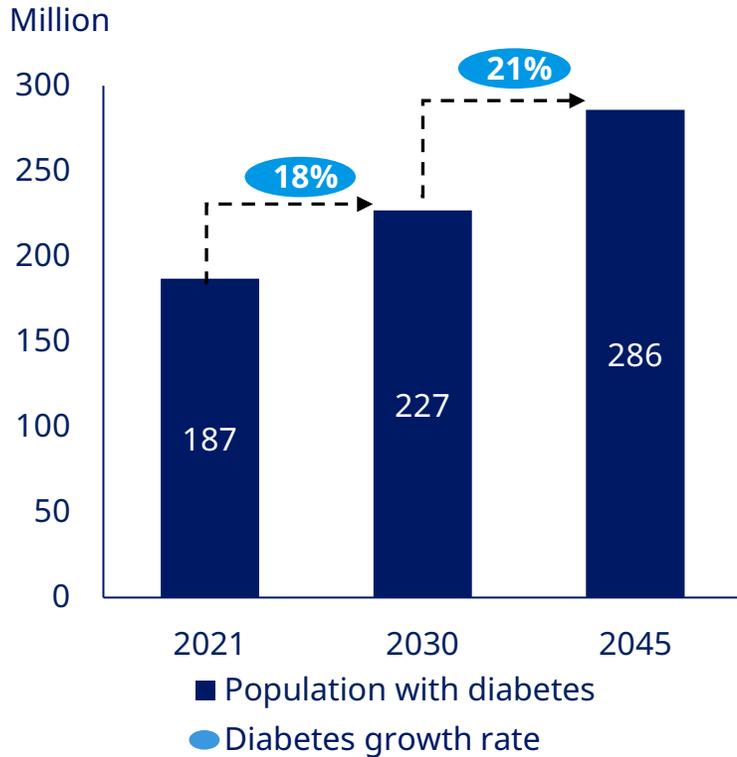
- Expand patient base across new insulins and GLP-1s

Note: IQVIA value in China only covers ~60% of the market
 Region China includes Mainland China, Taiwan and Hong Kong; VBP: Volume-based procurement; OAD: Oral anti-diabetes; IO: International Operations
 Source: Full year 2022 numbers based on Company Announcement (sales) and Diabetes Atlas, 10th edition, (patients)

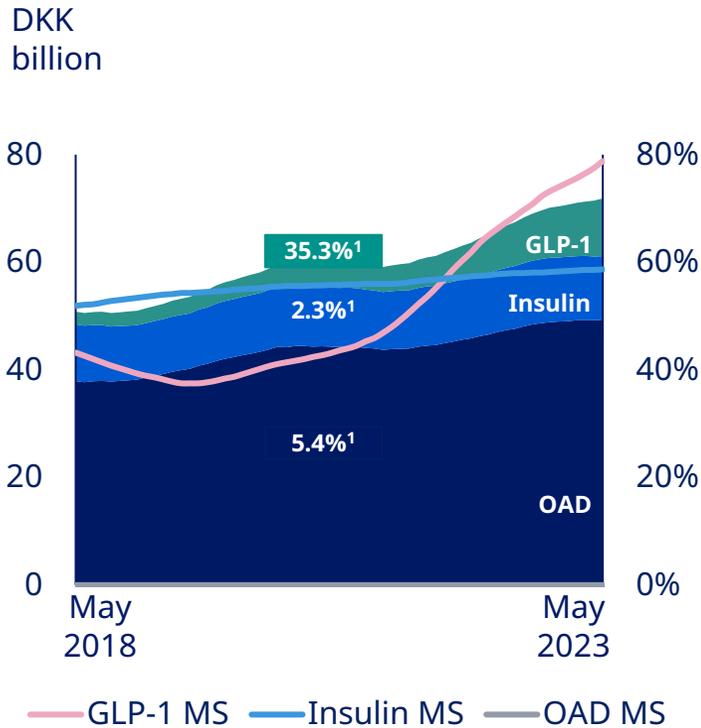


Rest of World at a glance

Diabetes trend in population



Diabetes market by value and Novo Nordisk market share



Novo Nordisk reported sales

First half of 2023	Sales (mDKK)	Growth ²
Injectable GLP-1 ³	4,046	39%
Rybelsus [®]	1,371	161%
Total GLP-1	5,417	58%
Total insulin⁴	5,247	9%
Other Diabetes care ⁵	227	-27%
Diabetes care	10,891	27%
Obesity care ⁶	1,249	47%
Diabetes & Obesity care	12,140	29%
Rare disease ⁷	2,041	-23%
Total	14,181	18%

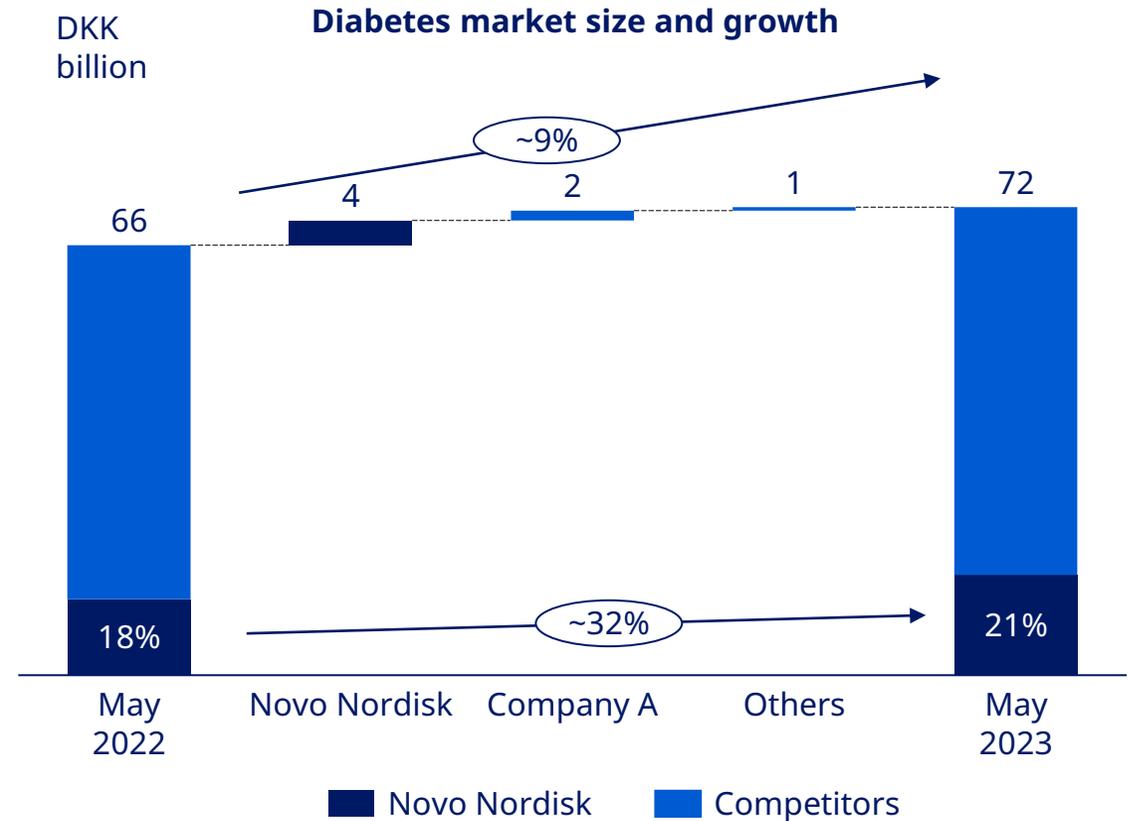
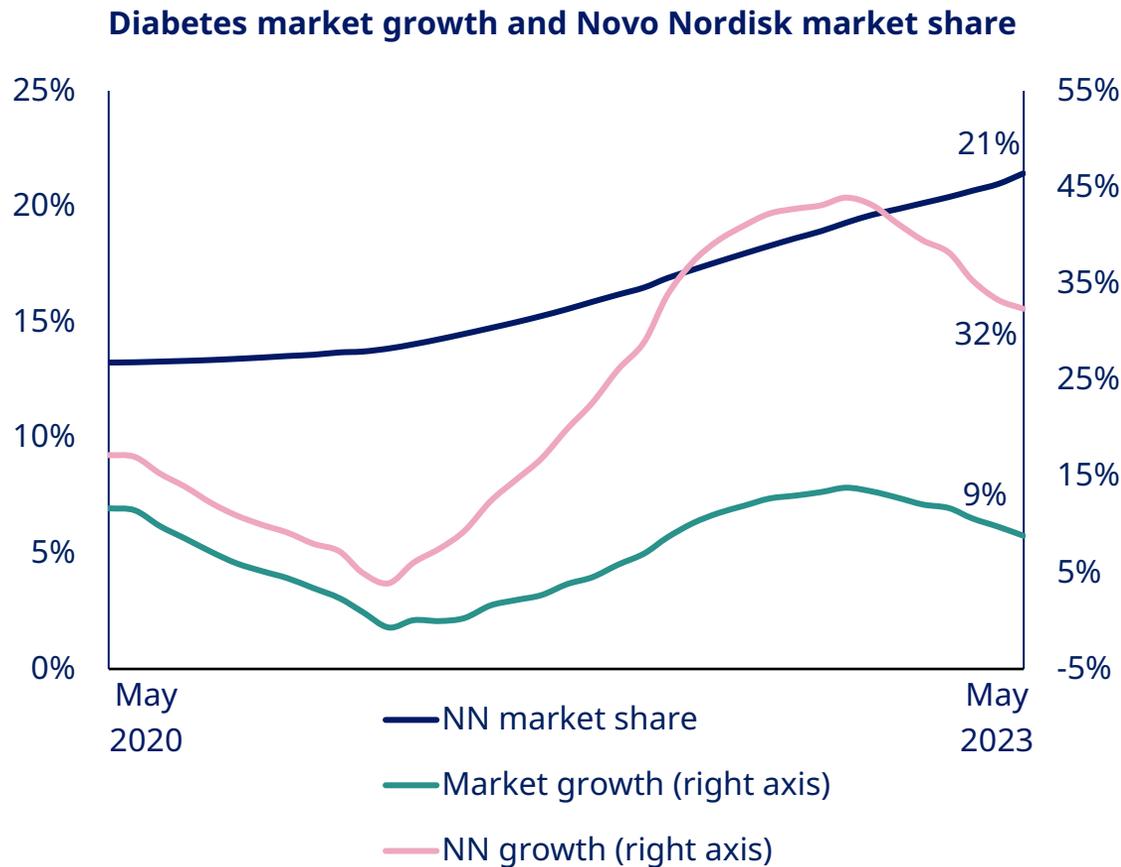
Diabetes trend estimates based on the following International Diabetes Foundation defined regions: South & Central America, Southeast Asia
Source: International Diabetes Federation: Diabetes Atlas 10th Edition 2021

¹ CAGR calculated for last 5-year period
Competitor insulin value market shares, as of May 2023: Novo Nordisk 59%, Others 41%; Competitor GLP-1 value market shares, as of May 2023: Novo Nordisk 79%, Others 21%. OAD: Oral anti-diabetic; MS: Market Share; Source: IQVIA MAT, May 2023 value figures

² At constant exchange rates; ³ Comprises Victoza[®], Ozempic[®];
⁴ Comprises Tresiba[®], Xultophy[®], Levemir[®], NovoMix[®], Ryzodeg[®], NovoRapid[®] and Fiasp[®]; ⁵ Comprises NovoNorm[®] and needles; ⁶ Comprises Saxenda[®];
⁷ Comprises primarily Esperoct[®], Refixia[®], NovoSeven[®], NovoEight[®] and Norditropin[®]



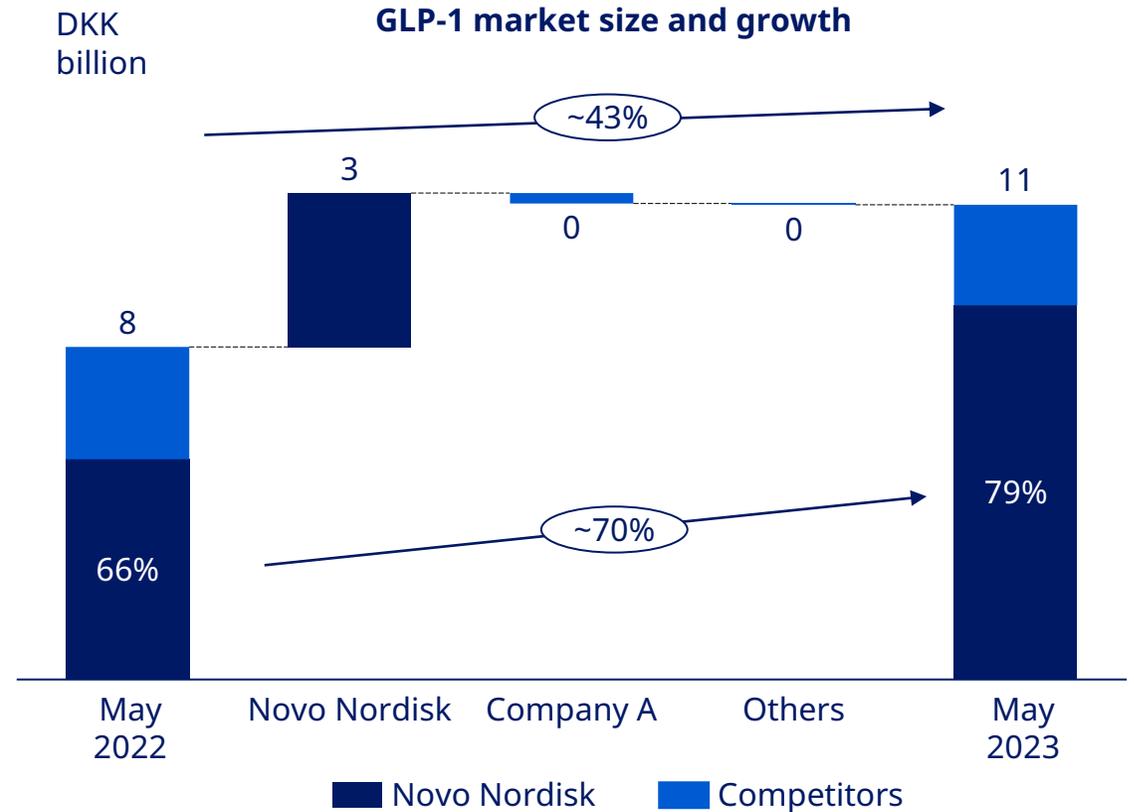
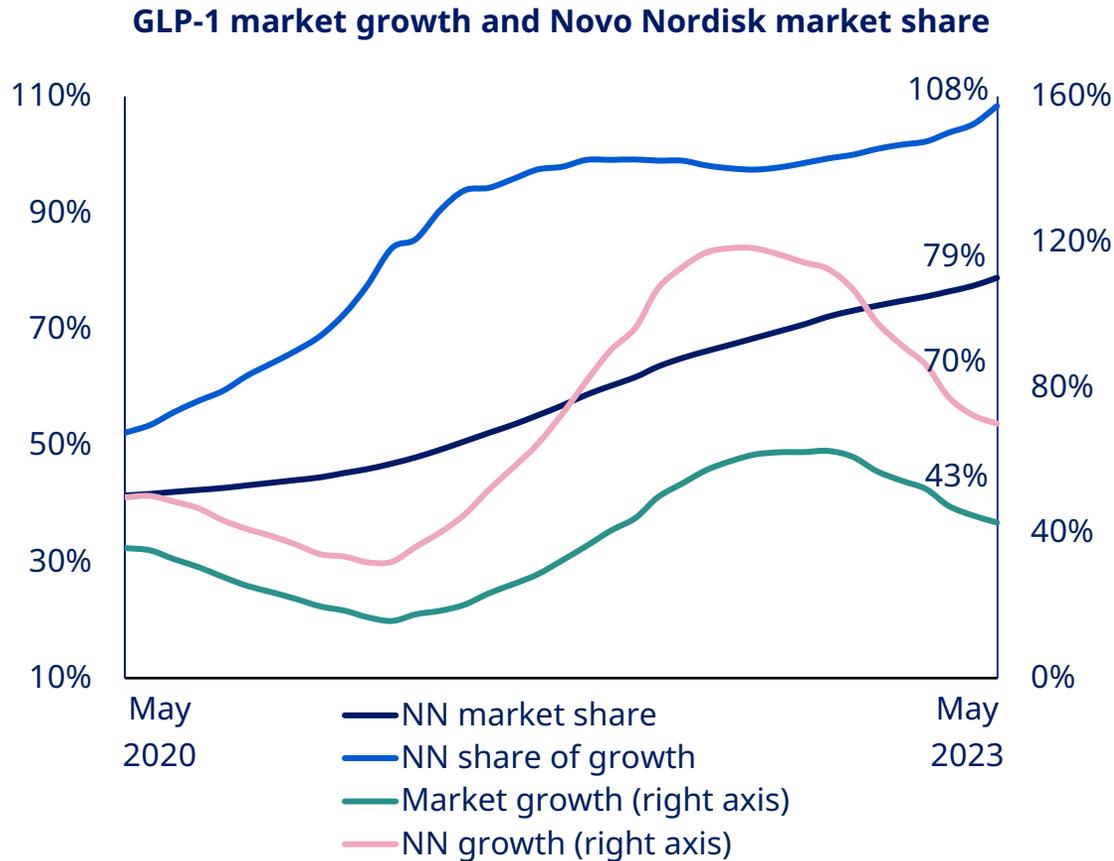
Diabetes market share and market growth in Rest of World



Source: IQVIA, May 2023, value, MAT; Due to contractual obligations competitor names are not disclosed. Company A represents an actual company. Rest of world; NN: Novo Nordisk



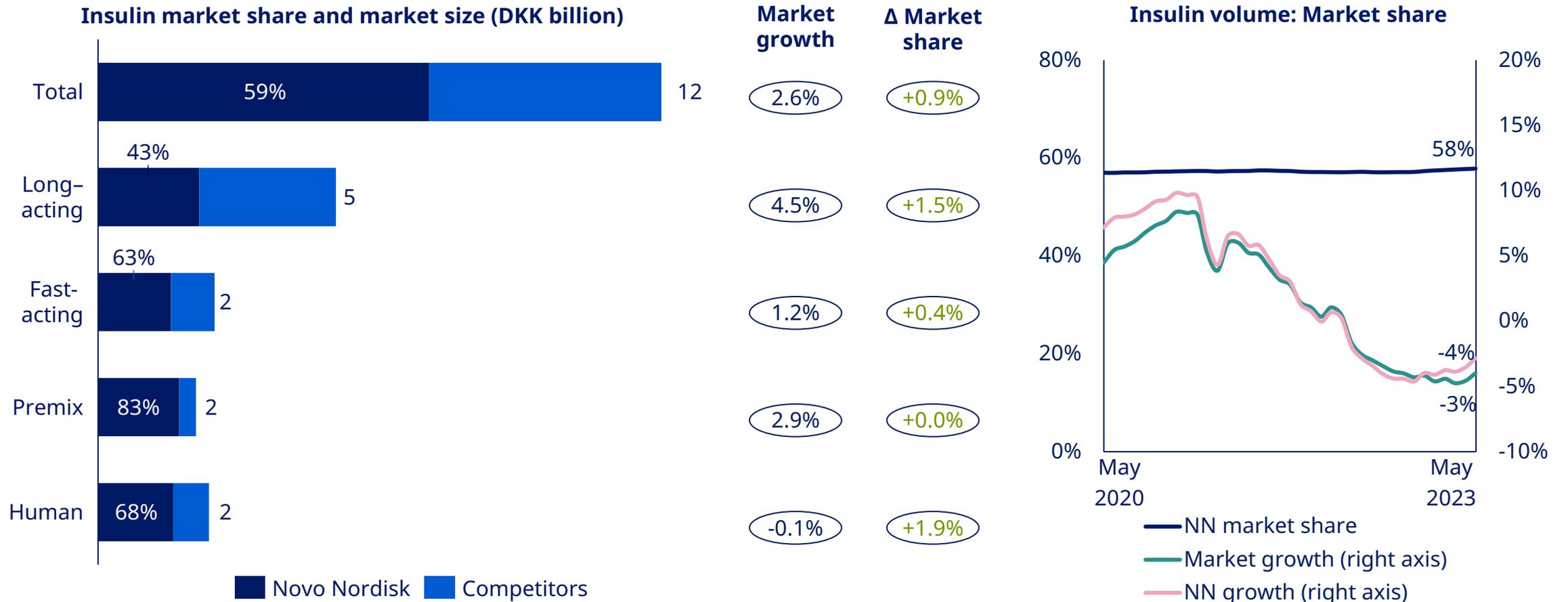
GLP-1 market share and market growth in Rest of World



Source: IQVIA, May 2023, Value, MAT; Due to contractual obligations competitor names are not disclosed. Company A represents an actual company. NN: Novo Nordisk



Insulin market size and volume market share in Rest of World

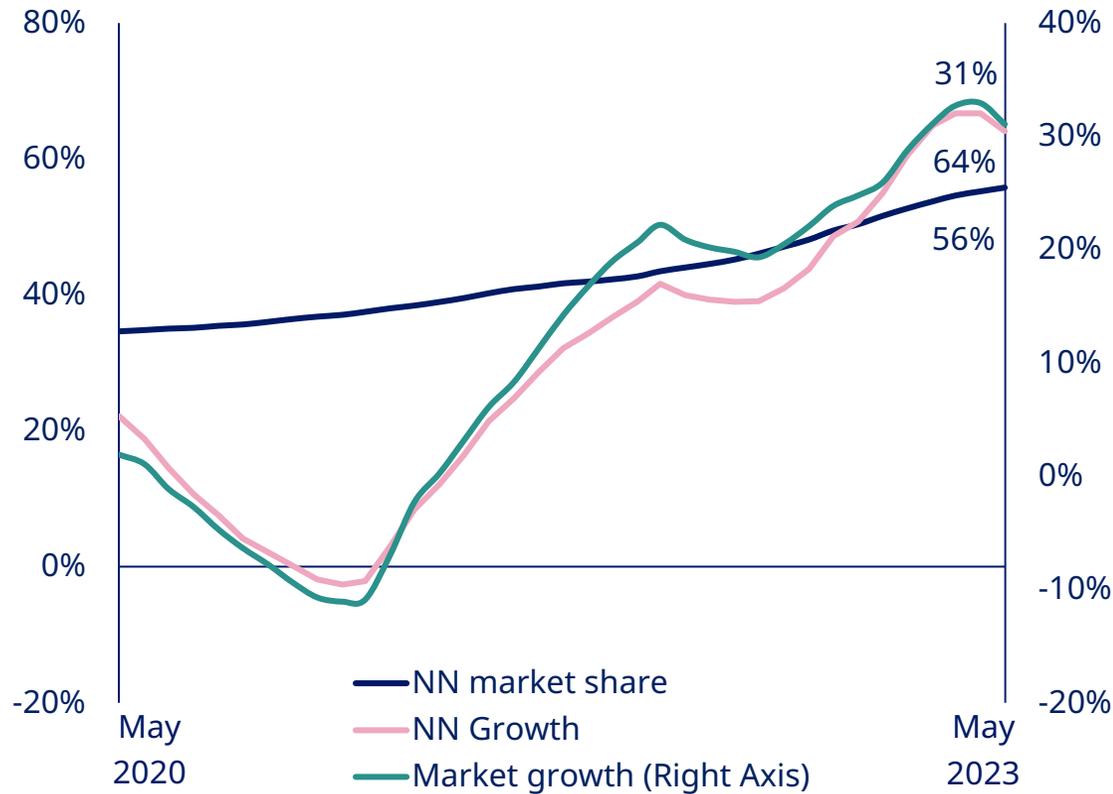


Source: IQVIA, May 2023; LHS graph – Value, RHS Graph - Volume, MAT; Share of growth not depicted due to too high numbers; NN: Novo Nordisk

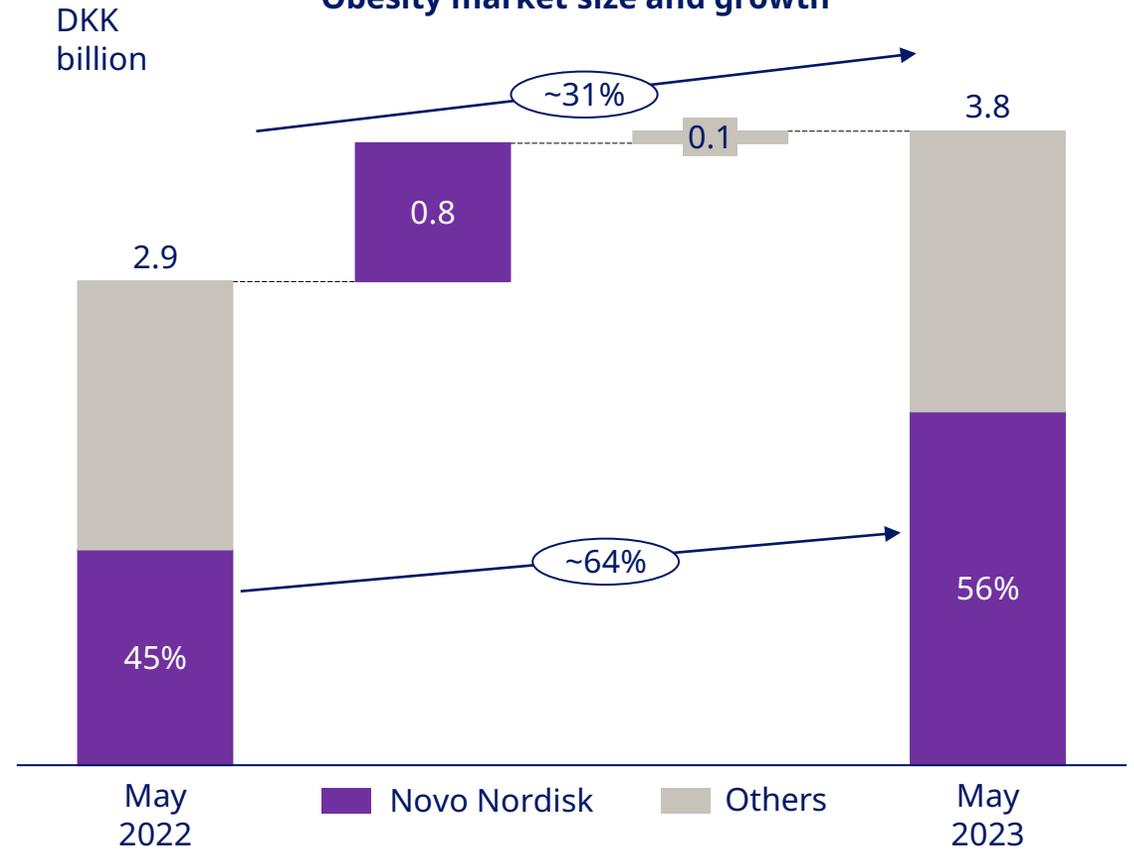


Obesity market share and market growth in Rest of World

Obesity market growth and Novo Nordisk market share



Obesity market size and growth



North America Operations

USA health care system	137
NAO at a glance	138

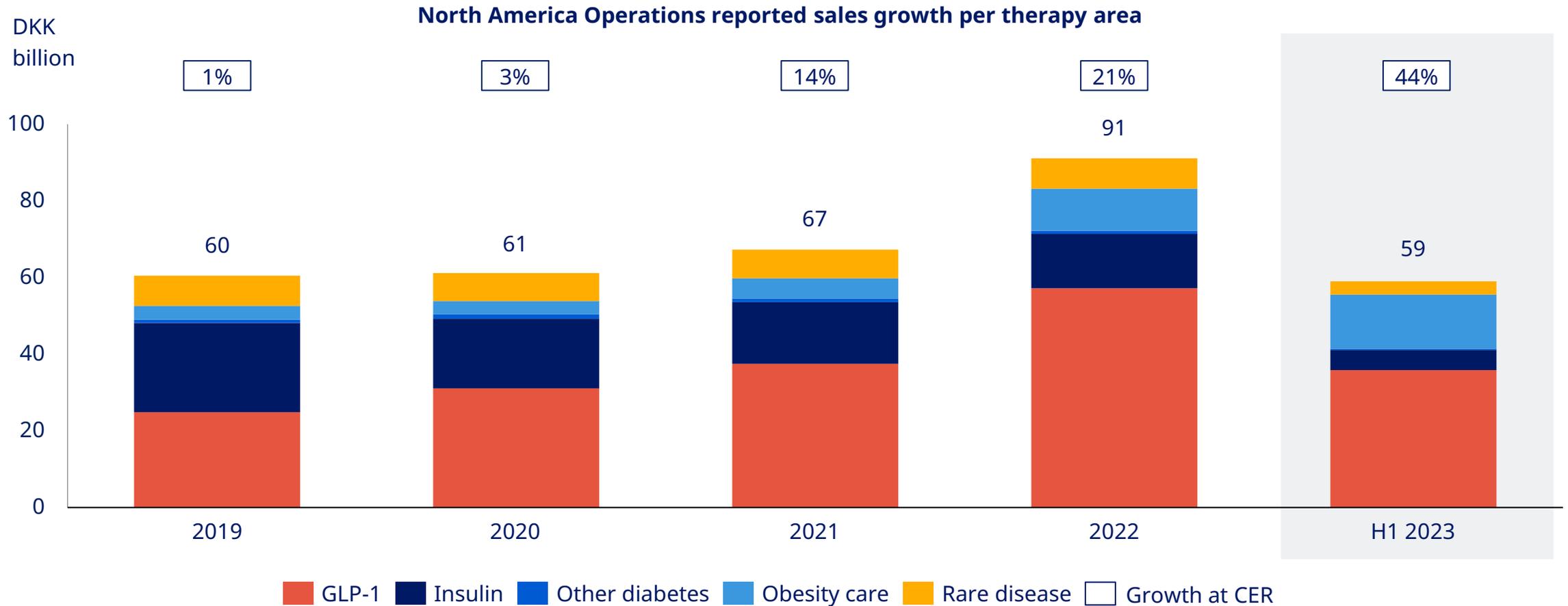
Leonard
Thompson
1922



novo nordisk



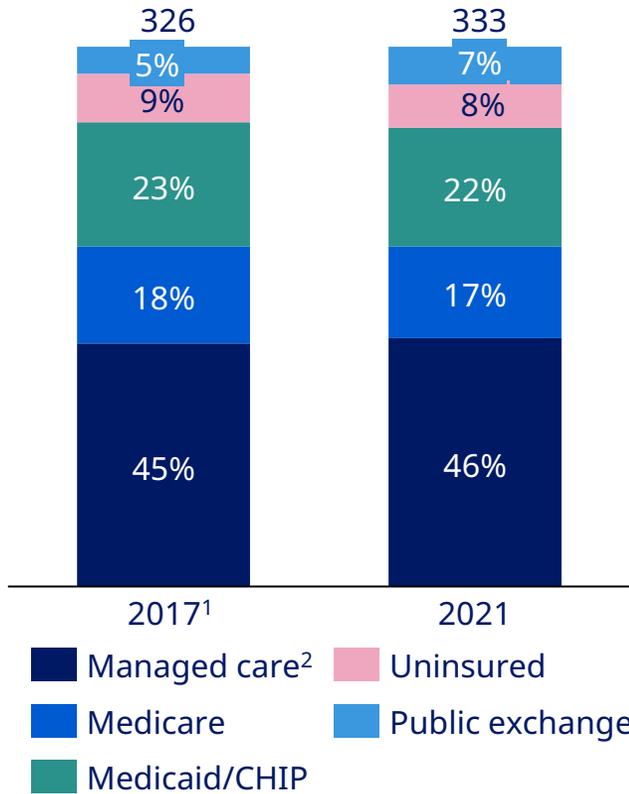
North America Operations growth has accelerated



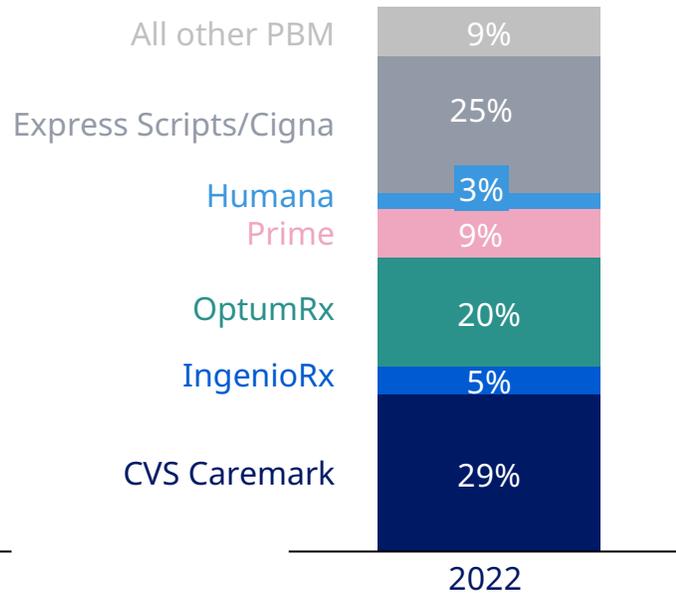


US health insurance is dominated by a few large commercial payers

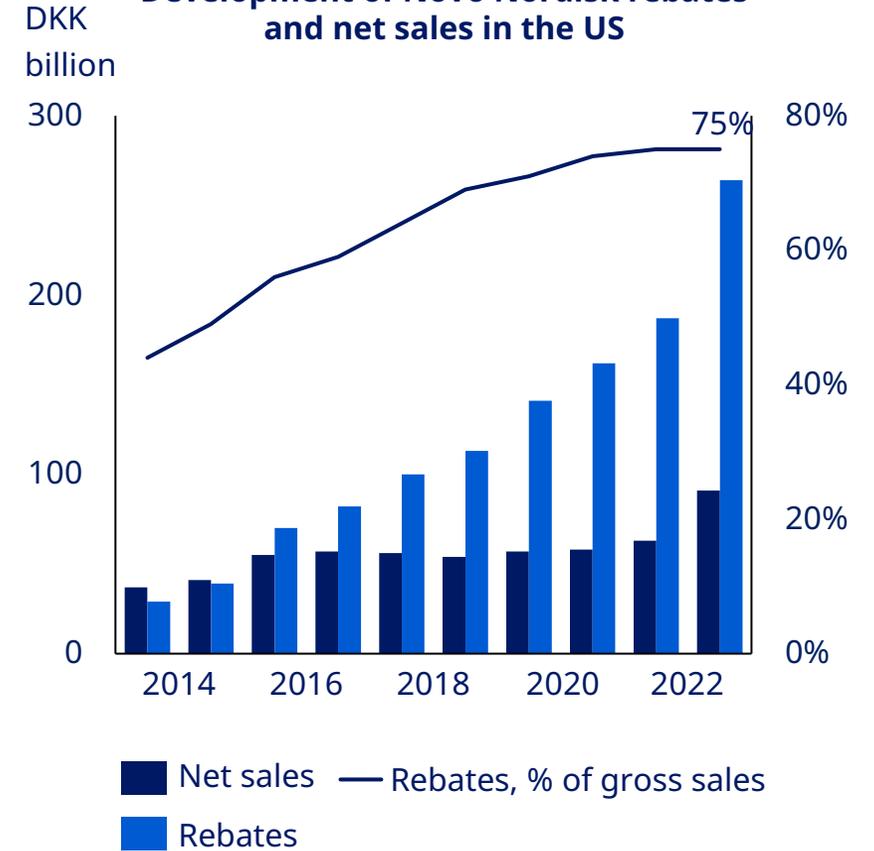
US population by health insurance status has been stable in recent years



Covered lives by PBM



Development of Novo Nordisk rebates and net sales in the US



¹ 2017 data reflect historical data through Oct 2017
² Managed care population is slightly underestimated as only population under the age 65 is captured to avoid double counting with those eligible for Medicare.
 Source: Centres for Medicare and Medicaid services, office of the actuary, National Health expenditures Projections

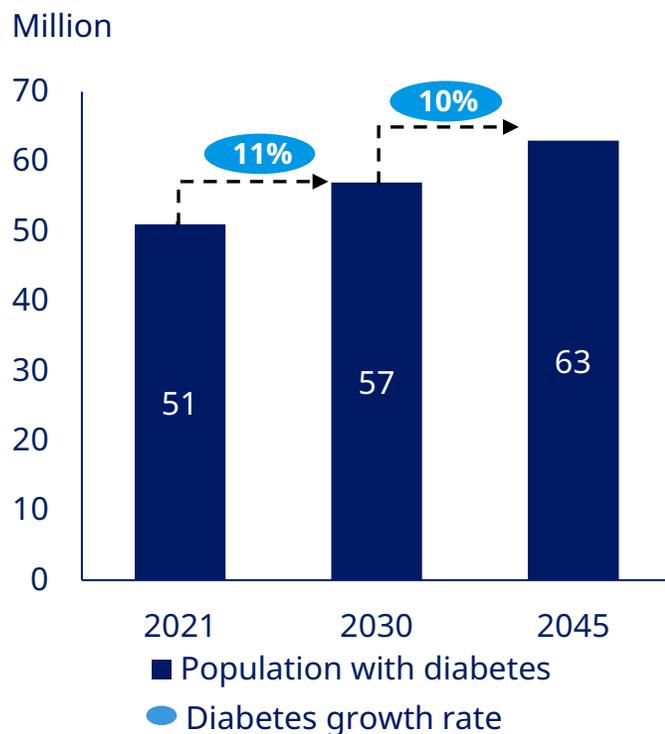
PBM: Pharmacy Benefit Manager
 Note: Covers all main channels (Managed Care, Medicare Part D, and Medicaid); market share based on claim adjudication coverage, i.e. not on formulary/rebate decision power
 Sources: Cleveland Research

Source: Novo Nordisk Annual Report 2022

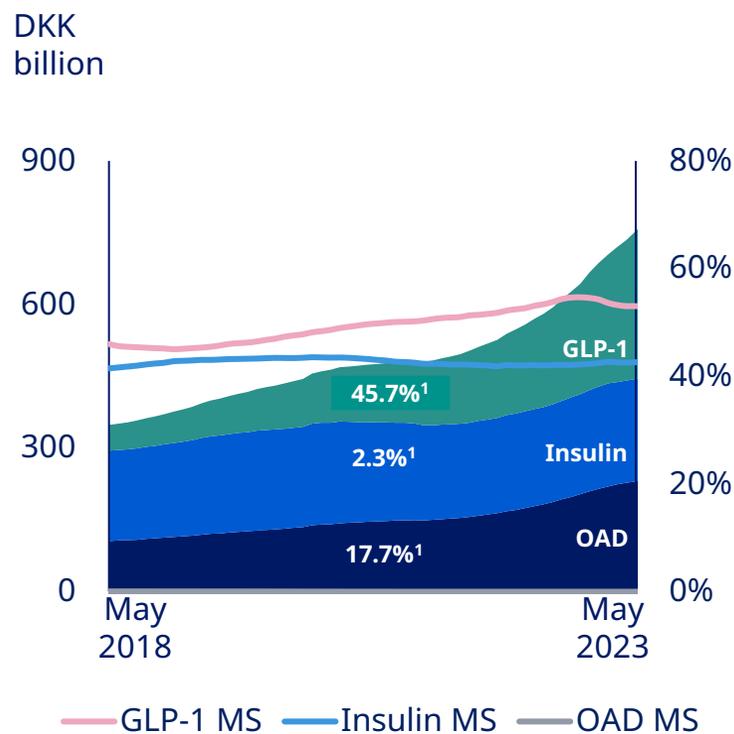


North America Operations at a glance

Diabetes trend in population



Diabetes market by value and Novo Nordisk market share



Novo Nordisk reported sales

First half of 2023	Sales (mDKK)	Growth ²
Injectable GLP-1 ³	30,861	43%
Rybelsus [®]	4,933	56%
Total GLP-1	35,794	44%
Total insulin⁴	5,284	-25%
Other Diabetes care ⁵	301	-22%
Diabetes care	41,379	28%
Obesity care ⁶	14,159	207%
Diabetes & Obesity care	55,538	51%
Rare disease ⁷	3,422	-18%
Total	58,960	44%

International Diabetes Federation: Diabetes Atlas 1th Edition 2000 and Diabetes Atlas 10th Edition 2021

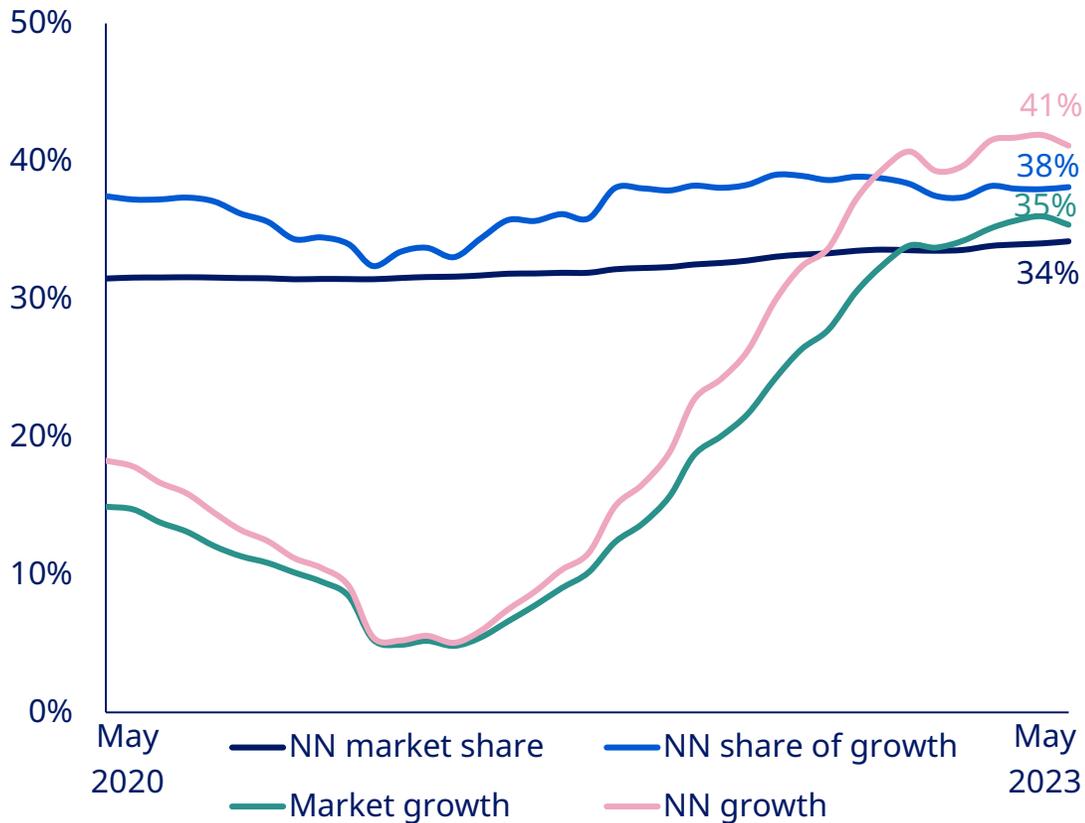
¹ CAGR calculated for 5-year period
 Competitor insulin value market shares, as of May 2023: Novo Nordisk 43%, Others 58%; Competitor GLP-1 value market shares, as of May 2023: Novo Nordisk 52%, Others 48%. OAD: Oral anti-diabetic; MS: Market Share; Source: IQVIA MAT, May 2023 value figures

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⁵ Comprises NovoNorm[®] and needles; ⁶ Comprises Saxenda[®] and Wegovy[®];
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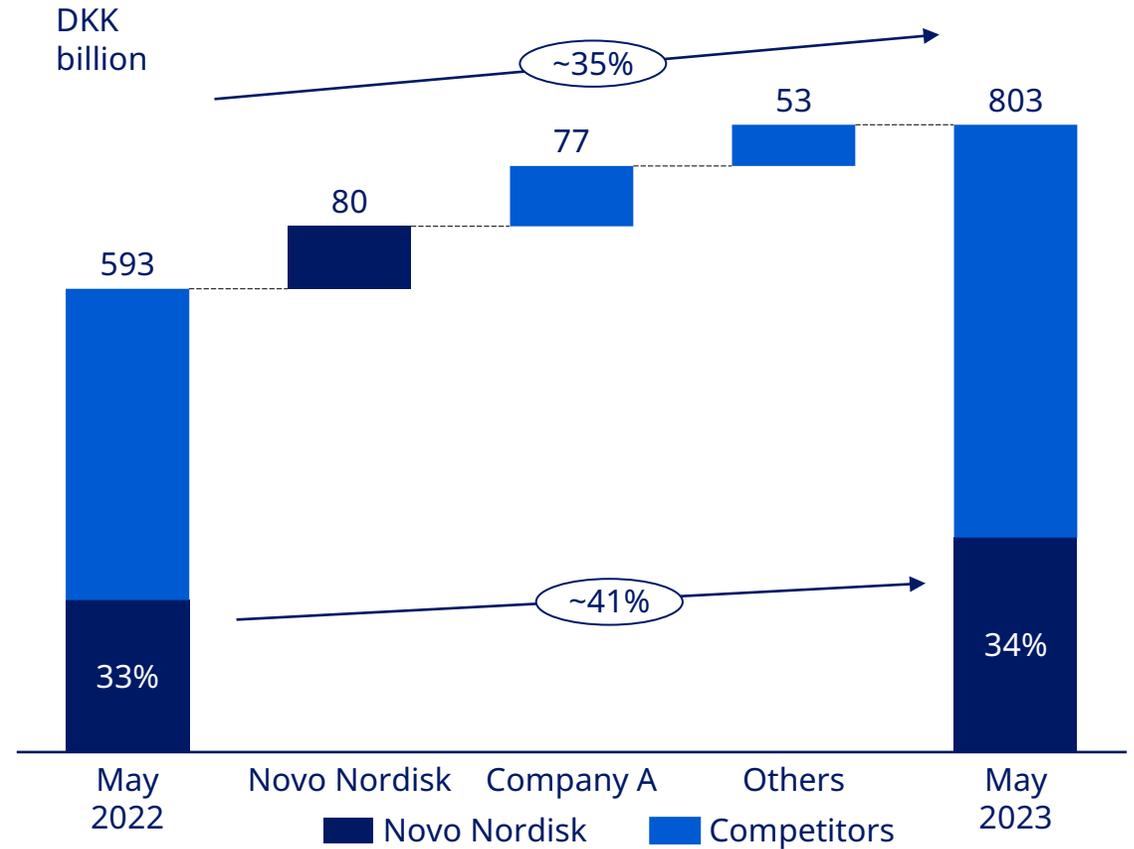


Diabetes market share and market growth in North America Operations

Diabetes market growth and Novo Nordisk market share



Diabetes market size and growth

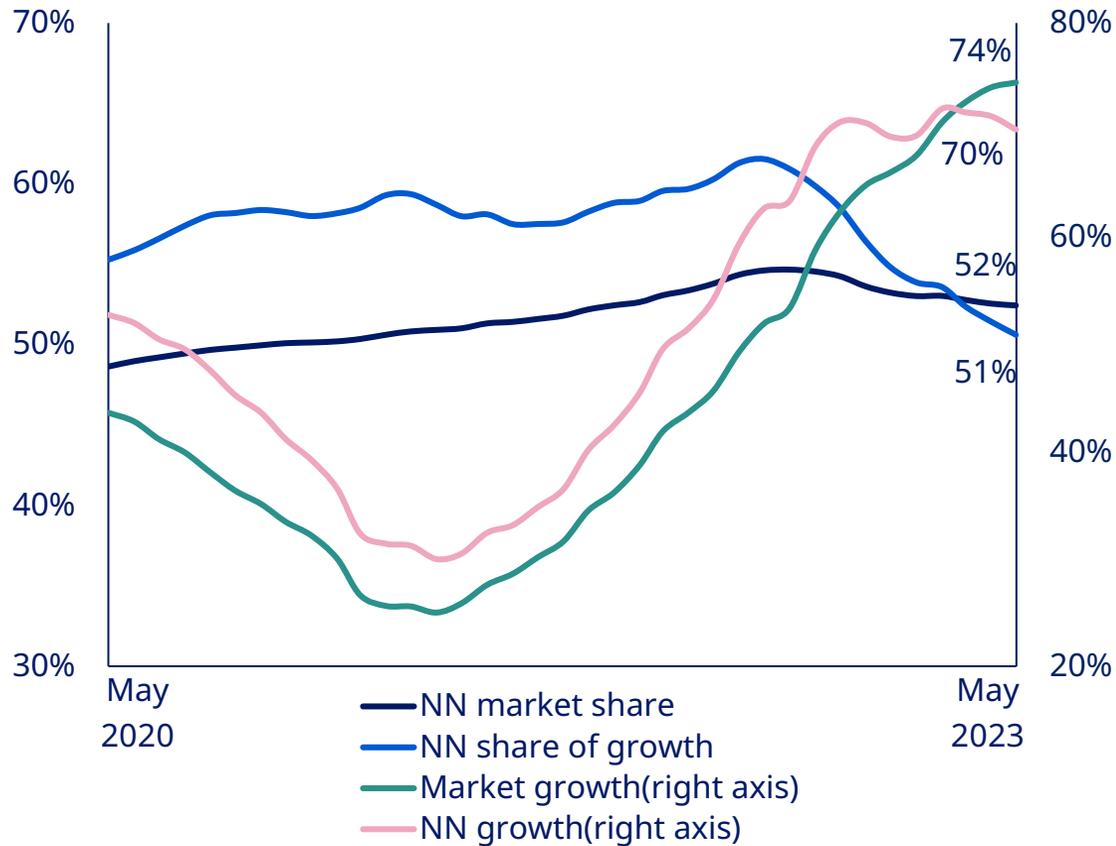


Source: IQVIA, May 2023, value, MAT; Due to contractual obligations competitor names are not disclosed. Company A represents an actual company. NN: Novo Nordisk

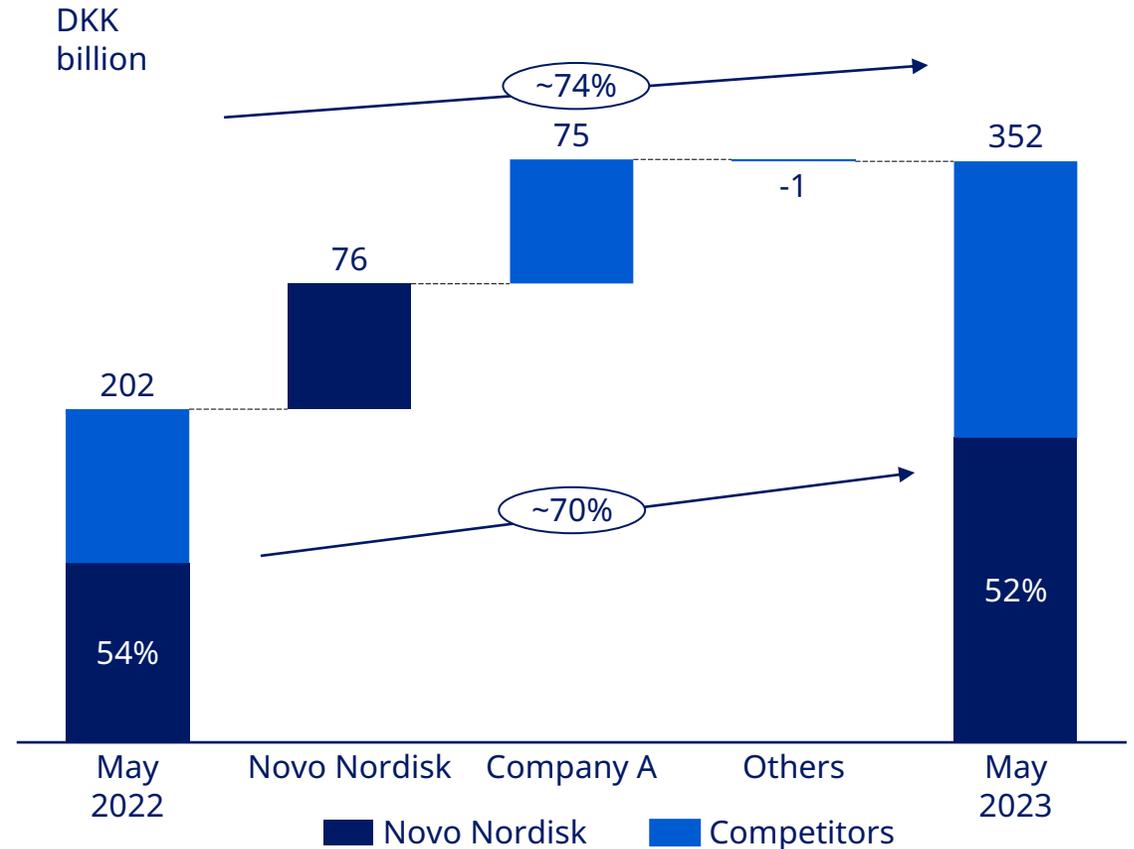


GLP-1 market share and market growth in North America Operations

GLP-1 market growth and Novo Nordisk market share



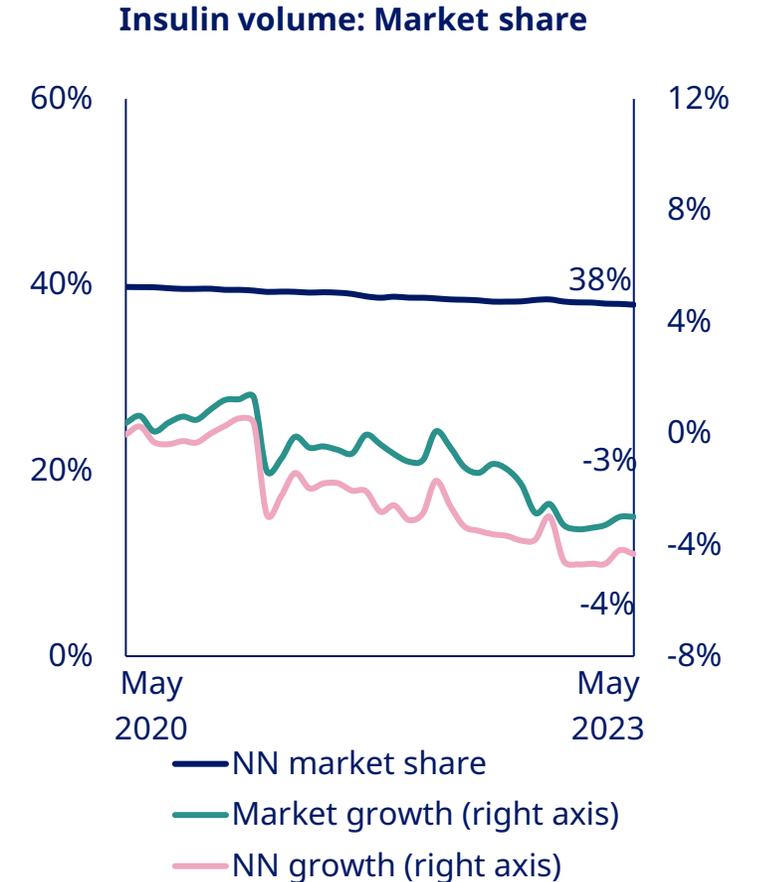
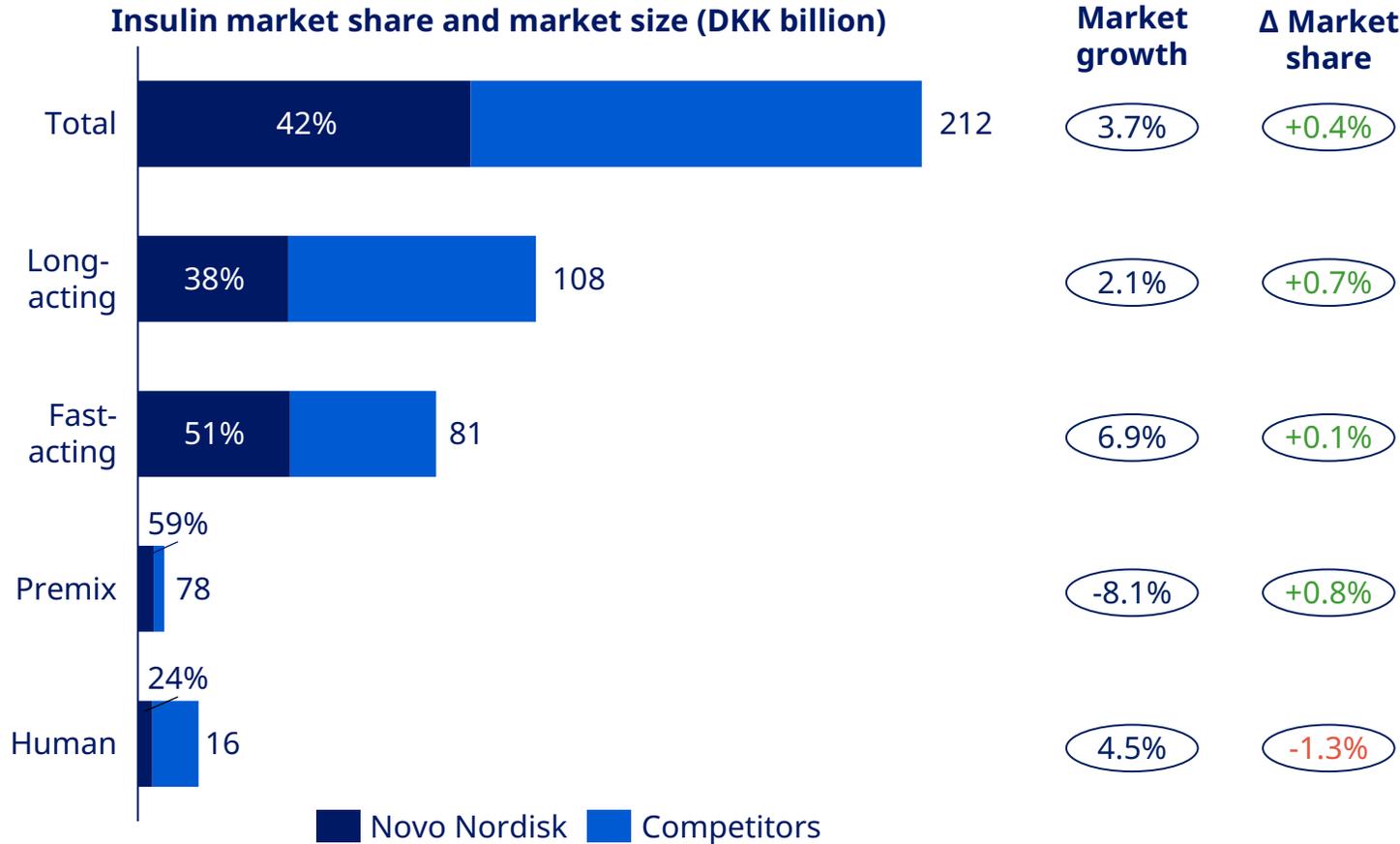
GLP-1 market size and growth



Source: IQVIA, May 2023, value, MAT; Due to contractual obligations competitor names are not disclosed. Company A represents an actual company. NN: Novo Nordisk



Insulin market size and volume market share in North America Operations

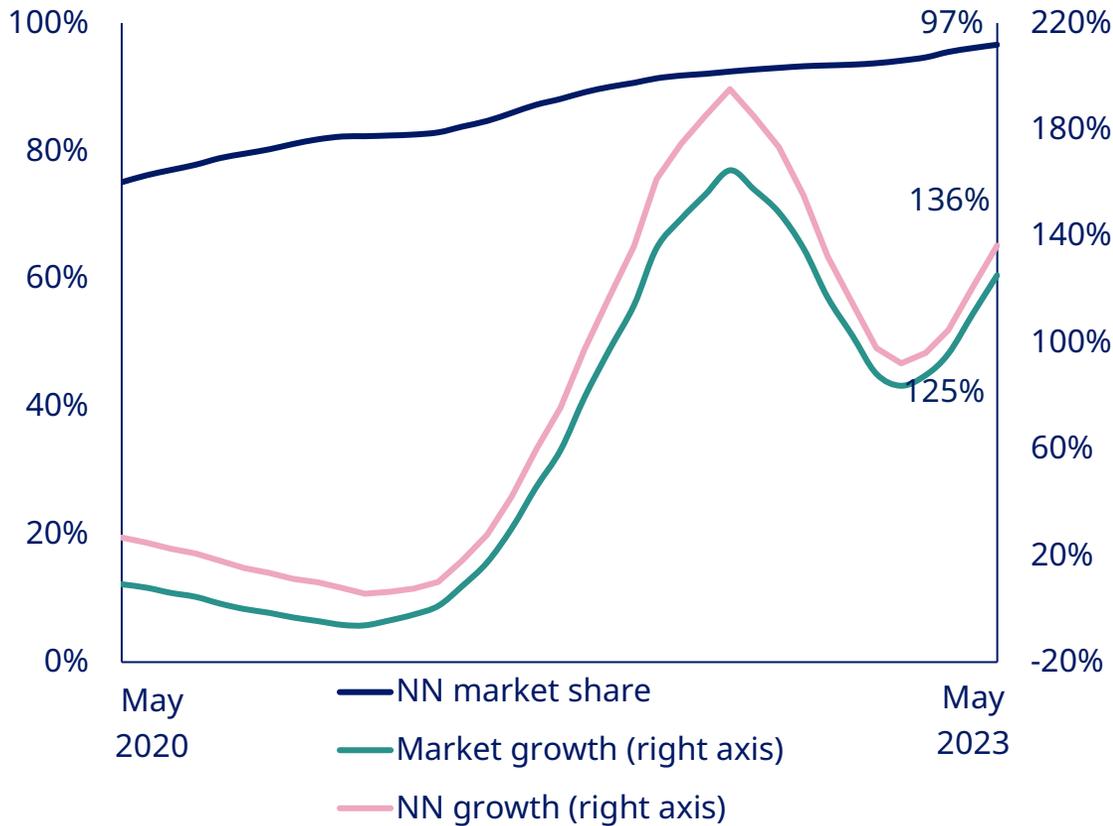


Note: Insulin market numbers do not reflect rebates.
 Source: IQVIA, May 2023, LHS graph - Value, RHS Graph - Volume, MAT, all countries. Share of growth not depicted due to too high numbers; NN: Novo Nordisk

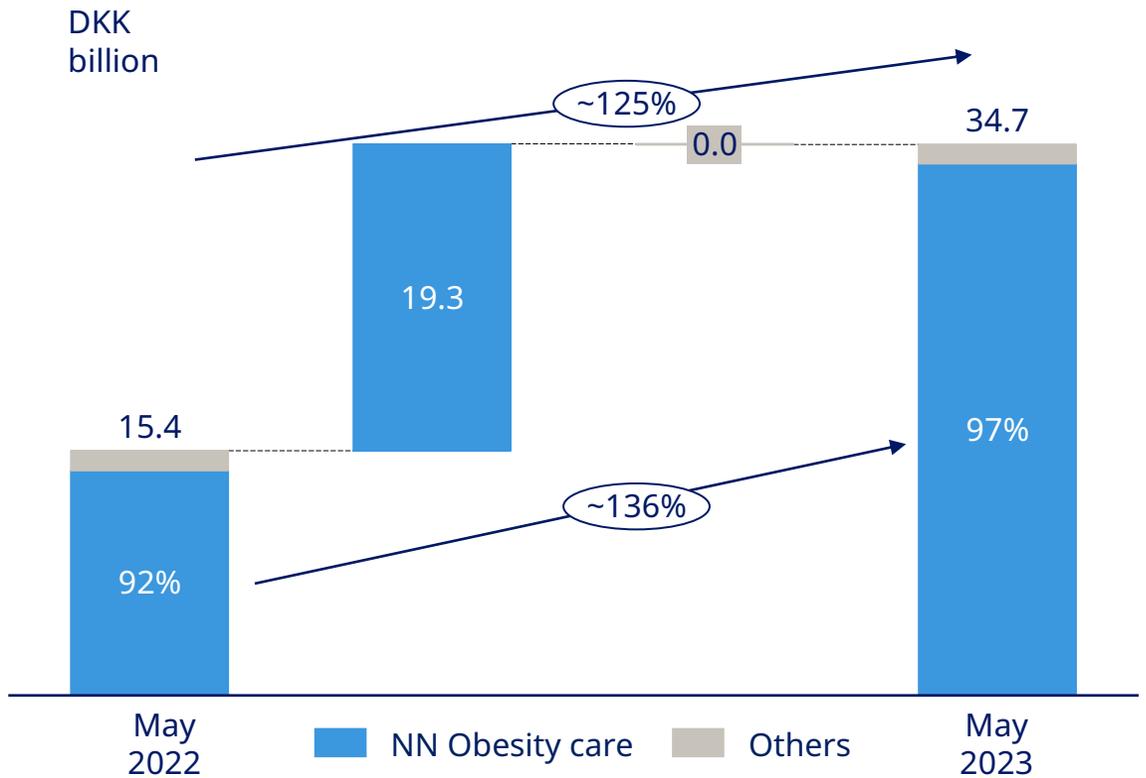


Obesity market share and market growth in North America Operations

Obesity market growth and Novo Nordisk market share



Obesity market size and growth

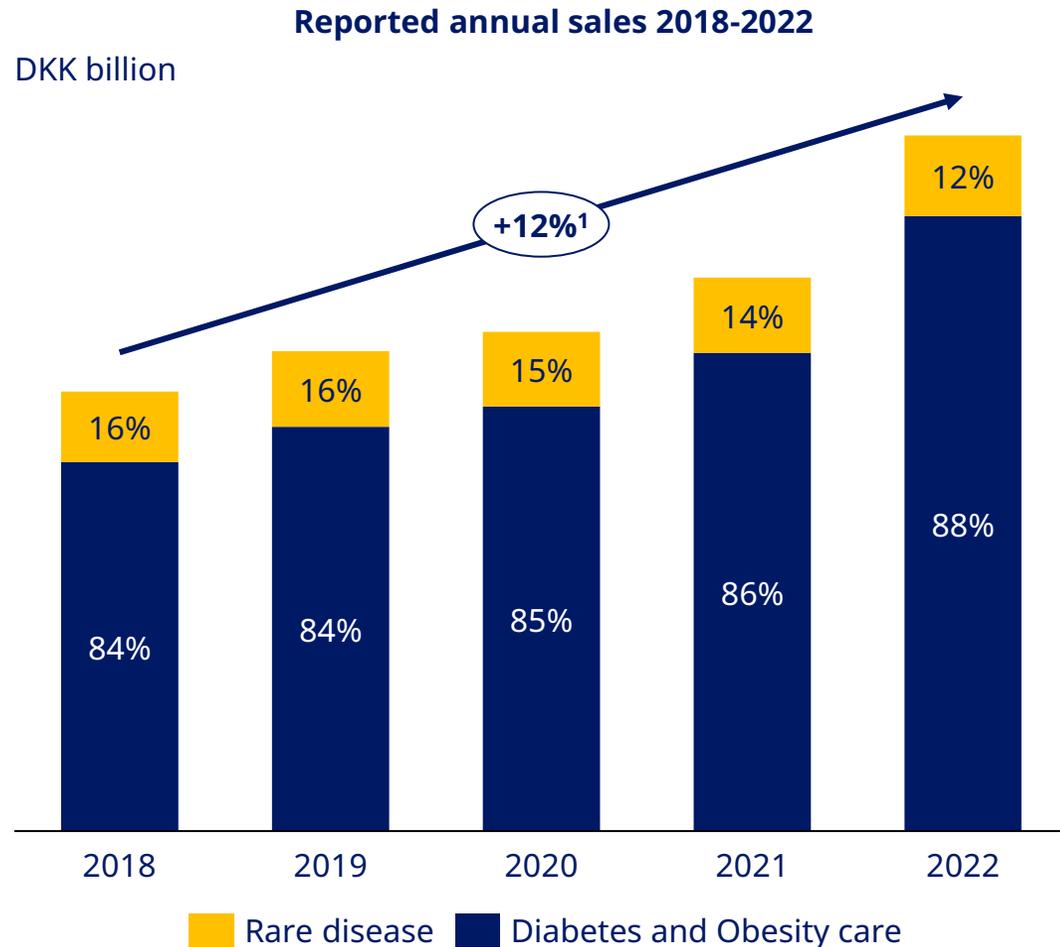


Source: IQVIA, May 2023, value, MAT, all countries; Share of growth not depicted due to too high numbers; NN: Novo Nordisk

Financials

Profit and loss, capital allocation	144
Currencies	150

Solid sales growth driven by Diabetes and Obesity care



¹ CAGR for 5-year period

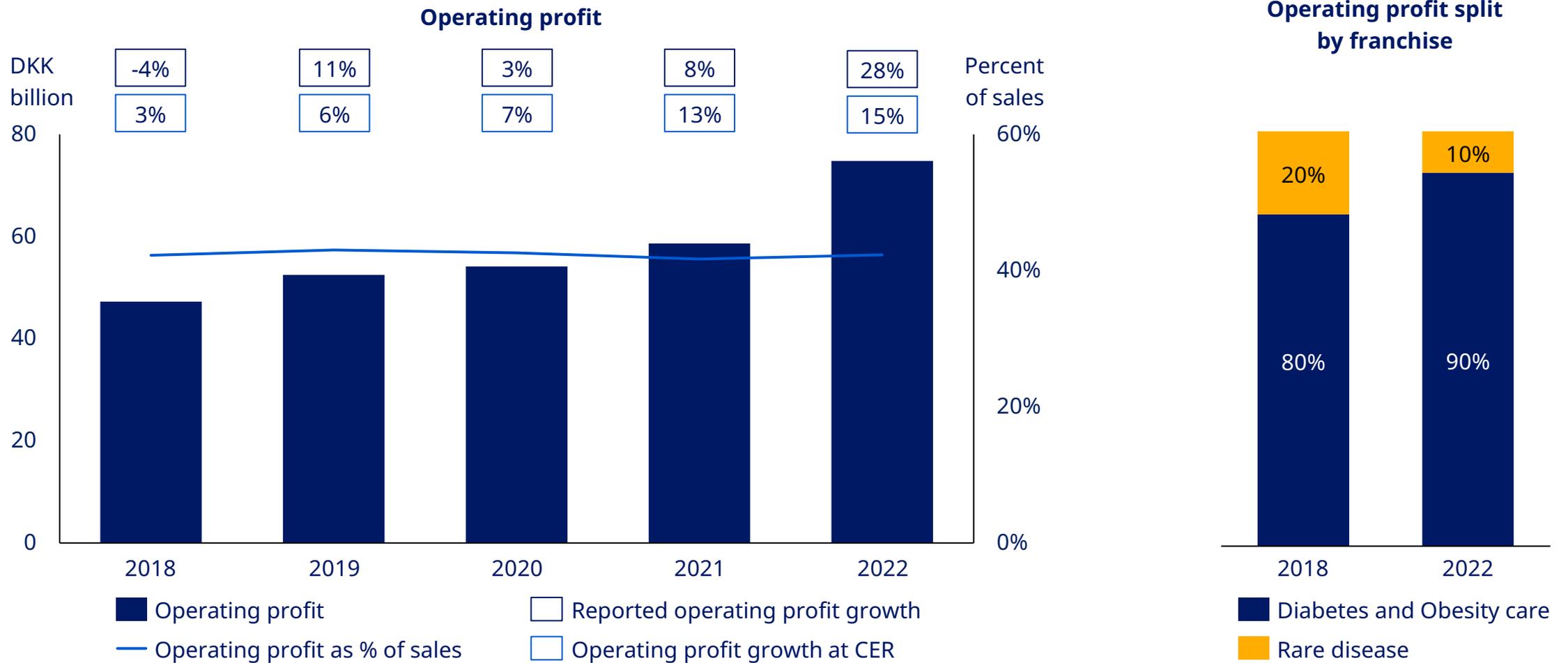
S&D: Sales and distribution; R&D: Research and development

Note: The outlined expected developments are aspirations and not long-term financial targets

Expected development towards 2025

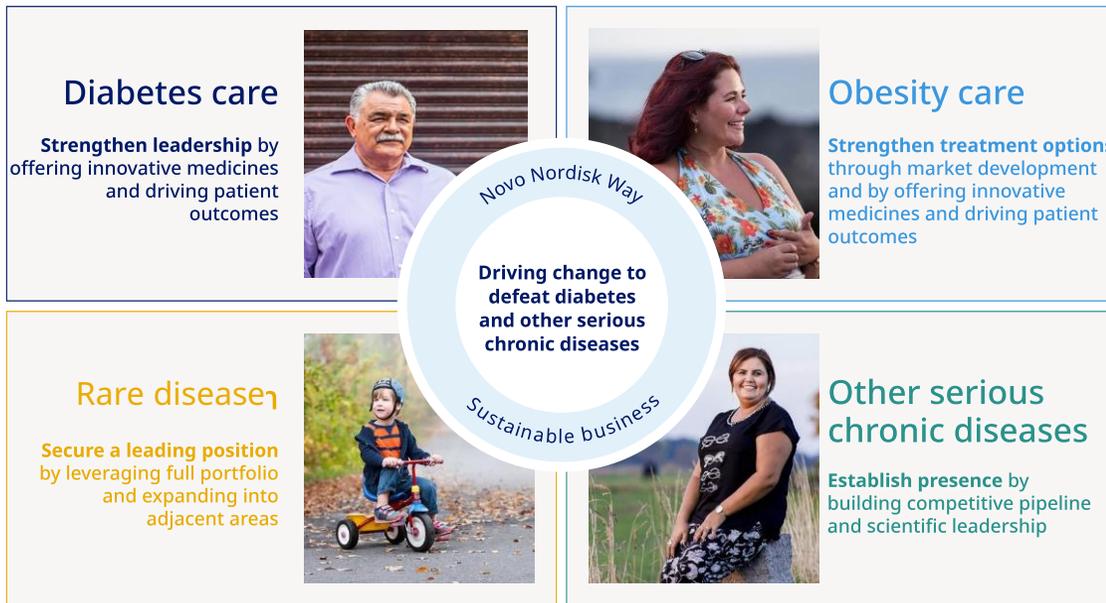
	Gross margin	➔	Remain broadly stable
	S&D cost ratio	➔	Gradually decline enabled by attractive sales growth
	R&D cost ratio	➔	Gradually increase to expand and diversify pipeline
	Administration cost ratio	➔	Decline driven by efficiency gains
	Operating margin	➔	Remain broadly stable

Solid operating profit growth driven by Diabetes care



Resource allocation in Novo Nordisk is guided by investing in future growth while delivering attractive shareholder returns

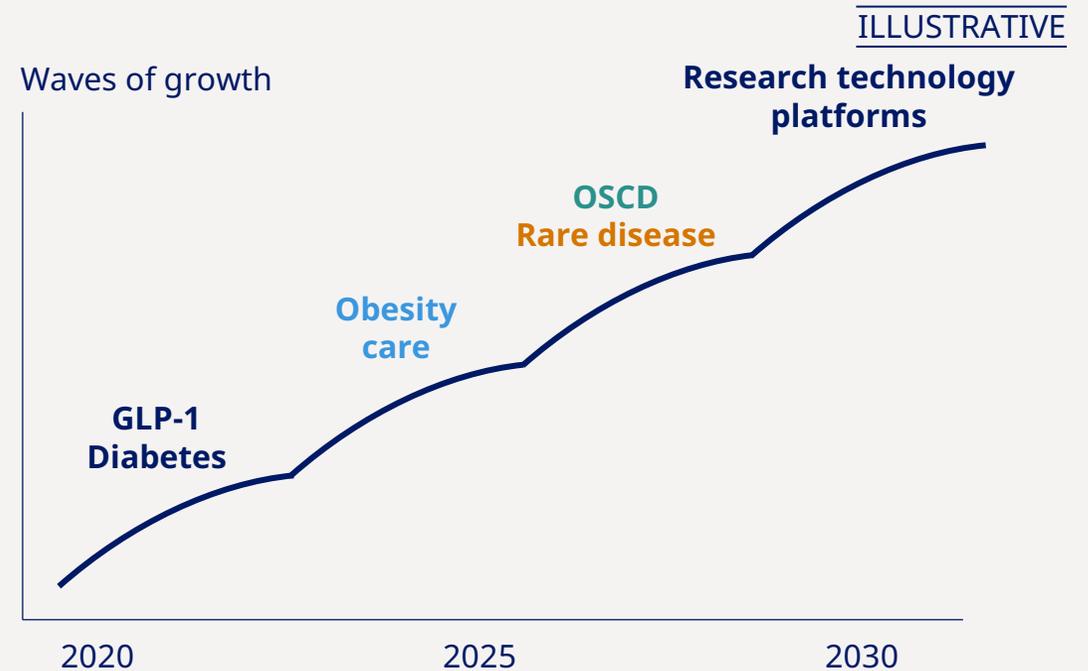
Corporate strategy guides resource allocation



Focus on driving sustained sales growth

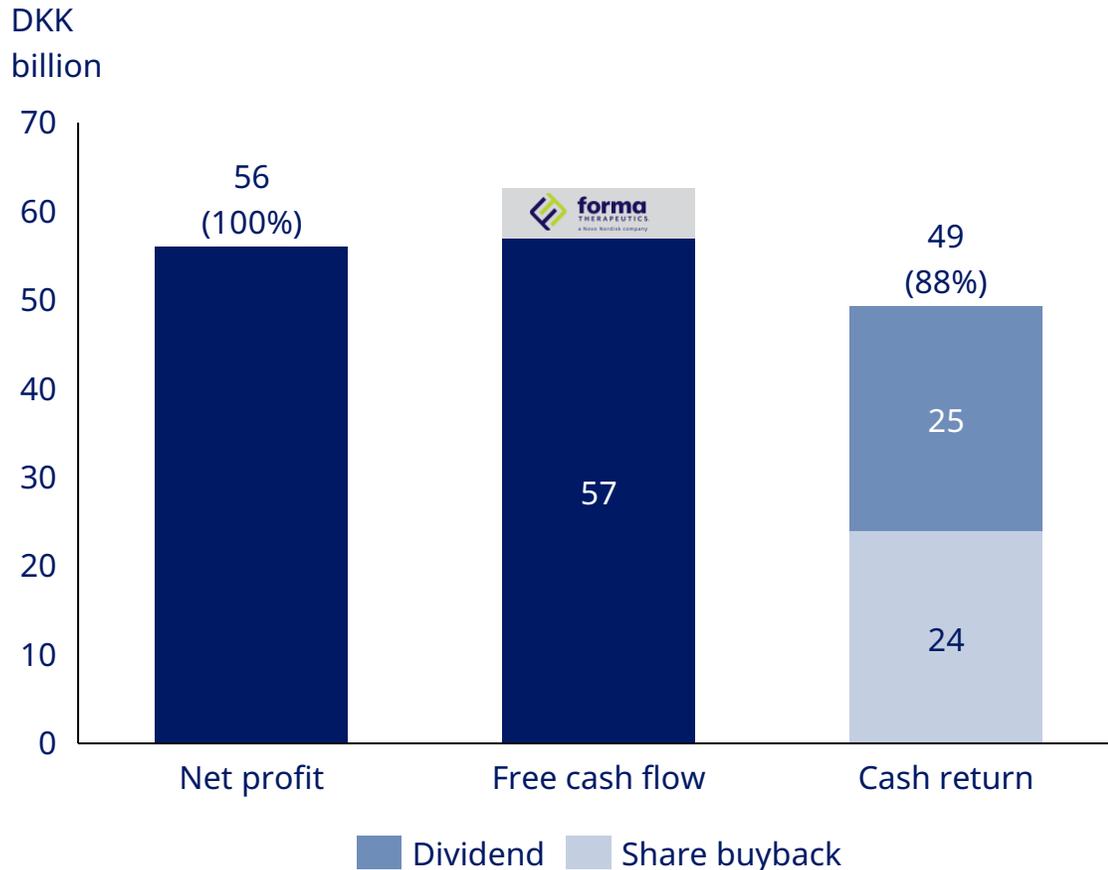
- **Commercial investments** in growth markets and products
- **R&D investments** in future growth assets

Expected primary sales growth drivers towards 2030



Net profit has been converted to cash and returned to shareholders

Cash conversion and allocation (2022)



Strategic capital allocation priorities

Business development investments to enhance R&D pipeline
CAPEX investments to meet demand including R&D pipeline

Deliver competitive capital allocation to shareholders

- Continued share buybacks and dividends

Financial flexibility within current credit ratings

- Moody's: A1 since 2012, S&P Global: AA- since 2013
- Net debt to EBITDA ratio around zero

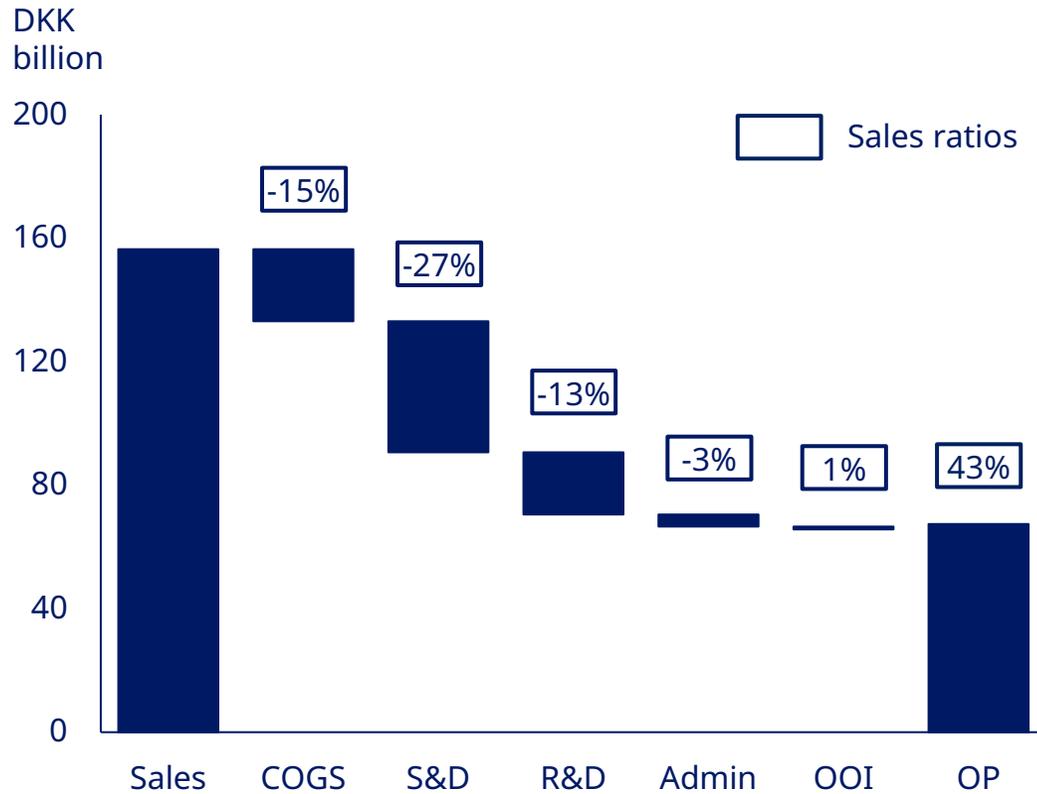
Mainly debt finance major business development projects

- 2021 bond issuance at an all-inclusive interest rate of ~0%
- 2022 bond issuance at an all-inclusive interest rate of ~1%

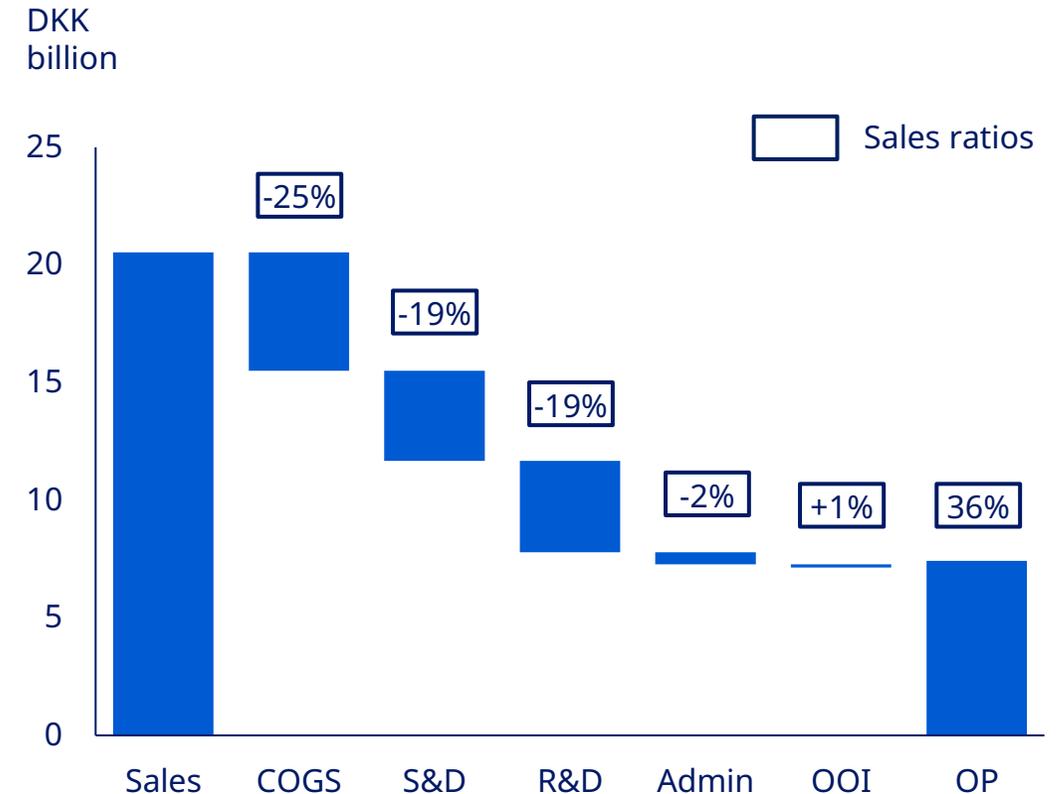
Note: Net cash used for the acquisition of Forma Therapeutics was 5,605 million DKK adjusted for marketable securities per note 5.3 of the 2022 Novo Nordisk Annual Report
 R&D: Research and Development; CAPEX: Capital expenditure; EBITDA: Earnings before interest, taxes, depreciation and amortisation

Rare disease segment has lower profitability driven by higher investments in R&D including the acquisition of Forma in 2022

Diabetes and Obesity care P&L – full year 2022

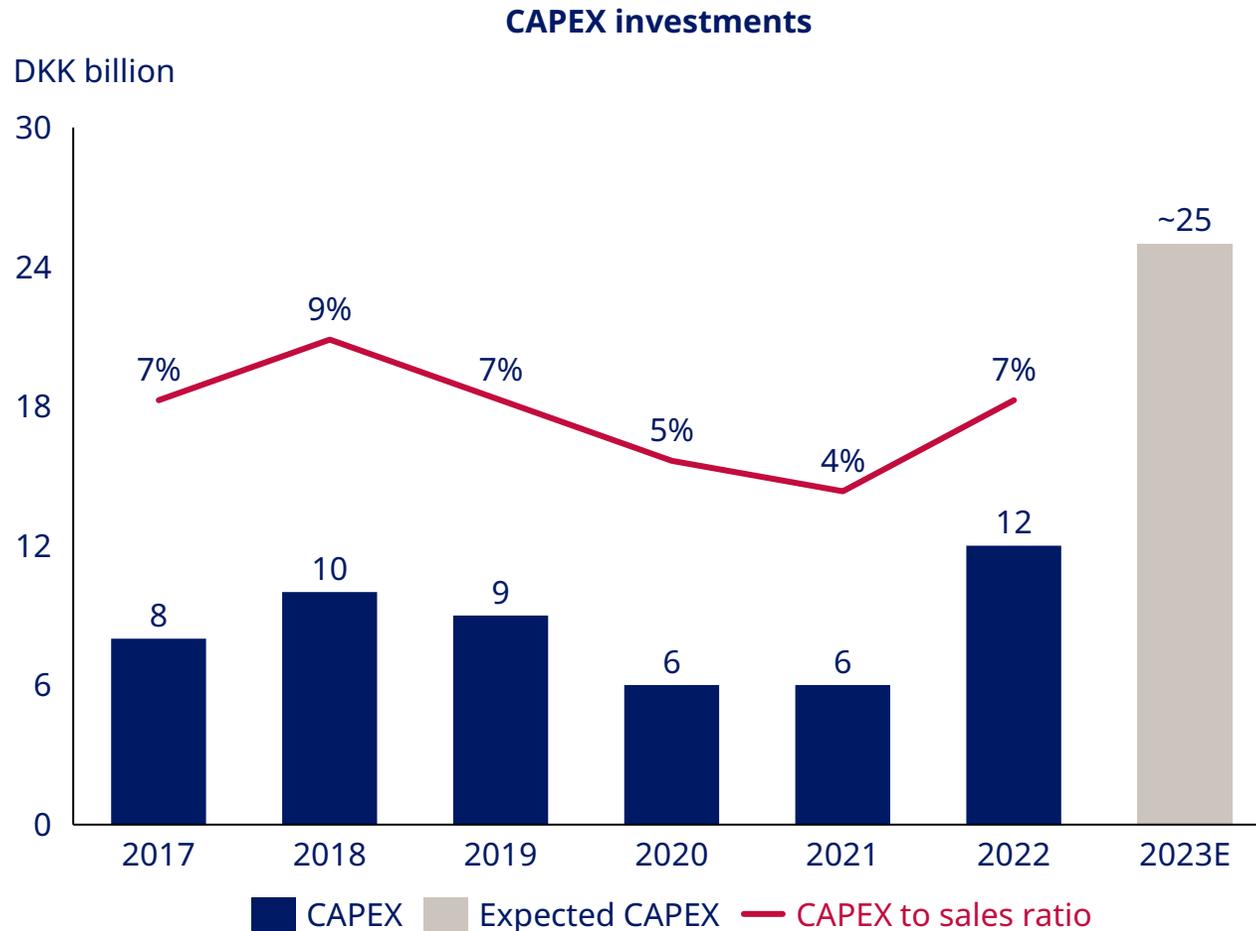


Rare disease P&L – full year 2022



P&L: Profit and Loss; COGS: Cost of goods sold; OOI: Other operating income; OP: Operating profit; S&D: Sales and distribution costs; R&D: Research and development costs; Admin: Administrative costs

Step-up in CAPEX to meet demand for current and future products



Ensure readiness to meet future demands

- Capital expenditure is expected to be around DKK 25 billion in 2023
- Investments primarily at existing manufacturing sites, for growth of marketed products and future pipeline products
- Both active pharmaceutical ingredient (API) production and fill-finish capacity to be expanded across TAs
- CAPEX to sales ratio is expected to be low double digit in the coming years

Currency impact on Novo Nordisk's P/L

Operational currency impact

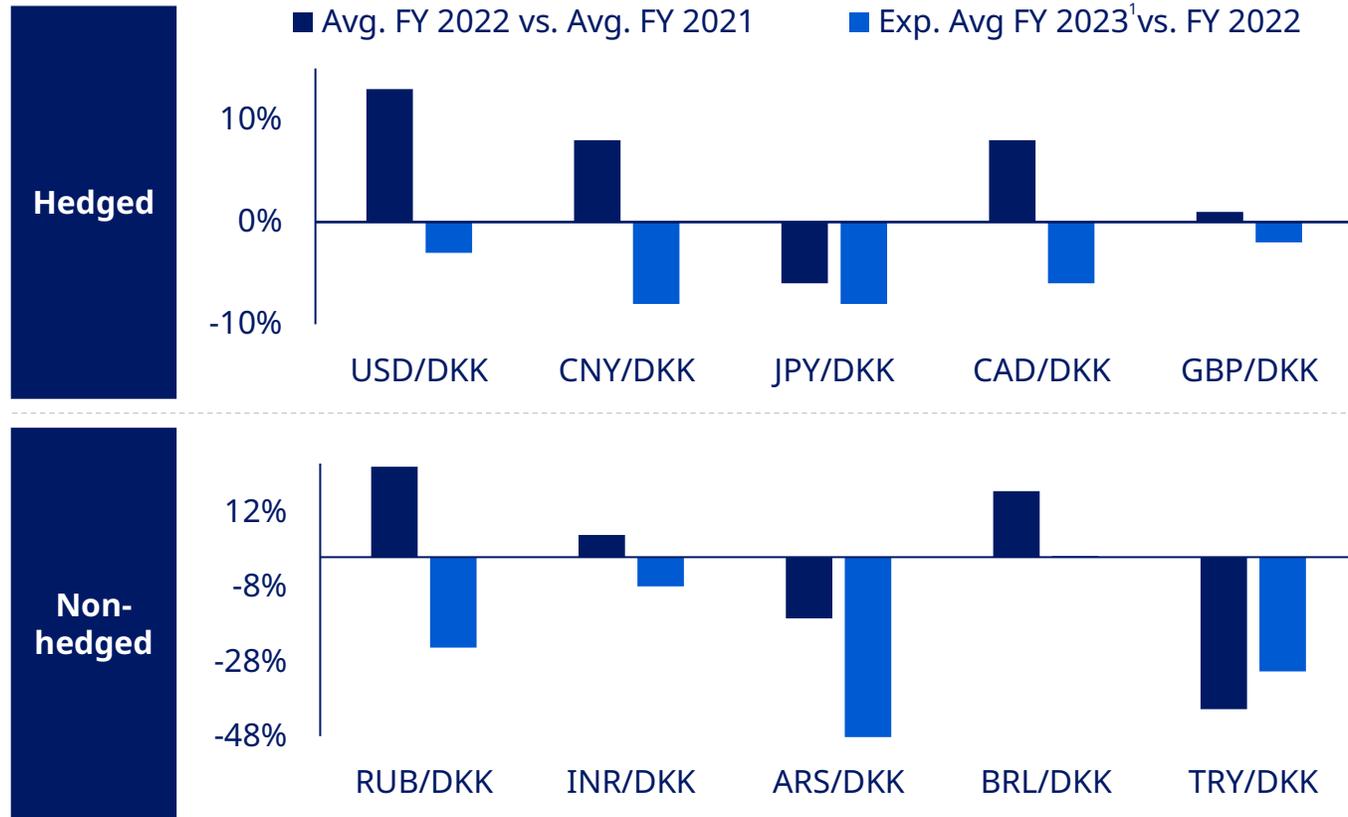
- All movements in currencies will directly impact the individual reported functional lines of the Novo Nordisk's P&L statement
- The currency effect on e.g. operating profit growth is the difference between the reported growth and the operating profit growth at CER
- Key currencies account for around 80% of the total currency exposure
- No hedging effects are included in the operating profit
- Sensitivity table gives an indication of gain/loss of a 5% immediate change in exchange rates compared to exchange rates on announcement day

DKK million	2022	2021
Income statement		
Net sales	176,954	140,800
Cost of goods sold	(28,448)	(23,658)
Gross profit	148,506	117,142
Sales and distribution costs	(46,217)	(37,008)
Research and development costs	(24,047)	(17,772)
Administrative costs	(4,467)	(4,050)
Other operating income and expenses	1,034	332
Operating profit	74,809	58,644
Financial income	239	2,887
Financial expenses	(5,986)	(2,451)
Profit before income taxes	69,062	59,080
Income taxes	(13,537)	(11,323)
Net profit	55,525	47,757
Earnings per share		
Basic earnings per share (DKK)	24.51	20.79
Diluted earnings per share (DKK)	24.44	20.74

Financial currency impact

- All gain/losses from hedging contracts are included in the financial income/expenses
- All key currencies are hedged:
 - USD 12 months
 - JPY 12 months
 - CAD 9 months
 - GBP 3 months*
 - CNY 6 months
- Hedging is primarily performed with the use of forward contracts
- Net financials includes hedging gain/loss including the cost of hedging and the effect from currency gain/losses of balances in non-hedged currencies
- Hedging costs are the interest rate differentials between DKK and hedged currencies

Operating profit expected to be negatively impacted by currencies in 2023, partly countered by net financials



FY 2022

- Positive FX impact on operating profit of 7.6 bDKK
- Negative FX impact on net financials of -4.7 bDKK
- Foreign exchange net gain of 2.9 bDKK

FY 2023 outlook

- Currency impact on Operating profit is expected to be -9%-points
- Net financial items is expected to be a gain of around DKK 2.8 billion mainly driven by gains on hedging contracts due to depreciation of the USD vs 2022 average

¹ Year-to-date realised data and remainder expected flat currency development based on the spot rate as of 7 August 2023

USD: United States dollar; DKK: Danish Kroner; CNY: Chinese yuan renminbi; JPY: Japanese yen; CAD: Canadian Dollar; GBP: British pound sterling; RUB: Russian Ruble; INR: Indian rupee; ARS: Argentine Peso; BRL: Brazilian Real; TRY: Turkish New Lira

Purpose & Sustainability

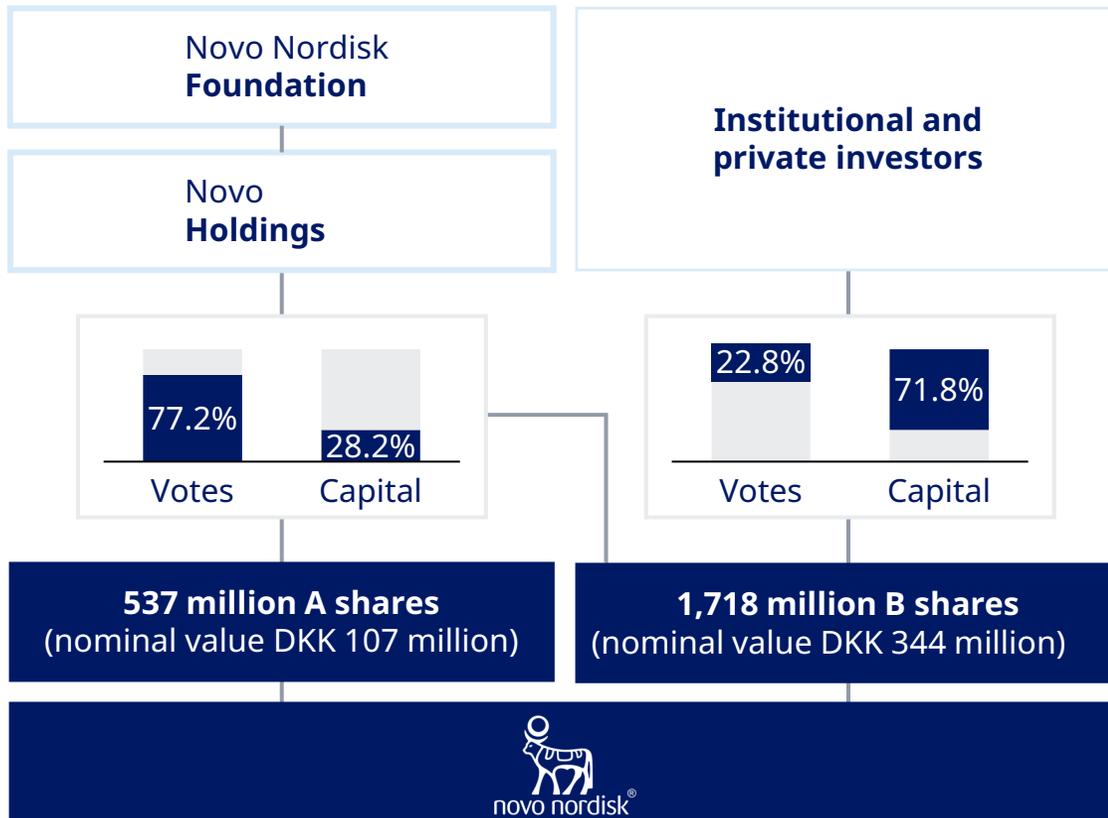
Sustainable business	153
Environmental responsibility	156
Social responsibility	158
Governance	163



RANJITH S.
Ranjith lives with type 1 diabetes
India

Long-term value to society is driven by a strong sense of purpose and by being a responsible business

Foundation ownership enables long-term focus on shared value creation



ESG¹ responsibility has been anchored in Articles of Associations since 2004



¹ Known as the Triple Bottom Line at time of implementation
ESG: Environmental, Social and Governance

*Ownership as of 30 June 2023

2022 statement of ESG performance

		2022	2021	2020
 Environmental performance	Resources			
	Energy consumption for operations (1,000 GJ)	3,677	3,387	3,191
	Share of renewable power for production sites	100%	100%	100%
	Water consumption for production sites (1,000 m ³)	3,918	3,488	3,368
	Breaches of environmental regulatory limit values	75	12	15
	Emissions and waste			
	Scope 1 emissions (1,000 tonnes)	76	77	75
	Scope 2 emissions (1,000 tonnes)	16	16	15
	Scope 3 emissions (1,000 tonnes) ¹	2,041	NA	NA
	Waste from production sites (tonnes)	213,505	180,806	140,783
 Social performance	Patients			
	Patients reached with Novo Nordisk's Diabetes care products (estimate in millions)	36.3	34.6	32.8
	- Hereof reached via the Novo Nordisk Access to Insulin Commitment (estimate in millions) ²	1.8	1.7	3.2
	- Hereof children reached through Changing Diabetes® in Children (cumulative)	41,033	31,846	28,296
	People & employees			
	Employees (total)	55,185	48,478	45,323
	Employee turnover	8.2%	11.0%	7.9%
	Sustainable Employer Score ³	85%	84%	N/A
	Frequency of occupational accidents (number per million working hours)	1.5	1.3	1.3
	Gender in leadership positions (ratio men:women)	56:44	57:43	59:41
	Gender in senior leadership positions (ratio men:women)	61:39	64:36	65:35
	Gender in the Board of Directors (ratio men:women)	54:46	67:33	62:38
	Societies			
	Total tax contribution (DKK million)	36,003	32,593	26,376
	Donations and other contributions (DKK million)	126	92	158
	Change in average list price across US product portfolio (% change to previous year)	2.4%	1.6%	2.3%
Change in average net price across US product portfolio (% change to previous year)	-12.7%	-12.3%	-16.9%	
Change in average list price across US insulin portfolio (% change to previous year)	0.0%	0.0%	0.5%	
Change in average net price across US insulin portfolio (% change to previous year)	-19.5%	-10.9%	-26.9%	
 Governance Performance	Governance processes			
	Business ethics reviews	35	37	32
	Employees trained in business ethics	99%	98%	99%
	Supplier audits	294	253	177
	Product recalls	3	1	0
	Failed inspections	0	0	0
	Values and trust			
	Facilitations of the Novo Nordisk Way	36	34	26
	Company reputation (scale 0-100) ⁴	82.3	82.6	N/A
	Animals purchased for research	79,750	47,879	50,036

1. 2022 is the first year of full Scope 3 emissions' disclosure, which in 2020 and 2019 was limited to business flights and product distribution. 2. In 2020, the ceiling price was lowered from USD 4 to USD 3 which affects the comparability of 2021 and prior years 3. In 2021, the engagement survey was entirely redesigned to support Novo Nordisk's strategic goals. As a result, comparison to previous surveys is not appropriate. 4. In 2021, Company reputation replaced Company trust in order to capture more dimensions of how Novo Nordisk is perceived by external stakeholders.

With Circular for Zero, Novo Nordisk aspires to have zero environmental impact

circular FOR zero

Current environmental impact



CO₂ emissions

2,133 thousand tonnes in Scope 1, 2 and 3 (2022)¹



Waste

600+ million prefilled plastic pens produced every year



Resources

Everything Novo Nordisk purchases

Environmental aspirations



Circular products

Upgrade existing and design new products based on circular principles and solve the end-of-life product waste challenge to close the resource loop



Circular company

Eliminate environmental footprint from operations and drive a circular transition across the company aspiring for zero environmental impact



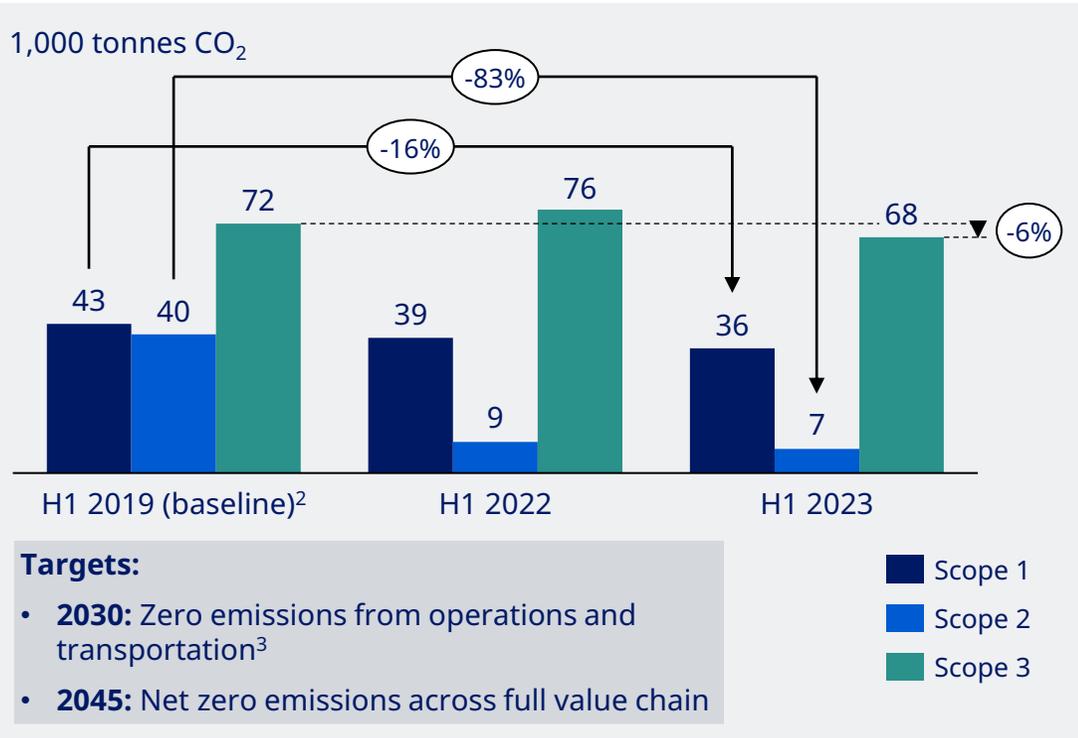
Circular supply

Proactive collaboration with suppliers to embed circular thinking for reduced environmental impact across the value chain and switch towards circular sourcing and procurement

1. In 2022, for the first time, Novo Nordisk reported Scope 3 emissions according to the categories of the Greenhouse Gas Protocol (in 2021, the Scope 3 emissions' reporting was limited to product distribution and business flights).

Novo Nordisk pledges to reach net-zero emissions across the entire value chain by 2045

Emissions from Scope 1, 2 and 3¹



Key initiatives to reduce CO₂ emissions across all three scopes

Scope 1 - Direct emissions from own sources (16% reduction vs H1 2019)

- **Company cars:** 100% electric or plug-in hybrid electric cars by 2030
- **Energy:** Ongoing transition to renewable energy in production facilities resulted in reduced emissions

Scope 2 - Indirect emissions from purchased energy (83% reduction vs H1 2019)

- **Production:** Sourcing 100% of renewable power at production sites since 2020

Scope 3 - Other indirect emissions across value chain (6% reduction vs H1 2019)

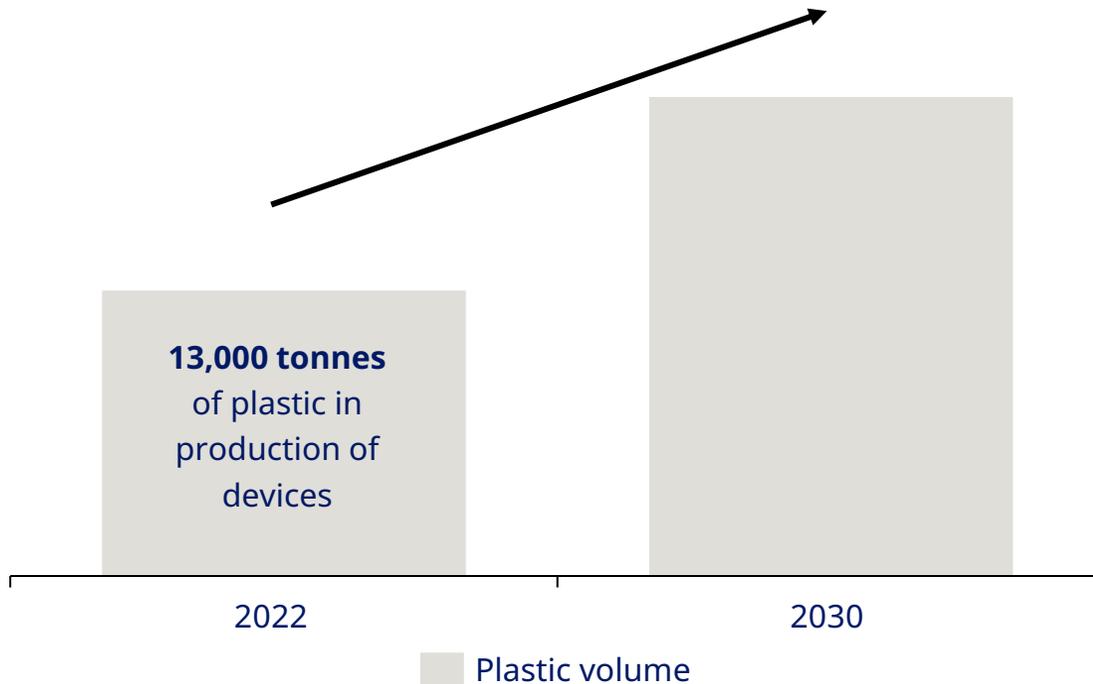
- **Suppliers:** >400 key suppliers have committed to source renewable power
- **Product distribution:** Alliances with various providers for Sustainable Aviation Fuel that will reduce emissions from air transport significantly

¹ Scope 3 emissions are limited to emissions from business flights and product distribution. ² In 2019, some emission categories were only reported on an annual basis. For these categories, the quarterly emissions have been estimated based on the full-year results. ³ CO₂ emissions from operations and transportation represent the emissions from production, offices and labs, cars, business flights and product distribution.

Reaching more patients will increase the plastic footprint, a challenge Novo Nordisk has started to address

Growing volumes impact Novo Nordisk’s plastic footprint

ILLUSTRATIVE



Change to sustainable plastic

- Engage with suppliers to pursue shift to **sustainable plastic**
- Drive innovation via **partnerships** to e.g. re-purpose medical waste



Reduce plastic consumption

- Drive **portfolio decisions** towards lower plastic consumption
- Drive switch towards **durable devices** in relevant markets



Avoid plastic waste on landfill

- **Take-back**¹ pilot in Denmark with partners leading to >20% device return
- **Take-back** expansion to UK, Brazil and France with ambition to establish industry solution for scaling



¹ More information on the pilot called "Returpen™" can be found here: [Returpen.dk](https://returpen.dk)

Social responsibility is core to Novo Nordisk and initiatives focus on prevention, access and innovation



...accelerating **prevention** to bend the curve...



...providing **access to affordable** care for vulnerable patients in every country...

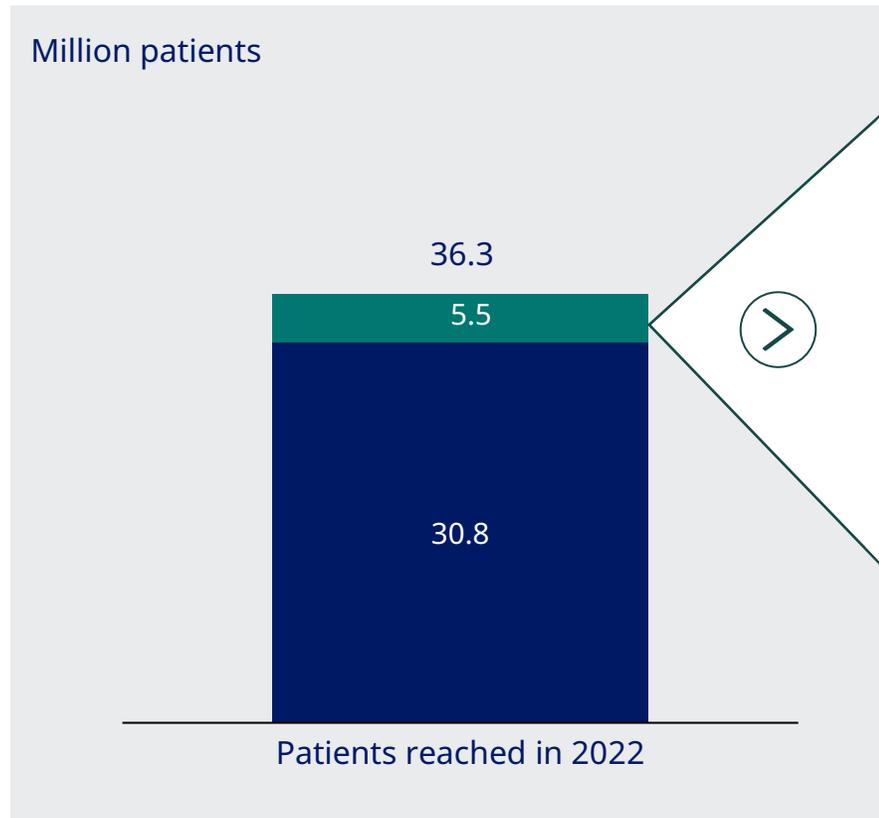


...**innovating** to improve lives...

... and thereby help society rise to one of its biggest challenges

In 2022, more than 5 million people with diabetes were reached with access and affordability initiatives

5.5 out of 36.3 million people were reached with access and affordability initiatives



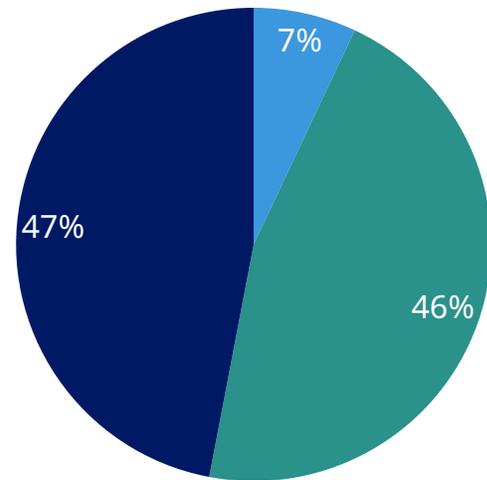
A number of focused programmes (as of full year 2022)

Access to Insulin Commitment	<ul style="list-style-type: none"> • 3 USD ceiling price for human insulin vial offered to 76 low- and middle-income countries, reaching ~1.8 million patients in 2022 • 2.5 million patients reached at or below the ceiling price in countries outside the commitment¹
Changing Diabetes® in Children	<ul style="list-style-type: none"> • ~41,000 children reached at the end of 2022, across 26 countries in three regions (APAC, LATAM and SEEMEA) • More than half of the 9,187 newly enrolled children reached through expansion in Ethiopia, Sudan, Kenya and Uganda
Vulnerability assessments	<ul style="list-style-type: none"> • Ensure availability of affordable insulin for vulnerable patients • Completed vulnerability assessments, resulting in 25 plans being implemented across APAC, LATAM and SEEMEA regions
US affordability offerings	<ul style="list-style-type: none"> • Suite of affordability offerings including unbranded biologics, My \$99 insulin and more • In 2022, DKK 261 billion were provided in discounts and rebates in the US, amounting to 75% of US gross sales

1. The access and affordability programmes are not mutually exclusive, implying that the sum of the reach of each programme cannot be interpreted as the total unique number of people with diabetes reached. More info on Novo Nordisk access and affordability programmes can be found at : [Access & affordability \(novonordisk.com\)](https://www.novonordisk.com/access-and-affordability). 2. Changing Diabetes® in Children is a public-private partnership between the International Society for Paediatric and Adolescent Diabetes, the World Diabetes Foundation, Roche, and Novo Nordisk.

In the US, net prices have declined in the last five years

The US population by health insurance coverage



333 million people

- Uninsured
- Private insurance schemes
- Government insurance schemes

Insulin net prices¹ have declined



Net prices¹ across the full Novo Nordisk portfolio² declined



¹Percentage change represents a sales weighted average list and net price for the respective calendar year compared to the sales weighted average list and net price for the prior year, indexed to base year 2019, and is not reflective of the magnitude of individual list price actions ²NN US Product Portfolio is inclusive of Diabetes, Obesity and Rare disease products
Government insurance schemes cover Medicare, Medicaid and public exchanges, some of these with high deductibles.
Source: Novo Nordisk Annual Report 2022 (illustration created from figures presented on page 89)

Barriers to access go beyond price

Diabetes Compass launched with World Diabetes Foundation

- Many healthcare systems in LMICs are overburdened
- Aims to reduce vulnerabilities through **innovative digital solutions** to support health workers and people with diabetes
- Pilots in **Sri Lanka** and **Tanzania** have been launched
- Roll-out of digital products expected to begin in 2023



Thermal solution for human insulin can address one key access to care barrier

- Strict **insulin storage recommendations** are hard to meet in humanitarian settings and where access to refrigeration is low
- The **positive scientific opinion** received from EMA in April supports obtaining the national approvals for additional option for storage outside of refrigeration prior to first use
- **National submission ongoing** in >50 countries, e.g. submitted in India and Bangladesh in July 2022



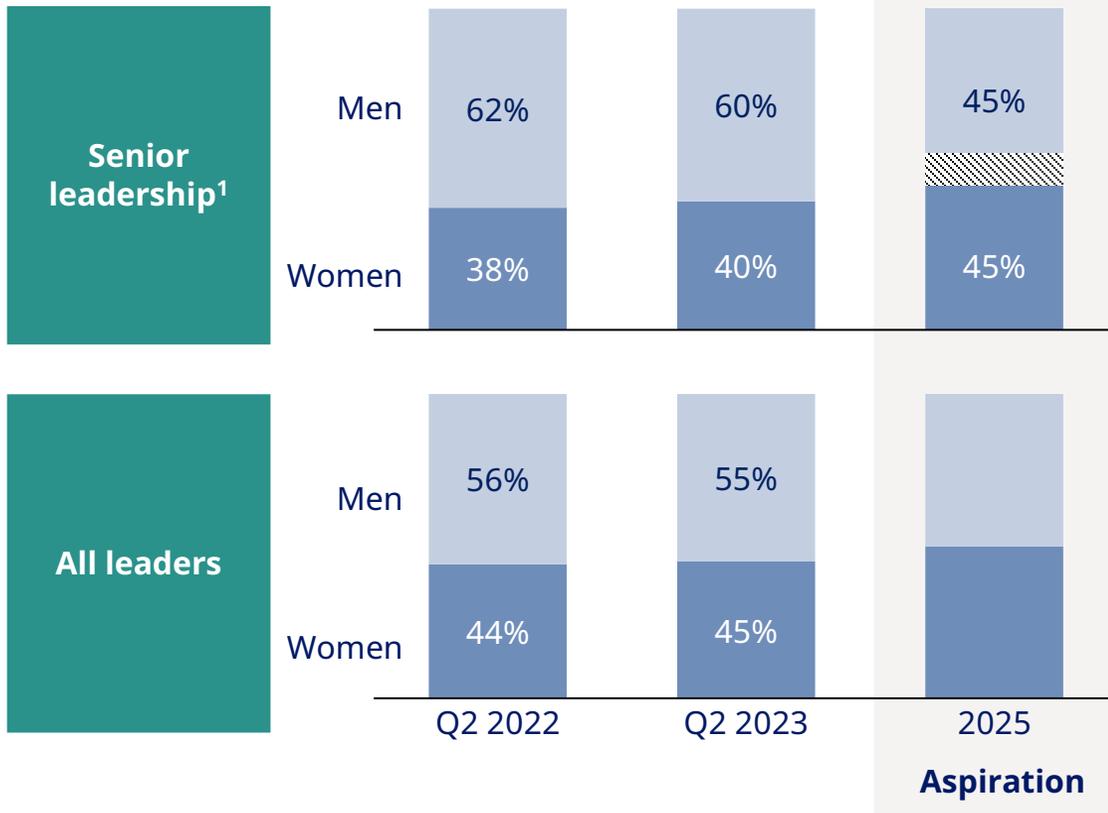
iCare initiative towards strengthening health infrastructure in Middle Africa

- A business-integrated model improving access to treatment and care
- **Capacity:** 6,300 HCPs trained
- **Affordability:** 32,300 underserved patients reached with insulin
- **Reach:** Onboarded new distributors to reduce mark-ups
- **Empowerment:** 10,900 patients enrolled in patient empowerment programmes



The journey towards being a sustainable employer starts with being inclusive and diverse

2025 aspiration supporting Diversity and Inclusion



Driving an inclusive and diverse workplace

Diversity & Inclusion aspirational targets:

- Create an inclusive culture where all employees have a sense of belonging and equitable opportunities to realise their potential
- Achieve a balanced gender representation across all managerial levels
- Achieve a minimum of 45% women and a minimum of 45% men in senior leadership positions by the end of 2025

Diversity & Inclusion aspirations in action:

- D&I is continuously embedded in HR processes and policies across the employee life cycle
- All areas have local D&I action plans to address local challenges and opportunities
- All leaders must embrace their role as inclusive leaders

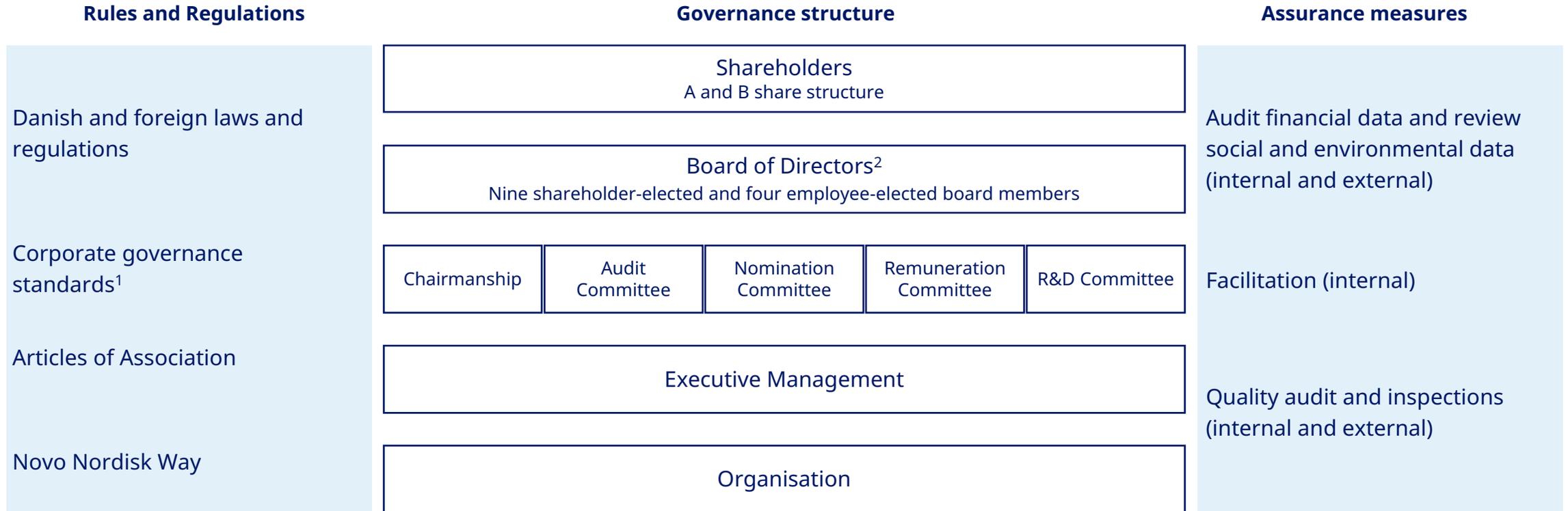
Diversity & Inclusion progress:

- Inclusion Index in 2023 stands at 82%, the same as in 2022
- End of Q2 2023 40% of leaders in senior leadership positions were women, compared to 38% end of Q2 2022

¹ Senior leadership defined as executive vice presidents, senior vice presidents, corporate vice presidents, and vice presidents; D&I: Diversity and inclusion

Note: Full social statements to be found in Novo Nordisk Annual Report 2022. No formulated 2025 aspiration exist for "all leaders", but Novo Nordisk aspires for balanced gender representation at all managerial levels½

Structure in place to ensure corporate governance



1. The corporate governance standards designated by Nasdaq Copenhagen and New York Stock Exchange. 2. In 2022, the Board of Directors met ten times.

Novo Nordisk has a sustainable tax approach

Sustainable tax approach approved by the BoD

1 | Commercially driven

- Business structures driven by commercial considerations
- Pay taxes where value is generated
- Effective tax rate of ~20% for 2022

2 | Responsible

- No artificial structures or tax havens
- Transfer pricing principles compliant with OECD guidelines
- Advanced pricing agreements covering ~65% of revenue

3 | Transparent

- Open about tax practices and maintain cooperative relationships with tax authorities
- Tax approach published on [novonordisk.com](https://www.novonordisk.com)
- Total tax contribution in 2022 around DKK 36 billion

Corporate income taxes by region – three year average in DKK billion

Region	IP rights ¹	Production ²	Sales ³	Corporate income taxes
International Operations				11.0
- Denmark				9.6
- EMEA (excl. Denmark)				0.7
- Region China				0.4
- Rest of World				0.3
North America Operations				1.0
- The US				0.8
Total				12.0



Share of category



Share of category



Share of category

1. Intellectual property rights based on sales from where intellectual property rights are located. 2. Production based on production employees in the region. 3. Sales based on the location of the customer.

OECD: The Organisation for Economic Co-operation and Development

Note: All figures and graphs are average 2020-2022

ESG is integrated in reporting and remuneration as well as recognised externally

ESG is included in integrated reporting and short- and long-term remuneration



We strive to adhere to sustainability frameworks for our ESG reporting



ESG rankings by third-party agencies recognise Novo Nordisk's efforts

Rating agency



AAA



Top 13% in industry group 'pharmaceuticals'



A (Climate)
A- (Water)



Ranked 11th out of 20 companies

Investor contact information

Share information

Novo Nordisk's B shares are listed on the stock exchange in Copenhagen under the symbol 'NOVO B'. Its ADRs are listed on the New York Stock Exchange under the symbol 'NVO'.

For further company information, visit Novo Nordisk on:
www.novonordisk.com

Access the full investor presentation here:



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