Erik Hageman (on the right) is one of Denmark’s longest-living people with type 1 diabetes, pictured here with his son Lars, who also has type 1 diabetes, and his grandchildren (from the left) Clara, Emilie and Holger.

Novo Nordisk
—a focused healthcare company

Investor presentation
First three months of 2023
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 three months 2023

Progress towards zero environmental impact
• Carbon emissions decreased by 21% vs Q1 2019\(^1\)

Adding value to society
• Medical treatment provided to 37.2 million people living with diabetes
• Reaching more than 42,000 children in Changing Diabetes\(^\text{®}\) in Children programme

Being recognised as a sustainable employer
• Share of women in senior leadership positions has increased to 39% from 37% end of March 2022

Diabetes value market share increased by 1.7%-points to 32.2%\(^2\)

Obesity care sales of DKK 7.8 billion (+124% at CER)

Rare disease sales of DKK 4.6 billion (-16% at CER)

Further raise innovation bar for Diabetes treatment
• Regulatory submission of once-weekly insulin icodect
• Completion of phase 3 trial PIONEER PLUS
• Completion of phase 1/2 trials with GLP-1/GIP

Develop superior treatment solutions for obesity
• Phase 3a trials REDEFINE 2 & 3 initiated with CagriSema

Strengthen and progress Rare Disease pipeline
• Somapacitan approved in the US for GHD in children
• CRL received for concizumab in the US

Establish presence in Other serious chronic diseases
• Phase 1 trials initiated with cell therapy treatment

Sales growth of 25% (CER) and operating profit growth of 28% (CER)

Operational leverage reflecting sales growth

Free cash flow of DKK 24.8 billion and DKK 23.5 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

VP: Vice president; CER: Constant exchange rates; CRL: Complete Response Letter; US: United States; GHD: Growth Hormone Deficiency; GIP: Gastric inhibitory polypeptide; GLP-1: Glucagon Like Peptide 1

Note: The strategic aspirations are not a projection of Novo Nordisk’s financial outlook or expected growth.
Sales growth of 25% driven by both operating units

Reported geographic sales split for first quarter of 2023

- Insulin
- GLP-1
- Other diabetes
- Obesity care
- Rare disease
- Growth at CER

International Operations

NAO: North America Operations
EMEA: Europe, Middle East and Africa
China: Mainland China, Hong Kong and Taiwan
RoW: Rest of World

Sales growth of 25% driven by both operating units

Reported therapy area sales and growth for first quarter of 2023

- North America Operations
- International Operations
- Growth at CER

Note: Unless otherwise specified, sales growth rates are at CER
Diabetes value market leadership increased by 1.7%-points to 32.2%

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

**Diabetes care sales grew by 21%** (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 increased by 0.8%-points in the last 12 months, driven by:

- Global GLP-1 volume growth of ~50%
- Estimated global GLP-1 share of total diabetes prescriptions is ~5%

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**Novo Nordisk global diabetes value market shares**

- **2020**: 28.8%
- **2021**: 29.3%
- **2022**: 30.5%
- **2023**: 32.2%

**Novo Nordisk global GLP-1 value market share**

- **2020**: 44.5%
- **2021**: 44.1%
- **2022**: 44.0%
- **2023**: 44.5%

CER: Constant exchange rates; IO: International Operations; NAO: North America Operations
Note: Sales growth rates are at CER
Source: IQVIA MAT, Feb 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**

- **DKK billion**: 
  - **IO**: 12% (52%) GLP-1, 4% growth at CER
  - **EMEA**: 19% (57%) GLP-1, -8% insulin
  - **China**: 17% (40%) GLP-1, -7% growth at CER
  - **RoW**: 4% (56%) GLP-1, -22% insulin

**Geographical regions**

- **Insulin**: -8%, 4%, 5%, 5%
- **GLP-1**: 52%, 19%, 17%, 4%
- **Growth at CER**: 4%, 3%, 4%, 4%

**GLP-1 patients and value market share in IO**

- **Number of patients (millions)**
  - **Class growth ~50%**
  - **Value market share**
    - **IO**: 65.2%, 43.7%, 32.3%, 12.8% GLP-1 patients
    - **EMEA**: 75%, 60%, 45%, 30% Ozempic®
    - **China**: 75%, 60%, 45%, 30% Victoza®
    - **RoW**: 60%, 45%, 30%, 15% Rybelsus®

**Note**: The market share and patient numbers are based on countries with IQVIA coverage. GLP-1 class growth calculated as Dec'22-Feb'23 vs Dec'21-Feb'22 (Rolling 3 month average). Source: IQVIA MAT, Feb 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 quarter of 2023 with volume growth across our portfolio

**US GLP-1 weekly NBRx prescriptions**

**US GLP-1 TRx market share**

NBRx: New-to-brand prescriptions; TRx: Total prescriptions; NN: Novo Nordisk; Scripts: Prescriptions; US: United States

Note: Class growth calculated as Q1 2023 vs Q1 2022

Source: IQVIA Xponent, NBRx data from week ending 14 Apr 2023. TRx data from week ending 14 Apr 2023. Each data points represents a rolling four-week average.
Obesity care sales grew by 124% in the first quarter of 2023 mainly driven by the US following relaunch of Wegovy

**The US**
- Commercial relaunch in January 2023
- Broad commercial formulary access
- To safeguard continuity of care, the supply of the lower Wegovy® dose strengths in the US will be reduced temporarily

**International Operations**
- Wegovy® launched in Denmark and Norway
- Gradual roll-out in IO

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1 Annual growth at CER. Each TRx data points represents one week of data; 2IQVIA weekly, 14 Apr 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. 54% volume growth for Global BAOM market growth refers to moving annual total.
Rare disease sales decreased by 16% driven by temporary reduction in manufacturing output

**Reported Rare disease sales**

- DKK billion
- Growth at CER
  - Total: -16%
  - Rare blood disorders: -3%
  - Haem. A: 19%
  - Haem. B: 15%
  - Novo-Seven®: -11%
  - Rare endocrine disorders: -38%

**Rare disease sales driven by global commercial execution**

**Rare disease sales decrease is driven by:**
- 14% sales decline in North America Operations
- 17% sales decline in International Operations

**Rare blood disorders sales decreased by 3%, driven by:**
- Lower sales of NovoSeven® partially countered by sales of haemophilia A and B products

**Rare endocrine disorders sales decreased by 38% driven by:**
- North America Operations sales for Norditropin® declined by 33% driven by 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 ~35%

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1 Total includes “Other Rare disease”, which consists of primarily Vagifem® and Activelle®; 2 Comprises 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.
PIONEER PLUS achieved its primary endpoint and demonstrated statistically significant HbA$_1^c$ reduction vs oral sema 14 mg

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

<table>
<thead>
<tr>
<th>Treatment</th>
<th>5 weeks follow-up</th>
<th>68 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral semaglutide 14 mg</td>
<td>-1.5%</td>
<td></td>
</tr>
<tr>
<td>Oral semaglutide 25 mg</td>
<td>-1.9%*</td>
<td>-2.2%*</td>
</tr>
<tr>
<td>Oral semaglutide 50 mg</td>
<td>-4.5</td>
<td>-7.0*</td>
</tr>
</tbody>
</table>

**Primary endpoint:**
- Change from baseline to week 52 in HbA$_1^c$

**Secondary endpoint:**
- Change from baseline to week 52 in body weight

**Inclusion criteria** (1,606 participants):
- Type 2 Diabetes
- HbA$_1^c$ 8.0 - 10.5%
- BMI ≥25 kg/m$^2$
- Stable dose of 1-3 OADs (metformin, SU, SGLT-2i or DPP-4i*)

**Headline trial results**

- Change in HbA$_1^c$:
  - Oral semaglutide 14 mg: -1.5%
  - Oral semaglutide 25 mg: -1.9%*
  - Oral semaglutide 50 mg: -4.5%
  - Mean baseline HbA$_1^c$: 9.0%

- Change in body weight:
  - Oral semaglutide 14 mg: -2.2%*
  - Oral semaglutide 25 mg: -7.0*
  - Oral semaglutide 50 mg: -9.2*
  - Mean baseline body weight: 96.4 kg

*All doses of oral semaglutide appeared to have safe and well-tolerated profile*

*DPP-4i* terminated at randomization

T2D: Type 2 diabetes; HbA$_1^c$: 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
## R&D milestones

<table>
<thead>
<tr>
<th>Project</th>
<th>Q1 2023</th>
<th>Q2 2023</th>
<th>H2 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diabetes care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin Icodec</td>
<td></td>
<td>✓ EU/US/CN submission</td>
<td></td>
</tr>
<tr>
<td>Oral semaglutide (25/50mg)</td>
<td>✓ Phase 3 results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDC semaglutide/GIP OW</td>
<td></td>
<td>✓ Phase 2 results</td>
<td>US submission</td>
</tr>
<tr>
<td>Oral GLP-1/GIP</td>
<td></td>
<td>✓ Phase 1 results</td>
<td></td>
</tr>
<tr>
<td>Cagrisema T2D</td>
<td></td>
<td></td>
<td>Phase 3 initiation</td>
</tr>
<tr>
<td><strong>Obesity care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEP HFpEF</td>
<td>Phase 3 results</td>
<td>Phase 3 results (T2D)</td>
<td></td>
</tr>
<tr>
<td>Oral semaglutide (50 mg)</td>
<td>Phase 3 results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PYY 1875</td>
<td>Phase 3 results</td>
<td>Phase 1/2 results</td>
<td></td>
</tr>
<tr>
<td>SELECT CVOT</td>
<td></td>
<td>Phase 3 results</td>
<td></td>
</tr>
<tr>
<td>Oral Amycretin</td>
<td></td>
<td></td>
<td>Phase 1 results</td>
</tr>
<tr>
<td><strong>Rare disease</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sogroya® (Somapacitan)</td>
<td>✓ US approval (GHD)</td>
<td>EU decision (GHD)</td>
<td></td>
</tr>
<tr>
<td>Concizumab</td>
<td></td>
<td>CRL received (HwI)</td>
<td></td>
</tr>
<tr>
<td><strong>Other serious chronic diseases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ziltivekimab (HFpEF)</td>
<td>✓ Phase 1 initiation</td>
<td></td>
<td>Phase 3 initiation</td>
</tr>
<tr>
<td>Stem cell HF (Heartseed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stem cell Parkinson’s disease</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

CRL: Complete response letter; CVOT: Cardiovascular Outcomes Trial; EU: European Union; FDC: Fixed dose combination; GHD: Growth Hormone Deficiency; GIP: Gastric inhibitory polypeptide; GLP-1: Glucagon Like Peptide 1; HFpEF: Heart failure with preserved ejection fraction; HwI: Haemophilia with inhibitors; JP: Japan; OW: once weekly; PYY: Peptide YY; T2D: Type 2 Diabetes Mellitus; US: United States.
# Financial results – First three months of 2023

<table>
<thead>
<tr>
<th>In DKK million</th>
<th>First three months of 2023</th>
<th>First three months of 2022</th>
<th>Change (reported)</th>
<th>Change (CER)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>53,367</td>
<td>42,031</td>
<td>27%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Gross profit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross margin</td>
<td>84.7%</td>
<td>83.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales and distribution costs</td>
<td>(12,412)</td>
<td>(10,183)</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td>Percentage of sales</td>
<td>23.3%</td>
<td>24.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research and development costs</td>
<td>(6,728)</td>
<td>(5,206)</td>
<td>29%</td>
<td>28%</td>
</tr>
<tr>
<td>Percentage of sales</td>
<td>12.6%</td>
<td>12.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration costs</td>
<td>(1,071)</td>
<td>(970)</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Percentage of sales</td>
<td>2.0%</td>
<td>2.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other operating income and expenses</td>
<td>33</td>
<td>392</td>
<td>(92%)</td>
<td>(92%)</td>
</tr>
<tr>
<td><strong>Operating profit</strong></td>
<td>25,007</td>
<td>19,147</td>
<td>31%</td>
<td>28%</td>
</tr>
<tr>
<td>Operating margin</td>
<td>46.9%</td>
<td>45.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial items (net)</td>
<td>(270)</td>
<td>(1,228)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Profit before income tax</strong></td>
<td>24,737</td>
<td>17,919</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>Income taxes</td>
<td>(4,923)</td>
<td>(3,709)</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Effective tax rate</td>
<td>19.9%</td>
<td>20.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net profit</strong></td>
<td>19,814</td>
<td>14,210</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Diluted earnings per share (DKK)</td>
<td>8.78</td>
<td>6.22</td>
<td>41%</td>
<td></td>
</tr>
</tbody>
</table>

CER: Constant exchange rates
## Financial outlook for 2023

<table>
<thead>
<tr>
<th>Category</th>
<th>Expectations 4 May 2023</th>
<th>Expectations 1 Feb 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales growth – at CER</td>
<td>24% to 30%</td>
<td>13% to 19%</td>
</tr>
<tr>
<td>Sales growth - reported</td>
<td>Around 6 percentage points lower</td>
<td>Around 4 percentage points lower</td>
</tr>
<tr>
<td>Operating profit growth – at CER</td>
<td>28% to 34%</td>
<td>13% to 19%</td>
</tr>
<tr>
<td>Operating profit growth - reported</td>
<td>Around 9 percentage points lower</td>
<td>Around 5 percentage points lower</td>
</tr>
<tr>
<td>Financial items (net)</td>
<td>Gain of around DKK 3.0 billion</td>
<td>Gain of around DKK 2.4 billion</td>
</tr>
<tr>
<td>Effective tax rate</td>
<td>19% to 21%</td>
<td>19% to 21%</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>DKK 66 to 74 billion</td>
<td>DKK 60 to 68 billion</td>
</tr>
</tbody>
</table>

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 27 April 2023.

CER: Constant exchange rates

Note: Changes since last highlighted in bold.
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

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 June 2023</td>
<td>Investor event at ADA</td>
</tr>
<tr>
<td>10 August 2023</td>
<td>Financial statement for the first six months of 2023</td>
</tr>
<tr>
<td>02 November 2023</td>
<td>Financial statement for the first nine months of 2023</td>
</tr>
<tr>
<td>31 January 2024</td>
<td>Financial statement 2023</td>
</tr>
</tbody>
</table>

Investor Relations contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
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</tr>
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</tr>
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</tr>
</tbody>
</table>
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’s opportunity is in the large unmet needs across all therapy areas in scope

<table>
<thead>
<tr>
<th>Diabetes care</th>
<th>Obesity care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>537m</strong> people with diabetes&lt;sup&gt;1&lt;/sup&gt;</td>
<td><strong>&gt;764m</strong> people with obesity&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>~15%</strong> of people in good control&lt;sup&gt;2&lt;/sup&gt;</td>
<td><strong>~2%</strong> of people in medically treated</td>
</tr>
<tr>
<td>Rare disease</td>
<td>Other serious chronic diseases</td>
</tr>
<tr>
<td><strong>0.6m</strong> people with haemophilia&lt;sup&gt;4&lt;/sup&gt;</td>
<td><strong>16%</strong> of global deaths caused by ASCVD&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>~35%</strong> of people being treated</td>
<td><strong>&gt;25m</strong> people affected by heart failure&lt;sup&gt;6&lt;/sup&gt;</td>
</tr>
<tr>
<td>Haemophilia</td>
<td><strong>&gt;25m</strong> people affected by NASH&lt;sup&gt;7&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td><strong>&gt;70m</strong> people affected by AD&lt;sup&gt;8&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

1 International Diabetes Federation: Diabetes Atlas 10<sup>th</sup> edition, 2021; 2Real-world studies indicate between 30-55% of patients reach HbA1c target <7% e.g. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4388968/; taking 42.5% in good control of treated people; 3 World Diabetes Atlas 2022; 4 WFH annual survey 2020 (120 of 147 countries responded); Prevalence by calculating expected number of patients using 20.9 per 10,000 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); 6 Global Public Health Burden of Heart Failure, Apr. 2017: https://pubmed.ncbi.nlm.nih.gov/28785469/; 7 Estes 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, Feb 2023; Note: Diabetes and Obesity care market values are based on list prices in the US.

NN: Novo Nordisk.
Sales growth of 25%, driven by the GLP-1 portfolio for diabetes and obesity treatment

Novo Nordisk reported quarterly sales by therapy

Reported sales CAGR: 9.6%

Q1 2013 Q1 2023

Other rare disease
Rare endocrine disorders
Rare blood disorders
Diabetes and Obesity care

Sales of DKK 53.0 billion (+27%)

Reported sales and growth breakdown for the first quarter of 2023

<table>
<thead>
<tr>
<th>Therapy</th>
<th>Sales (mDKK)</th>
<th>Growth</th>
<th>Share of growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GLP-1</td>
<td>26,811</td>
<td>50%</td>
<td>84%</td>
</tr>
<tr>
<td>Long-acting insulin</td>
<td>4,133</td>
<td>-14%</td>
<td>-7%</td>
</tr>
<tr>
<td>Premix insulin</td>
<td>2,776</td>
<td>-7%</td>
<td>-2%</td>
</tr>
<tr>
<td>Fast-acting insulin</td>
<td>4,488</td>
<td>-9%</td>
<td>-4%</td>
</tr>
<tr>
<td>Human insulin</td>
<td>2,012</td>
<td>-11%</td>
<td>-3%</td>
</tr>
<tr>
<td>Total insulin</td>
<td>13,409</td>
<td>-11%</td>
<td>-15%</td>
</tr>
<tr>
<td>Other Diabetes care</td>
<td>729</td>
<td>-21%</td>
<td>-2%</td>
</tr>
<tr>
<td>Total Diabetes care</td>
<td>40,949</td>
<td>21%</td>
<td>67%</td>
</tr>
<tr>
<td>Obesity care</td>
<td>7,842</td>
<td>124%</td>
<td>41%</td>
</tr>
<tr>
<td>Diabetes and Obesity care</td>
<td>48,791</td>
<td>31%</td>
<td>108%</td>
</tr>
<tr>
<td>Rare blood disorders</td>
<td>3,049</td>
<td>-3%</td>
<td>-1%</td>
</tr>
<tr>
<td>Rare endocrine disorders</td>
<td>1,128</td>
<td>-38%</td>
<td>-7%</td>
</tr>
<tr>
<td>Other Rare disease</td>
<td>399</td>
<td>-12%</td>
<td>0%</td>
</tr>
<tr>
<td>Rare disease</td>
<td>4,576</td>
<td>-16%</td>
<td>-8%</td>
</tr>
<tr>
<td>Total</td>
<td>53,367</td>
<td>25%</td>
<td>100%</td>
</tr>
</tbody>
</table>

1 CAGR for 10-year period; 2 Comprises Victoza®, Ozempic®, Rybelsus®; 3 Comprises Tresiba®, Xultophy® and Levenir®; 4 Comprises Ryzodeg® and NovoMix®; 5 Comprises Fiasp® and NovoRapid®; 6 Primarily Novonorm®, needles and GlucaGen® HypoKit®; 7 Comprises Saxenda® and Wegovy®; 8 Comprises NovoSeven®, NovoEight®, NovoThirteen®, Refixia®, and Esperoct®; 9 Comprises Norditropin® and Macrilen®; 10 Primarily Vagifem® and Actuelle®

Note: Sales numbers are reported in Danish kroner; Growth is at constant exchange rate, except for total sales growth of 26%; Refixia® and NovoThirteen® are launched as Rebinyn® and TRETTEN®, respectively, in North America.
Sales growth of 25%, driven by both NAO and IO with 41% and 10% sales growth respectively

Historic and reported sales by geography

<table>
<thead>
<tr>
<th>Region</th>
<th>Sales (mDKK)</th>
<th>Growth</th>
<th>Share of growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Operations</td>
<td>24,070</td>
<td>10%</td>
<td>22%</td>
</tr>
<tr>
<td>EMEA</td>
<td>12,742</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Region China</td>
<td>4,461</td>
<td>-5%</td>
<td>-2%</td>
</tr>
<tr>
<td>RoW</td>
<td>6,867</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>North America Operations</td>
<td>29,297</td>
<td>41%</td>
<td>78%</td>
</tr>
<tr>
<td>Hereof USA</td>
<td>27,322</td>
<td>39%</td>
<td>71%</td>
</tr>
<tr>
<td><strong>Total sales</strong></td>
<td><strong>53,367</strong></td>
<td><strong>25%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

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, high barriers to entry, and a collaborative approach to innovation

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

<table>
<thead>
<tr>
<th>EU/US patent protection¹</th>
<th>2031/32²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2031/2032²,³</td>
</tr>
<tr>
<td></td>
<td>2034/32²</td>
</tr>
<tr>
<td></td>
<td>2028/29</td>
</tr>
<tr>
<td></td>
<td>2028/29</td>
</tr>
<tr>
<td></td>
<td>2028/29</td>
</tr>
<tr>
<td></td>
<td>2027/28</td>
</tr>
<tr>
<td></td>
<td>2023⁵</td>
</tr>
</tbody>
</table>

### Barriers to entry for biosimilar players

#### 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

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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. ⁵ Saxenda® patent identical to Victoza® patent. 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)

- ~5,000 extracellular targets
- ~21,000 intracellular targets

**Opportunity to silence genes**
- Drugability of intracellular targets

**Gene targets**
- Happiness to silence genes
- Drugability of intracellular targets

**RNAi**
- Engage on the temporary genetic level with RNA therapeutics

**Genes (DNA)**
- Engage on the temporary genetic level with RNA therapeutics

**mRNA**
- Engage on the temporary genetic level with RNA therapeutics

**Peptides and proteins**
- Engage on the temporary genetic level with RNA therapeutics

**RNA**: Ribonucleic acid; **mRNA**: messenger RNA
First two human dose initiations with Dicerna in line with ambition presented at Capital Markets Day 2022

First two phase 1 trials in NASH with siRNA technology initiated

<table>
<thead>
<tr>
<th>Therapy Area</th>
<th>Trial 1</th>
<th>Trial 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obesity care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASH</td>
<td>![MARC1](32 patients)</td>
<td>![LXR(a)](48 patients)</td>
</tr>
</tbody>
</table>

**Trial objectives**

The trials are investigating safety, tolerability, pharmacokinetics and pharmacodynamics of the respective siRNA-based assets

**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

siRNA: Small interfering RNA; MARC1: Mitochondrial amidoxime reducing component 1; LXR(a): Liver X receptor alpha
Novo Nordisk’s core capabilities provide a competitive advantage to continue to defeat diabetes

**Engineering, formulating, developing and delivering protein-based treatments**

**Efficient large-scale production of proteins**

**Global commercial reach and leader in chronic disease care**

**Deep disease understanding**

**Today:** Oral solutions to differentiate from competition

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

**Today:** Global reach and industry leading GLP-1 portfolio

**Today:** Provide value and outcomes beyond HbA$_{1c}$ for diabetes

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

**Tomorrow:** Expand capacity and continue efficiency gains

**Tomorrow:** Continued rollout of portfolio and launch of new products

**Tomorrow:** Normalise living with diabetes supported by digital solutions

API: Active pharmaceutical ingredient; HbA$_{1c}$: Refers to glycated haemoglobin, which is the average blood glucose (sugar) levels for the last three months
Core capabilities and additional technology platforms open up new opportunities across therapy areas

<table>
<thead>
<tr>
<th>Therapy areas</th>
<th>Currently active</th>
<th>Exploratory potential</th>
<th>Injectable administration</th>
<th>Oral administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes care</td>
<td><img src="image1" alt="Diabetes care" /></td>
<td><img src="image2" alt="Diabetes care" /></td>
<td><img src="image3" alt="Diabetes care" /></td>
<td><img src="image4" alt="Diabetes care" /></td>
</tr>
<tr>
<td>Obesity care</td>
<td><img src="image5" alt="Obesity care" /></td>
<td><img src="image6" alt="Obesity care" /></td>
<td><img src="image7" alt="Obesity care" /></td>
<td><img src="image8" alt="Obesity care" /></td>
</tr>
<tr>
<td>CVD</td>
<td><img src="image9" alt="CVD" /></td>
<td><img src="image10" alt="CVD" /></td>
<td><img src="image11" alt="CVD" /></td>
<td><img src="image12" alt="CVD" /></td>
</tr>
<tr>
<td>NASH</td>
<td><img src="image13" alt="NASH" /></td>
<td><img src="image14" alt="NASH" /></td>
<td><img src="image15" alt="NASH" /></td>
<td><img src="image16" alt="NASH" /></td>
</tr>
<tr>
<td>RBD</td>
<td><img src="image17" alt="RBD" /></td>
<td><img src="image18" alt="RBD" /></td>
<td><img src="image19" alt="RBD" /></td>
<td><img src="image20" alt="RBD" /></td>
</tr>
<tr>
<td>RED</td>
<td><img src="image21" alt="RED" /></td>
<td><img src="image22" alt="RED" /></td>
<td><img src="image23" alt="RED" /></td>
<td><img src="image24" alt="RED" /></td>
</tr>
<tr>
<td>Other areas</td>
<td><img src="image25" alt="Other areas" /></td>
<td><img src="image26" alt="Other areas" /></td>
<td><img src="image27" alt="Other areas" /></td>
<td><img src="image28" alt="Other areas" /></td>
</tr>
</tbody>
</table>

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**

- 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

**Future Research & early development trends for Novo Nordisk**

FHD: First human dose; RNA: Ribonucleic acid
Pipeline supports significant growth opportunities across all four strategic focus areas

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>SUBMITTED</th>
<th>APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>NN1845 – GSI</td>
<td>NN9388 – Cagrisema</td>
<td>NN1535 – Icosema</td>
<td>NN1436 – Insulin Icodec</td>
<td>Tresiba®</td>
</tr>
<tr>
<td>NN1471 – Pumpinsulin</td>
<td>NN9775 – PYY 1875 analogue</td>
<td>NN9924 – Oral Semaglutide 25 and 50 mg</td>
<td>NN8640 – Sogroya®</td>
<td>Xultophy®</td>
</tr>
<tr>
<td>NN9041 – DNA Immunotherapy</td>
<td>NN7533 – Ñdec in SCD</td>
<td>NN9536 – Semaglutide 7.2 mg</td>
<td>NN7415 – Concizumab in HwI</td>
<td>Levernir®</td>
</tr>
<tr>
<td>NN9541 – Oral GLP-1/GIP co-agonist</td>
<td>NN7535 – Etavopivat in Beta thalassemia</td>
<td>NN9838 – Cagrisema</td>
<td>NN7022 – Nedosiran in PH</td>
<td>Ryzodeg®</td>
</tr>
<tr>
<td>NN9917 – SemaDapa FDC</td>
<td>NN9931 – Gilead in NASH</td>
<td>NN9932 – Oral Semaglutide 50 mg obesity</td>
<td>NovoMix®</td>
<td>NovoRapid®</td>
</tr>
<tr>
<td>NN9904 – Once weekly oral sema</td>
<td>NN9500 – FGF-21 in NASH</td>
<td>NN9931 – Semaglutide 2.4 mg in NASH</td>
<td>Fiasp®</td>
<td>Rybelsus®</td>
</tr>
<tr>
<td>NN9487 – Oral Amycretin</td>
<td>NN6021 – Belcesiran in AATLD</td>
<td>NN6535 – Semaglutide 14.0 mg in AD</td>
<td>Ozempic®</td>
<td>Victoza®</td>
</tr>
<tr>
<td>NN6020 – DCR-AUD¹</td>
<td>NN6019 – ATTR Cardiomyopathy</td>
<td>NN6018 – Ziltivekimab in ASCVD</td>
<td>Wegovy®</td>
<td>Saxenda®</td>
</tr>
<tr>
<td>NN6582 – LXR(a) in NASH</td>
<td></td>
<td>NN7769 – Mim8 in HA</td>
<td>NovoSeven®</td>
<td>NovoEight®</td>
</tr>
<tr>
<td>NN6581 – MARC1 in NASH</td>
<td></td>
<td>NN7535 – Etavopivat in SCD</td>
<td>Esperoct®</td>
<td>NovoThirteen®</td>
</tr>
<tr>
<td>NN9003 – Stem Cells in HF</td>
<td></td>
<td></td>
<td>Refixia®</td>
<td>Norditropin®</td>
</tr>
<tr>
<td>NN9001 – Stem Cells in PD</td>
<td></td>
<td></td>
<td>Sogroya®</td>
<td>Sogroya®</td>
</tr>
</tbody>
</table>

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 HFrEF
- SELECT – Semaglutide 2.4 mg in obese population

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 the EU, the US and Japan for adult growth hormone disorder, approved in the US for paediatric growth hormone disorder; AD: Alzheimer’s Disease; ASCVD: Atherosclerotic Cardiovascular Disease; CKD: chronic kidney disease; CVOT: Cardiovascular outcome trial; FDC: Fixed-dose combination; FGF-21: Fibroblast growth factor 21; GDF15: Growth differentiation factor 15; GHD: Growth hormone disorder; GSI: Glucose Sensitive Insulin; HA: Haemophilia A; HF: Heart failure; HFrEF: heart failure with preserved ejection fraction; HwI: Haemophilia with inhibitors; JP: Japan; MDS: myelodysplastic syndrome; mAb: monoclonal antibody; NASH: Nonalcoholic Steatohepatitis; PYY: Peptide YY; PAD: Peripheral arterial disease; PD: Parkinson’s Disease; PH: Primary hyperoxalate; QW: Once-weekly; SCD: Sickle cell disease; Sema: Semaglutide; US: United States.
Novo Nordisk has a global manufacturing setup

Novo Nordisk has a global manufacturing setup with various production capabilities across different countries. The image illustrates the product supply value chain with key stages including research and development, manufacturing development, API production, filling and tableting, assembly and packaging, and distribution (cold chain). Local production is indicated in Russia, Japan, Algeria, and Iran. All products are highlighted with the term “API, fill and finish.”

API: Active Pharmaceutical Ingredient
Diabetes care

Disease and market  32
GLP-1 segment      40
Insulin segment    46
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**

- **Fast-acting**
- **Premix**
- **Long-acting**

---

**Liver**  
**Pancreas**  
**Muscle**  
**Fat cell**
GLP-1s have positive effects beyond glycaemic control and treatment guidelines now reflect the CV risk benefits

Medications for treatment of type 2 diabetes

<table>
<thead>
<tr>
<th>Class</th>
<th>Efficacy</th>
<th>Hypo risk</th>
<th>Weight change</th>
<th>Cardiovascular effects</th>
<th>ASCVD</th>
<th>HF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metformin</td>
<td>High</td>
<td>No</td>
<td>Neutral</td>
<td>Potential Benefit</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
<tr>
<td>Sulfonylurea</td>
<td>High</td>
<td>Yes</td>
<td>Gain</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
<tr>
<td>TZDs</td>
<td>High</td>
<td>No</td>
<td>Gain</td>
<td>Potential Benefit</td>
<td>Increased risk</td>
<td></td>
</tr>
<tr>
<td>DPP-IV inhibitors</td>
<td>Intermediate</td>
<td>No</td>
<td>Neutral</td>
<td>Potential risk</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
<tr>
<td>SGLT-2 inhibitors</td>
<td>Intermediate</td>
<td>No</td>
<td>Loss</td>
<td>Benefit</td>
<td>Benefit</td>
<td>Benefit</td>
</tr>
<tr>
<td>GLP-1</td>
<td>High</td>
<td>No</td>
<td>Loss</td>
<td>Benefit/Neutral(^1)</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
<tr>
<td>Long-acting insulin</td>
<td>High</td>
<td>Yes</td>
<td>Gain</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
<tr>
<td>Fast-acting insulin</td>
<td>High</td>
<td>Yes</td>
<td>Gain</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

\(^1\) Benefic: dulaglutide, liraglutide, semaglutide; Neutral: exenatide once weekly, lixisenatide

Hypo: Hypoglycaemia; ASCVD: Atheroscerotic cardiovascular disease; HF: Heart failure; TZDs: Thiazolidinediones


Updated ADA/EASD diabetes treatment guidelines

**Goal:** Cardiorenal risk reduction in high-risk T2D patients (on top of CV SoC)

- **ASCVD or indicators of high risk**
  - GLP-1 with proven CVD benefit
  - OR
  - SGLT-2 with proven CVD benefit

- **HF with documented HFrEF or HFpEF**
  - SGLT-2 with proven HF benefit

**Goal:** HbA\(_1c\) and weight management

- **Glycaemic management**
  - Metformin OR combination therapy with adequate efficacy to reach and maintain goals (intermediate – very high)
  - Very high: Semaglutide mentioned for glucose lowering efficacy

- **Weight management**
  - When choosing glucose-lowering therapies consider regimen with high efficacy
  - Very high: Semaglutide mentioned for weight loss efficacy

**CKD**

- **SGLT-2 with primary evidence of reducing CKD progression**
  - THEN
  - GLP-1 with proven CVD benefit

If additional cardiorenal risk reduction or glycaemic lowering needed

If HbA\(_1c\) above target, identify barriers to reach treatment goals

**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

- **Life expectancy** 8 years shorter\(^1\)
- **Driven by 200% increased risk of all cause mortality**\(^1\)

- **70%** of people with diabetes die from **atherosclerotic CVD**\(^2\)
- **150%** increase in risk of stroke\(^3\)

- Higher likelihood of neuropathy, retinopathy, limb amputation, cancer and cognitive dysfunction\(^4\)

---

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

- **2021**: 537 Million
- **2030**: 643 Million
- **2045**: 784 Million


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 HbA1c target.

Of the 537 million, 36.3 million people are currently treated with Novo Nordisk diabetes products:
- 6.3 mio treated with GLP-1
- 4.5 mio treated with new-generation insulin
- 12.6 mio treated with modern insulin
- 11.5 mio treated with human insulins

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 HbA1c 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

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.

Note: Other OADs cover: metformin, sulfonylurea, thiazolidinediones. OAD: Oral anti-diabetic
Source: MIDAS; patient and value figures based on IQVIA MAT, Feb 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

<table>
<thead>
<tr>
<th>Portfolio and pipeline</th>
<th>Digital health solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>High dose oral semaglutide</td>
<td>NovoPen®6 / NovoPen Echo® Plus are smart insulin pens and launched in 14 countries</td>
</tr>
<tr>
<td>Ozempic® 2.0 mg</td>
<td>Medtronic</td>
</tr>
<tr>
<td>Needing more than basal insulin</td>
<td>glooko</td>
</tr>
<tr>
<td>Needing first basal insulin</td>
<td>Dexcom®</td>
</tr>
<tr>
<td>Uncontrolled on current OAD</td>
<td>Partnered with global CGM players</td>
</tr>
<tr>
<td>Needing first injectable</td>
<td>Abbott</td>
</tr>
</tbody>
</table>

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 ~380 billion annually.

**Global diabetes market**

- Total: 382 billion (2022) vs. 314 billion (2021) (+13% growth at CER)
- Insulin: 107 billion (2022) vs. 112 billion (2021) (-11% growth at CER)
- GLP-1: 142 billion (2022) vs. 97 billion (2021) (+33% growth at CER)
- DPP-4i: 53 billion (2022) vs. 54 billion (2021) (-7% growth at CER)
- SGLT-2i: 80 billion (2022) vs. 52 billion (2021) (+45% growth at CER)

**The USA**

- Total: 187 billion (2022) vs. 147 billion (2021) (+13% growth at CER)
- Insulin: 39 billion (2022) vs. 41 billion (2021) (-17% growth at CER)
- GLP-1: 98 billion (2022) vs. 68 billion (2021) (+27% growth at CER)
- DPP-4i: 15 billion (2022) vs. 14 billion (2021) (-7% growth at CER)
- SGLT-2i: 36 billion (2022) vs. 22 billion (2021) (+42% growth at CER)

**Outside the USA**

- Total: 195 billion (2022) vs. 168 billion (2021) (+12% growth at CER)
- Insulin: 68 billion (2022) vs. 71 billion (2021) (-7% growth at CER)
- GLP-1: 44 billion (2022) vs. 28 billion (2021) (+49% growth at CER)
- DPP-4i: 38 billion (2022) vs. 40 billion (2021) (-7% growth at CER)
- SGLT-2i: 45 billion (2022) vs. 29 billion (2021) (+47% growth at CER)

Source: Company announcements as of Q4 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 class

- **Market CAGR: 10%**
  - GLP-1
  - SGLT-2i
  - Insulin
  - DPP-4i

Novo Nordisk remains global diabetes value market leader

Novo Nordisk market share and share of growth

---

**Note:** IQVIA data can be inflated due to use of list prices in the US

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1 Data is based on company reported sales from Sanofi, Eli Lilly, AstraZeneca, GSK, Novartis, Johnson & Johnson, and Merck. Data does not include generic metformin, sulphonylureas or thiazolidinediones.

BI: Boehringer Ingelheim; J&J: Johnson & Johnson; NN: Novo Nordisk

Source: IQVIA MAT, Feb 2023
GLP-1 effect dependent on blood glucose level

GLP-1 mechanism of action when blood sugar levels increase

- Creates sense of satiety in the brain
- Reduces glucagon secretion in the liver
- Slows gastric emptying
- Increases insulin secretion in the pancreas

Semaglutide holds a plethora of therapeutic opportunities

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

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.
**SUSTAIN trials with subcutaneous semaglutide**

<table>
<thead>
<tr>
<th>SUSTAIN</th>
<th>Change in HbA1c (%)</th>
<th>Baseline</th>
<th>Change in weight (kg)</th>
<th>Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8.1%</td>
<td>8.1%</td>
<td>-1.6*</td>
<td>92 kg</td>
</tr>
<tr>
<td>2</td>
<td>8.1%</td>
<td>8.1%</td>
<td>-1.3*</td>
<td>89 kg</td>
</tr>
<tr>
<td>3</td>
<td>8.3%</td>
<td>8.3%</td>
<td>-1.5*</td>
<td>96 kg</td>
</tr>
<tr>
<td>4</td>
<td>8.2%</td>
<td>8.2%</td>
<td>-1.2*</td>
<td>93 kg</td>
</tr>
<tr>
<td>5</td>
<td>8.4%</td>
<td>8.4%</td>
<td>-1.4*</td>
<td>92 kg</td>
</tr>
<tr>
<td>6</td>
<td>8.7%</td>
<td>8.7%</td>
<td>-1.3*</td>
<td>92 kg</td>
</tr>
<tr>
<td>7</td>
<td>8.2%</td>
<td>8.2%</td>
<td>-1.3*</td>
<td>95 kg</td>
</tr>
</tbody>
</table>

- *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.
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.
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**

<table>
<thead>
<tr>
<th>Estimand</th>
<th>Trial product estimand</th>
<th>Treatment policy estimand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once-weekly semaglutide</td>
<td>2.0 mg</td>
<td>1.0 mg</td>
</tr>
<tr>
<td>HbA1c reduction</td>
<td>2.2%*</td>
<td>1.9%</td>
</tr>
<tr>
<td>Body weight reduction (kg)</td>
<td>6.9*</td>
<td>6.0</td>
</tr>
<tr>
<td>HbA1c &lt; 7.0%1</td>
<td>68%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Data from SUSTAIN FORTE

- Semaglutide 2.0 mg showed superior HbA1c reduction with more patients reaching target\(^1\) 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

---

1 ADA recommended treatment target
\(^*\)Statistically significant
S.c.: subcutaneous; Sema: Semaglutide; T2D: Type 2 diabetes
Phase 2 trial for CagriSema in people with type 2 diabetes was successfully completed in Q3 2022

Exploratory phase 2a trial of CagriSema in T2D

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Dose escalation</th>
<th>Treatment maintenance</th>
<th>Follow up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cagrilintide 2.4 mg + semaglutide 2.4 mg</td>
<td>16 weeks</td>
<td>16 weeks</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Cagrilintide 2.4 mg + placebo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semaglutide 2.4 mg + placebo</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Primary endpoint: Change from baseline (week 0) to week 32 in HbA1c

Inclusion criteria (92 people):
- Type 2 diabetes
- HbA1c 7.5–10.0%
- Metformin +/- SGLT2i
- BMI ≥27 kg/m²

Headline trial results

<table>
<thead>
<tr>
<th>Change in HbA1c</th>
<th>Change in body weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean baseline HbA1c: 8.4%</td>
<td></td>
</tr>
<tr>
<td>Cagrilintide 2.4 mg OW</td>
<td>Mean baseline body weight: 106 kg</td>
</tr>
<tr>
<td>Semaglutide 2.4 mg OW</td>
<td></td>
</tr>
<tr>
<td>CagriSema (2.4 mg semaglutide and 2.4 mg cagrilintide)</td>
<td></td>
</tr>
</tbody>
</table>

Change from baseline (%)
- Cagrilintide 2.4 mg OW: -8.1%
- Semaglutide 2.4 mg OW: -5.1%
- CagriSema (2.4 mg semaglutide and 2.4 mg cagrilintide): -15.6%

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, HbA1c: Glycosylated haemoglobin; OW: Once-weekly
Novo Nordisk global insulin market leadership at 46.3% and the global insulin volume market declined by 1.3%

North America Operations
Market growth: -3.4%
MS: 38.1%
MS gain/loss\(^1\): -0.5%-p
Sales growth: -18%

USA
Market growth: -3.5%
MS: 37.7%
MS gain/loss\(^1\): -0.4%-p
Sales growth: -18%

EMEA
Market growth: -2.2%
MS: 47.4%
MS gain/loss\(^1\): -0.1%-p
Sales growth: -11%

RoW
Market growth: -4.4%
MS: 57.5%
MS gain/loss\(^1\): 0.4%-p
Sales growth: 4%

Region China
Market growth: 9.4%
MS: 46.0%
MS gain/loss\(^1\): -4.6%-p
Sales growth: -22%

International Operations
Market growth: -0.6%
MS: 49.2%
MS gain/loss\(^1\): -0.9%-p
Sales growth: -8%

Global
Market growth: -1.3%
MS 46.3%
MS gain/loss\(^1\): -0.8%-p
Sales growth: -11%

Source: IQVIA MAT, Feb 2023 volume figures
Note: Sales growth for first three months of 2023 at constant exchange rates; Market shares are for Novo Nordisk, market growth for total insulin market
\(^1\)MS gain/loss compared with Feb 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

### Insulin market share and market size (DKK billion)

<table>
<thead>
<tr>
<th></th>
<th>Novo Nordisk</th>
<th>Competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>274</td>
<td></td>
</tr>
<tr>
<td>Long-Acting</td>
<td>137</td>
<td></td>
</tr>
<tr>
<td>Fast-Acting</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Premix</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Human</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

### Market growth and Δ Market share

- **Total**: 3.4% +0.5%
- **Long-Acting**: 2.9% +1.3%
- **Fast-Acting**: 7.2% -0.3%
- **Premix**: -7.5% +1.5%
- **Human**: -0.7% -1.9%

### Insulin volume: Market share

- **NN market share**: 46% 10%
- **Market growth (right axis)**: 46% 7%
- **NN growth (right axis)**: -1% -2%

Source: IQVIA, Feb 2023, LHS graph – Value, RHS Graph - Volume, MAT, all countries; Share of growth not depicted due to too high numbers; NN: Novo Nordisk
Insulin icodex, 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 HbA1c** 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 icodex phase 3 programme completed in 2022**

- **ONWARDS 1**: 984 people insulin-naive, 78-week, vs insulin glargine U100
- **ONWARDS 2**: 526 people on basal, 26-week, vs insulin degludec
- **ONWARDS 3**: 588 people insulin-naive, 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-naive using app-based dosing recommendations, 52-week
- **ONWARDS 6**: 582 people, type 1 diabetes using bolus insulin, 52-week, vs insulin degludec

TiR: Time-in-range

Note: For ONWARDS 1 and ONWARDS 6 main phases are completed
## The full ONWARDS programme with once-weekly insulin Icodec completed in 2022

<table>
<thead>
<tr>
<th>ONWARDS</th>
<th>Basal initiation</th>
<th>Basal switch</th>
<th>Basal initiation</th>
<th>Basal/Bolus</th>
<th>Basal initiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>52 weeks(^2)</td>
<td>26 weeks</td>
<td>26 weeks</td>
<td>26 weeks</td>
<td>52 weeks</td>
</tr>
<tr>
<td></td>
<td>(Full trial: 78 weeks)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants</td>
<td>984</td>
<td>526</td>
<td>588</td>
<td>582</td>
<td>1,085</td>
</tr>
</tbody>
</table>

**Baseline**

- Basal initiation: 8.5%
- Basal switch: 8.1%
- Basal initiation: 8.5%
- Basal/Bolus: 8.3%
- Basal initiation: 8.9%

**Change in HbA\(_{1c}\) (%)**

- Basal initiation: -1.55%\(^*\), -1.35%
- Basal switch: -0.93%, -0.71%
- Basal initiation: -1.57%, -1.36%
- Basal/Bolus: -1.16%, -1.18%
- Basal initiation: -1.68%, -1.31%

**Hypoglycaemia event rates\(^1\)**

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

|                        | 0.30 | 0.16 | 0.73 | 0.27 | 0.31 | 0.15 | 5.64 | 5.62 | 0.19 | 0.14 |

\(^*\) Statistically significant in terms of superiority.
\(^1\) Severe or clinically significant hypoglycaemia events (blood glucose <3 mmol/L) per patient year
\(^2\) Duration refers to trial main phase. T1D: Type 1 diabetes; T2D: Type 2 diabetes

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.
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: HbA₁c 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: HbA₁c 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: HbA₁c non-inferiority
• Sec. endpoint: Weight and hypo superiority

*Patients with Type 2 Diabetes Mellitus
Obesity care

Obesity disease background 52
Obesity market development 56
Innovation 57
More than 764 million people are living with obesity, yet the narrative is changing

Obesity is a global epidemic affecting more than 764 million people

Obesity impacts both the individual and society at large

Obesity is associated with more than 200 possible health complications

~3% of global GDP and ~8% of healthcare budget per country

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

Obesity prevalence (%)

- <10.0
- 10.0–19.9
- 20.0–29.9
- ≥30.0
- Not applicable

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

1 World Obesity Atlas 2022
Patient-centric strategy designed to activate more people with obesity, drive HCP engagement, and improve market access

Ensure obesity is a healthcare priority needing medical management

Maximize the value of Novo Nordisk’s superior treatment solutions

- >764 million people live with obesity
- ~10% seek help
- ~2% are treated with an AOM
- ~2.5 million seen by obesity experts
- Treated ~1 million with Saxenda® in 2021
- Only 25% on treatment for more than 1 year

764 million people

76 people

15 treatments

2.5 million seen by obesity experts

Treated 1 million with Saxenda® in 2021

Only 25% on treatment for more than 1 year

Value proposition to payers

Marketed product portfolio and pipeline closing the treatment gaps

Truth About Weight™

Rethink Obesity®

direct care

SELECT

Approved products

Late-stage pipeline products

people

0
50
100
150
200
250
300
350
400
450
500
550
600
650
700
750
800

Million people

HCP engagement

People with obesity activation

0

15

2.5

25

0.25

Oral semaglutide 50 mg

CagriSema

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**

| of patients new to anti-obesity medication | 70% |
| of patients are female                     | 81% |
| Average BMI                                | 37.8 |
| of patients have ≥3 comorbidities          | 31% |

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

<table>
<thead>
<tr>
<th>BMI (million of people)</th>
<th>27-30 (43)</th>
<th>30-35 (52)</th>
<th>35-40 (25)</th>
<th>≥40 (20)</th>
<th>Total (140)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No obesity-related comorbidity¹</td>
<td>7 (41%)</td>
<td>6 (35%)</td>
<td>2 (12%)</td>
<td>2 (12%)</td>
<td>17 (100%)</td>
</tr>
<tr>
<td>Any obesity-related comorbidity</td>
<td>36 (29%)</td>
<td>46 (37%)</td>
<td>23 (19%)</td>
<td>18 (15%)</td>
<td>123 (100%)</td>
</tr>
<tr>
<td>Hereof metabolic syndrome³</td>
<td>21 (29%)</td>
<td>26 (36%)</td>
<td>14 (19%)</td>
<td>12 (16%)</td>
<td>72 (100%)</td>
</tr>
</tbody>
</table>

¹Individuals 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, dyslipidemia, 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
Patient access to anti-obesity medications is improving in both the US and IO

The >40 million people having access to Wegovy® is nearly the number of people with diabetes in the US (~50 million)

~110m
Obesity prevalence in US adults

~60m
Commercial Channel
- Broad formulary access
- Around half of employers opt-in

~30m
People with commercial coverage

~10m
Medicaid

Restricted reimbursement for Saxenda® is progressing

**EXAMPLES**

- **BMI > 30** with one co-morbidity
- **BMI > 35** With pre-diabetes and risk of CV
- ~60% coverage by private insurance, 20% of which includes restricted/unrestricted coverage
- Saxenda® reimbursed in April 2020 in selected patient groups

Note: Obesity is defined as BMI > 30.

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

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

Obesity market size and growth

Source: IQVIA, Feb 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

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.

<table>
<thead>
<tr>
<th>STEP 1</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 2</th>
<th>STEP 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight management</td>
<td>Weight mgmt. with IBT</td>
<td>Sustained weight management</td>
<td>Weight loss over 2 years</td>
<td>Weight mgmt. with T2D</td>
<td>Head-to-head trial versus liraglutide 3.0 mg</td>
</tr>
<tr>
<td>Baseline body weight, kg</td>
<td>105.3</td>
<td>105.8</td>
<td>107.2</td>
<td>96.1</td>
<td>106.0</td>
</tr>
<tr>
<td>Sema Placebo</td>
<td>Sema + IBT Placebo</td>
<td>Sema Placebo</td>
<td>Sema</td>
<td>Placebo</td>
<td>Sema</td>
</tr>
<tr>
<td>Change from baseline in BW (%)</td>
<td>9</td>
<td>0</td>
<td>6.5</td>
<td>-9</td>
<td>0</td>
</tr>
<tr>
<td>-18</td>
<td>-16.9*</td>
<td>-17.6*</td>
<td>-18.2*</td>
<td>-16.7*</td>
<td>-10.6*</td>
</tr>
</tbody>
</table>

*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

- 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 ≥20% weight loss and reported improved quality of life versus placebo.

**Categorical weight loss**

<table>
<thead>
<tr>
<th>Weight loss</th>
<th>Semaglutide 2.4 mg</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥5%</td>
<td>92.4%</td>
<td>33.1%</td>
</tr>
<tr>
<td>≥10%</td>
<td>74.8%</td>
<td>11.8%</td>
</tr>
<tr>
<td>≥15%</td>
<td>54.8%</td>
<td>5.0%</td>
</tr>
<tr>
<td>≥20%</td>
<td>34.8%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Domain</th>
<th>ETD [95% CI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical function</td>
<td>9.43 [7.50 : 11.35] *</td>
</tr>
<tr>
<td>Physical</td>
<td>9.14 [7.31 : 10.96] *</td>
</tr>
<tr>
<td>Psychological</td>
<td>10.50 [8.81 : 12.19] *</td>
</tr>
<tr>
<td>Total</td>
<td>10.02 [8.42 : 11.62] *</td>
</tr>
</tbody>
</table>

*statistically significant; p-values other than physical function were not controlled for multiplicity

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

**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.

Change in body weight in % depicts observed means since time of randomisation; trial product estimand; BMI: body mass index.
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**

<table>
<thead>
<tr>
<th>Weight loss</th>
<th>Proportion of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥5%</td>
<td>90.5%</td>
</tr>
<tr>
<td>≥10%</td>
<td>80.8%</td>
</tr>
<tr>
<td>≥15%</td>
<td>65.5%</td>
</tr>
<tr>
<td>≥20%</td>
<td>41.2%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>SF-36 scores</th>
<th>ETD [95% CI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical functioning</td>
<td>2.46 [1.59 : 3.32] *</td>
</tr>
<tr>
<td>Role-physical</td>
<td>1.44 [0.42 : 2.47] *</td>
</tr>
<tr>
<td>Bodily pain</td>
<td>2.23 [-0.06 : 4.53]</td>
</tr>
<tr>
<td>General health</td>
<td>1.86 [0.73 : 3.00]</td>
</tr>
<tr>
<td>Vitality</td>
<td>4.31 [1.61 : 7.02] *</td>
</tr>
<tr>
<td>Social functioning</td>
<td>2.41 [0.07 : 4.76] *</td>
</tr>
<tr>
<td>Role-emotional</td>
<td>1.64 [0.52 : 2.76] *</td>
</tr>
<tr>
<td>Mental health</td>
<td>2.93 [1.80 : 4.06] *</td>
</tr>
<tr>
<td>Physical component summary</td>
<td>1.68 [0.64 : 2.72] *</td>
</tr>
<tr>
<td>Mental component summary</td>
<td>3.44 [2.28 : 4.60] *</td>
</tr>
</tbody>
</table>

*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.

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

0  8  16  24  32  40  48  56  64  72  80  88  96  104
Time since initiation (weeks)

Placebo: -0.6%

Semaglutide 2.4 mg: -16.7%

Data from STEP 5

- 40% of patients lost ≥ 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

Change in body weight in % depicts observed means since time of randomisation; trial product estimand; mean body weight: 106.0 kg
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 ≥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 trial investigating oral semaglutide 50 mg in obesity initiated in Q3 2021 and expected to complete in H1 2023

Global trial planned was started in H2 2021

Plan to include 660 patients with obesity

Oral semaglutide 50 mg

Placebo oral

1:1

68 weeks

7 weeks follow-up

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 ≥ 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

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

OASIS: Oral Semaglutide treatment effect in people with Obesity; CVD: Cardiovascular disease; BMI: Body Mass Index
In a 20-week phase 1 trial, CagriSema showed weight loss of 17% and appeared to have a safe and well tolerated profile.

The GI profile appeared similar to semaglutide 2.4 monotherapy.

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 fourth quarter of 2022.

### REDEFINE 1 trial design

- **N = 3400**
- **Week 0-16**: Dose escalation
- **Week 68-75**: Treatment maintenance
- **N = 1200**
- **Week 0-16**: Dose escalation
- **Week 68-75**: Treatment maintenance

**Inclusion criteria**
- **REDEFINE 1**: BMI: ≥ 30 kg/m² or ≥ 27 kg/m² and ≥1 comorbidity
- **Excludes diabetes diagnosis or HbA₁c ≥ 6.5%**

**Primary endpoints**
- Change in body weight (%)
- Achieve ≥ 5% body weight reduction

**Confirmatory secondary endpoints**
- Change in waist circumference
- HbA₁c
- Systolic blood pressure
- Patient reported outcomes

**REDEFINE 2 trial design**

- **N = 1200**
- **Week 0-16**: Dose escalation
- **Week 68-75**: Treatment maintenance

**Inclusion criteria**
- **REDEFINE 2**: BMI: ≥ 27 kg/m²
- **Type 2 diabetes, HbA₁c < 10%**

**Primary endpoints**
- Change in body weight (%)
- Achieve ≥ 5% body weight reduction

**Confirmatory secondary endpoints**
- Change in waist circumference
- HbA₁c
- Systolic blood pressure
- Patient reported outcomes

---

1 As 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; HbA₁c: Hemoglobin A₁c; IWQoL-Lite-CT: Impact of weight on quality of life – lite, clinical trials version; Short form 36v2
The SELECT cardiovascular outcomes trial expected to complete in the middle of 2023

**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.

**Primary endpoint**
Time from randomisation to first occurrence of 3-point MACE

**Secondary confirmatory endpoints**
Time from randomisation to first occurrence of
- CV death
- HF composite endpoint
- All-cause death

**Selected Secondary Supportive endpoints**
- 5-point MACE composite
- 5-component composite nephropathy endpoint
- Glucose metabolism endpoints and other metabolic parameters

**Estimated completion**
The trial is expected to complete in the middle of 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
The cardiovascular trial, SELECT, addresses many comorbidities that can be improved with weight management.

**SELECT trial endpoints**
- ✓ Primary
- X Secondary
- O Exploratory

**Improvements (examples)**
- Hypertension
- Hyperglycaemia
- Dislipidaemia
- Prevention of T2D
- NAFLD
- PCOS
- Kidney disease
- NASH
- GERD
- OSAS
- Knee OA
- Cardiovascular Disease
- CV mortality
- HF
- T2D remission

**Improvements per weight loss bracket**
- 0-5%
- 5-10%
- 10-15%
- >15%

**Weight loss (%)**

---

**Sources:**
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**

GLP-1 receptor

Amylin receptor

PK: Pharmacokinetics; PD: Pharmacodynamics
Building upon a 40-year legacy to capture the Rare disease strategic opportunity

A strategy anchored in Rare blood and endocrine disorders

- Hemato-renal
- Haemoglobinopathies
- Haemolytic anaemia
- Iron disorders
- Haemophilia

Lysosomal storage disorders
- Rare pituitary & adrenal disorders
- Bone/calcium imbalances
- Growth disorders
- Growth hormone disorders

- RBD
- RED

Rare blood disorders
Rare endocrine disorders

Three strategic horizons towards 2030

**Short-term**
Maximise current portfolio

**Medium-term**
Succeed with next-generation launches

**Long-term**
Expand from core

New disease areas via accelerated internal and external innovation

- Concizumab & Mim8
- Nedosiran
Rare disease sales decreased by 16%, driven by driven by temporary reduction in manufacturing output.

NovoSeven® and Norditropin® account for ~70% of Rare disease sales.

Growth at CER

Source: Quarterly company announcement
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

<table>
<thead>
<tr>
<th>Patients</th>
<th>Haemophilia with inhibitors</th>
<th>Haemophilia A</th>
<th>Haemophilia B</th>
</tr>
</thead>
<tbody>
<tr>
<td>~7,000</td>
<td>~185,000</td>
<td>~38,000</td>
<td></td>
</tr>
</tbody>
</table>

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**

1) Maintained OnD treatment
2) Concizumab prophylaxis
3) Concizumab prophylaxis
4) Concizumab prophylaxis

Main part 32 weeks
Extension part 136 weeks

**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**

- **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.
  - EU submission for inhibitor indications completed in Q1 2023.
  - Explorer8 in non-inhibitor patients is completed in Q3 2022.

---

**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.
- EU submission for inhibitor indications completed in Q1 2023.
- Explorer8 in non-inhibitor patients is completed in Q3 2022.
Main part of the explorer8 trial with concizumab in people with HA or HB without inhibitors has been completed

**explorer8 trial design**

- Previously OnD treatment
  - 1:2 Restart refers to the start of treatment with the new concizumab dosing regimen, which was implemented after the treatment pause
- Prophylaxis treatment (continued from phase 2)
  - 2 Concizumab PPX, QD
- Prophylaxis treatment (additional patients)
  - 3 Concizumab PPX, QD
  - 4 Concizumab PPX, QD

**Main part**
- 24 weeks

**Extension part**
- Up to 143 weeks

**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 restart

**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

**Key inclusion criteria:**
- Aged ≥12 years with haemophilia A or haemophilia B, patients mainly from phase 2

**Objective:**
- Assess the efficacy of Concizumab PPX vs no PPX (OnD treatment) in reducing number of bleeding episodes

**Endpoints:**
- Number of treated bleeding episodes (spontaneous/traumatic)

HA: Haemophilia A; HB: Haemophilia B; 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 concentration profiles increased with dose
- Mean concentrations at steady state were comparable for Cohort 3 (weekly dosing) and Cohort 4 (monthly dosing)

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

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
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**

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Patients with bleeds per cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 1.2mg QW</td>
<td>N=7</td>
</tr>
<tr>
<td>Cohort 2 3.8mg QW</td>
<td>N=9</td>
</tr>
<tr>
<td>Cohort 3 15mg QW</td>
<td>N=8</td>
</tr>
<tr>
<td>Cohort 4 60mg QM</td>
<td>N=8</td>
</tr>
<tr>
<td>Cohort 5 35mg QW</td>
<td>N=10</td>
</tr>
</tbody>
</table>

**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**

*QW: Once-weekly, QM: Once-monthly, N=Number of patients, AE: Adverse event*
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® launches**
    - Once-weekly efficacious treatment on par with Norditropin®
    - Appears to have safe profile and no injection site reactions
    - Simple and easy-to-use device
    - Phase 3 trials toward broad range of indications (e.g. SGA, Turner, Noonan, ISS) to expand the market
  - **Norditropin® strategy**
    - Apply a market-fit approach to support specific markets and patient groups
    - Broad label across eight indications

---

**Value MS%**

- Jan 2020: 0%
- Dec 2022: 34.5%

**Segment Value**
- Novo Nordisk
- Pfizer
- Eli Lilly
- Merck Kgaa
- Roche

hGH: Human growth hormone; SGA: Small for gestational age; ISS: Idiopathic short stature

Source: IQVIA, MAT Dec 2022; US panels for GHT has been removed from IQVIA from Jan 2022 version
Sogroya® phase 3 trial successfully completed with aspirational target product profile achieved

### 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 burden compared to Norditropin®

#### Status
- Adult GHD: Approved by the US, EU and JP
- Paediatric GHD: Approved by the US, decision pending EU/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**

Utilisation of megaTAL™ technology

- Double strand break
- Endocytosis and endosome escape
- Transfer and unpacking
- megaTAL mRNA
- megaTAL protein
- N8 gene
- AAV-N8
- FVIII gene introduced
- Normal Chromosome
- Nucleus
- Liver-specific FVIII expression

**AAV vector with N8 gene (PoC design)**

**LNP-formulated surrogate megaTAL targeting site specific locus**

**Normal Chromosome**

- Double strand break
- FVIII gene introduced

PoC: Proof-of-Concept; AAV: Adeno-associated virus; Rag2: recombination-activating gene; F8: Factor 8
Other serious chronic diseases

- The unmet needs
- Cardiovascular disease
- Non-alcoholic steatohepatitis
- Alzheimer's disease
- Stem cells
Novo Nordisk is expanding into other serious chronic diseases

Serious chronic diseases are associated with diabetes and obesity

- **AD**: Patients with AD live from 2 to 20 years from dementia onset
- **CVD**: 70% of people with diabetes die from atherosclerotic CVD; 40% of people hospitalised for heart failure have diabetes
- **NASH**: 80% of people with NASH live with obesity and 35% have diabetes
- **CKD**: 40% of people with diabetes have diabetic nephropathy and 50% have obesity

New therapeutic areas represent patient populations with high unmet medical needs

<table>
<thead>
<tr>
<th>Estimated patients</th>
<th>Number of related deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD ~85 million</td>
<td></td>
</tr>
<tr>
<td>CVD ~420 million</td>
<td>~20 million annually</td>
</tr>
<tr>
<td>NASH ~15-40 million(^1)</td>
<td>~20%(^2)</td>
</tr>
<tr>
<td>CKD ~200 million</td>
<td>~20%</td>
</tr>
</tbody>
</table>

\(^1\) Internal forecast comprising the USA, Europe and Japan; \(^2\) Diagnosis rate is considered a major uncertainty to the forecast. Sources: Alzheimer’s Association report: 2020 Alzheimer’s disease facts and figures, 2020 (16:391-460), Diabetes Care 2005 Jan; 28(1): 164-176; Ahera 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 large 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

Focusd approach in CVD

<table>
<thead>
<tr>
<th>Atherosclerosis</th>
<th>Heart failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCVD</td>
<td>Heart failure with preserved ejection fraction (HFpEF)</td>
</tr>
<tr>
<td>Transthyretin amyloid cardiomyopathy (ATTR-CM)</td>
<td></td>
</tr>
</tbody>
</table>

Treatments investigated:
- Ziltivekimab
- Semaglutide 2.4 mg Ziltivekimab
- PRX004

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
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**

<table>
<thead>
<tr>
<th>Category</th>
<th>Broader indications</th>
<th>Stand-alone CVD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Study</strong>&lt;br&gt;Current phase</td>
<td><strong>HFpEF</strong>&lt;br&gt;Phase 3 Sema 2.4mg</td>
<td><strong>ATTR-CM</strong>&lt;br&gt;Phase 2 NNC6019</td>
</tr>
<tr>
<td><strong>Global unmet need</strong>&lt;br&gt;(people)</td>
<td>~13m</td>
<td>~200m</td>
</tr>
<tr>
<td><strong>Potential differentiators</strong></td>
<td>1&lt;sup&gt;st&lt;/sup&gt; in class indication</td>
<td>First and only for T2D</td>
</tr>
<tr>
<td><strong>Potential launch year</strong></td>
<td>2024</td>
<td>2024/25</td>
</tr>
</tbody>
</table>

1 Specifically for a functional outcomes trial in an obese patient population

PCP: Primary Care Physician; CVD(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

**Ziltivekimab phase 2b RESCUE trial was successfully completed**

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

<table>
<thead>
<tr>
<th>% change</th>
<th>12 weeks of treatment</th>
<th>End of treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>placebo</td>
<td>-5%</td>
<td>-3%</td>
</tr>
<tr>
<td>ziltivekimab 7.5 mg</td>
<td>-77%*</td>
<td>-79%*</td>
</tr>
<tr>
<td>ziltivekimab 15 mg</td>
<td>-88%</td>
<td>-91%*</td>
</tr>
<tr>
<td>ziltivekimab 30 mg</td>
<td>-92%</td>
<td>-93%*</td>
</tr>
</tbody>
</table>

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

- Ziltivekimab QM showed reductions in inflammation biomarkers
- 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 inflammation
- The **phase 3 cardiovascular outcomes trial** was initiated in Q3 2021

---

*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

**Phase 3 CVOT trial ZEUS with ziltivekimab**

Investigate CV benefit in 6,200 patients

- **ziltivekimab 15 mg sc once-monthly + SoC**
- **Placebo sc once-monthly + SoC**

1:1

**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 MACE\(^1\)
- 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

Global¹ patients (in millions)

Approximately 5-8m patients

Market building

Targeted HCP outreach and relationship building

• Increase presence with key prescriber base being cardiologists and PCPs
• Enhance awareness of inflammatory burden in CVD with KOLs and HCP associations

Successful payer engagement

• Utilise ZEUS read-out to quantify anti-inflammatory clinical benefit in ASCVD patients with CKD vs Standard of Care

Integrated evidence generation

• Understand hsCRP and inflammation, epidemiology of disease and socio-economic burden of disease

¹ Includes US, EUS (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-sensitive C-reactive protein
NASH is a progressive disease with no approved treatment and low diagnosis rates today

NASH F1

- Inflamed tissue
- Large lipid droplets

NASH F2

- Inflamed/dying hepatocyte
- Collagen fibres

- Excessive collagen deposition

NASH F3

- Inflamed/dying hepatocyte

NASH-Cirrhosis F4

- Dead cell remnants
- Scar tissue

Diagnosis rates

- NASH F1: 26%
- NASH F2: 32%
- NASH F3: 42%

Treatment rates

- NASH F1: 50%
- NASH F2: 70%
- NASH F3: 90%

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)

- Prevalence
- Diagnosed
- Access

NASH prevalence

Low disease awareness

Inadequate patient referrals

No treatment options

No prognostic biomarker

Few patients receiving diagnosis

Market preparation priorities

- Build strong presence
  - Create urgency to treat in NASH
  - Build strong speciality-referral process
  - Engage Endos, Hepas and PCPs

- Increase diagnosis rate
  - Momentum towards NITs in clinical practice and guidelines
  - NITs for diagnosis, screening and monitoring

- Evidence generation
  - Build understanding of importance of addressing underlying cause of disease
  - Stop clinical progression amongst physicians and payers

Build evidence generation

NITs for diagnosis, screening and monitoring

Hurdles

- High expected investment level
- Low expected investment level

NASH: Non-alcoholic steatohepatitis; Endos: endocrinologist; PCP: primary care physician; NIT: Non-invasive tests; 1 Referrals 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)

Liver biopsy → 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

- Linking biomarkers and liver histology to outcomes
- Disease understanding

External

- Consortia
- Collaborations with academia and other healthcare companies

NN Development

Phase 2 trial with FGF21
Phase 3 ESSENCE trial (part 1 and 2), incl. screening data

Validate diagnostic tests
Validate tests for monitoring
Validate tests for prognosis

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 trial.\(^1\)

**Proportion of patients with improvements in fibrosis**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Placebo (0%)</th>
<th>0.1 mg (34.3%)</th>
<th>0.2 mg (47.3%)</th>
<th>0.4 mg (47.8%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placebo</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>0.1 mg</td>
<td>21.4%</td>
<td>10.8%</td>
<td>9.4%</td>
<td>5.8%</td>
</tr>
<tr>
<td>0.2 mg</td>
<td>22.9%</td>
<td>47.3%*</td>
<td>35.9%</td>
<td>46.9%*</td>
</tr>
<tr>
<td>0.4 mg</td>
<td>34.3%</td>
<td>47.3%*</td>
<td>35.9%</td>
<td>47.8%*</td>
</tr>
</tbody>
</table>

Semaglutide showed numerical improvements in fibrosis and fewer patients had progression of fibrosis vs placebo in phase 2 trial.\(^1\)

**Proportion of patients with progression of fibrosis**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Placebo (0%)</th>
<th>0.1 mg (0%)</th>
<th>0.2 mg (3%)</th>
<th>0.4 mg (3%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placebo</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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<td>47.3%*</td>
<td>35.9%</td>
<td>47.8%*</td>
</tr>
</tbody>
</table>

Note: *statistically significant at 72 weeks (p<0.05 vs placebo).\(^1\) Based 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
- **Semaglutide 2.4 mg sc. QW + SoC**
- **Placebo + SoC**
- 2:1 R
- Fixed follow-up

**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

F: Fibrosis stage; NASH: non-alcoholic steatohepatitis; QW: once-weekly; R: randomisation; SoC: standard of care (GLP-1RAs disallowed); MELD: Model for End-stage Liver Disease
Alzheimer’s disease patient journey is complex and underscores key barriers to overcome for Novo Nordisk to be successful.

**Significant and growing unmet need**

- **AD prevalence**

- **Prevalence Diagnosed patients Eligible patients**
  - MCI
  - Mild dementia

**Hurdles**

- Early symptoms dismissed as normal ageing
- Complex tests and limited screening/diagnosing skills
- Lack of prognostic markers and simple tests
- Limited DMT options
- Few patients receiving diagnosis

**Market preparation priorities**

- **Support healthcare system preparedness**
  - Larger number of AD patients expected to enter the system
  - May lead to significant bottlenecks and delay to patient care

- **Increase diagnosis rate**
  - Support NITs development, e.g. blood-based/digital biomarkers
  - Increase AD education and access to screening tools for PCPs and HCP insight

- **Evidence generation**
  - Evidence to better understand the impact of delaying disease progression
  - Role of neuroinflammation in disease progression

**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

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 semaglutide⁷,⁸
- 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-1¹⁴,¹⁵ incl. semaglutide¹⁶

**Reduced atherosclerosis** with liraglutide and semaglutide¹⁷

Systemic **anti-inflammatory** effects with semaglutide¹⁷

---

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**

- Parkinson’s disease
- Stroke
- Alzheimer’s disease
- Dry AMD
- Blindness
- Hearing loss
- Congenital bone disorders
- Chronic heart failure
- Spinal cord injury
- Chronic kidney disease
- NASH
- Diabetes
- Osteoarthritis
- Muscular dystrophy

**Multiple sites:** Cancers and wound healing

**Maturing the platform to enable development of competitive cell therapies**

<table>
<thead>
<tr>
<th>Focus area</th>
<th>Novo Nordisk capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pluripotent stem cell</td>
<td>In-depth know-how on embryonic pluripotent stem cells</td>
</tr>
<tr>
<td>Bank of several undifferentiated stem cells</td>
<td>Exploitation of quality controlled stem cells</td>
</tr>
<tr>
<td>Differentiated to specific cell types</td>
<td>IP-protected protocols for differentiation</td>
</tr>
<tr>
<td>Upscaling, manufacturing and delivery/devices</td>
<td>GMP-grade cell manufacturing and development of cell delivery devices¹</td>
</tr>
<tr>
<td>Clinical development and regulatory affairs</td>
<td>Early interactions with regulators</td>
</tr>
<tr>
<td></td>
<td>Clinical trial experience</td>
</tr>
</tbody>
</table>

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
Potential first human dose with cell therapy in collaboration with Heartseed and others

Utilise internal capabilities and disease understanding for stem cell development

- GMP-grade production capability
- Academic collaborations
- Ethical stem cell practices
- IP positions on differentiation protocols

2 first human dose projects upcoming

Therapeutic areas

- Parkinson's disease
- Chronic heart failure
- Type 1 diabetes
- Dry age-related macular degeneration

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

GMP: Good manufacturing practice; IP: Intellectual property; iPSC: induced pluripotent stem cells; QA/QC: Combination of quality assurance with quality assurance and quality control; hESC: Human embryonic stem cell; FHD: First human dose
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 ≤40%
- NYHA cardiac function classification grade ≥II

HS-001 high dose

HS-001 low dose

26-week follow-up
52-week follow-up

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

PD: Parkinson’s disease; LVEF: Left ventricular ejection fraction; NYHA: New York Heart Association
International Operations

International Operations 102
EMEA 108
Region China 113
Rest of World 118
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

NAO

51%

49%

IO

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

Growth momentum in IO

IO: International Operations; NAO: North America Operations; Source (RHS): IQVIA Feb 2023, Value, MAT
International Operations at a glance

Diabetes market by value and Novo Nordisk market share

**Novo Nordisk reported sales**

<table>
<thead>
<tr>
<th>First quarter of 2023</th>
<th>Sales (mDKK)</th>
<th>Growth(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total GLP-1(^3)</strong></td>
<td>8,833</td>
<td>52%</td>
</tr>
<tr>
<td>Long-acting insulin(^4)</td>
<td>2,980</td>
<td>-5%</td>
</tr>
<tr>
<td>Premix insulin(^5)</td>
<td>2,637</td>
<td>-7%</td>
</tr>
<tr>
<td>Fast-acting insulin(^6)</td>
<td>2,737</td>
<td>-11%</td>
</tr>
<tr>
<td>Human insulin</td>
<td>1,649</td>
<td>-11%</td>
</tr>
<tr>
<td><strong>Total insulin</strong></td>
<td>10,003</td>
<td>-8%</td>
</tr>
<tr>
<td>Other Diabetes care(^7)</td>
<td>568</td>
<td>-17%</td>
</tr>
<tr>
<td><strong>Diabetes care</strong></td>
<td>19,404</td>
<td>12%</td>
</tr>
<tr>
<td>Obesity care(^8)</td>
<td>1,931</td>
<td>65%</td>
</tr>
<tr>
<td><strong>Diabetes &amp; Obesity care</strong></td>
<td>21,335</td>
<td>15%</td>
</tr>
<tr>
<td>Rare disease(^9)</td>
<td>2,735</td>
<td>-17%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24,070</strong></td>
<td><strong>10%</strong></td>
</tr>
</tbody>
</table>

\(^{1}\) CAGR calculated for 5-year period; Competitor insulin value market shares, as of Feb 2023: Novo Nordisk 51%, Sanofi 27% and Eli Lilly 13%; Competitor GLP-1 value market shares, as of Feb 2023: Novo Nordisk 65%, Eli Lilly 33% and AstraZeneca 1%; OAD: Oral anti-diabetic; MS: Market share; Source: IQVIA MAT, Feb 2023 value figures

\(^{2}\) Growth as percent of last year.

\(^{3}\) At Constant exchange rates;

\(^{4}\) Comprises Victoza\(^®\), Ozempic\(^®\), and Rybelsus\(^®\);

\(^{5}\) Comprises Tresiba\(^®\), Xultophy\(^®\) and Levemir\(^®\);

\(^{6}\) Comprises Ryzodeg\(^®\) and NovoMix\(^®\);

\(^{7}\) 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, Feb 2023, Value, MAT, all countries; NN: Novo Nordisk; AZ: Astra Zeneca
GLP-1 market share and market growth

Source: IQVIA, Feb 2023, Value MAT, all countries; NN: Novo Nordisk; AZ: Astra Zeneca
Insulin market size and volume share of growth and market share in International Operations

Insulin market share and market size (DKK billion)

<table>
<thead>
<tr>
<th>Type</th>
<th>Market Share</th>
<th>Market Size (Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>51%</td>
<td>60</td>
</tr>
<tr>
<td>Long-Acting</td>
<td>39%</td>
<td>28</td>
</tr>
<tr>
<td>Fast-acting</td>
<td>58%</td>
<td>16</td>
</tr>
<tr>
<td>Premix</td>
<td>80%</td>
<td>9</td>
</tr>
<tr>
<td>Human</td>
<td>47%</td>
<td>8</td>
</tr>
</tbody>
</table>

Market growth and Δ Market share:

- Total: -4.3%, +0.8%
- Long-Acting: -3.8%, +2.4%
- Fast-acting: -0.1%, -1.5%
- Premix: -9.5%, +2.3%
- Human: -8.5%, -0.8%

Insulin volume: Market share

Source: IQVIA, Feb 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

Source: IQVIA, Feb 2023, Value MAT, all countries
**EMEA at a glance**

**Diabetes trend**

- Population with diabetes
- Diabetes growth rate

**Diabetes market by value and Novo Nordisk market share**

- **GLP-1 MS**: 36%<sup>1</sup>
- **Insulin MS**: 3.24%<sup>1</sup>
- **OAD MS**: 13%<sup>1</sup>

**Novo Nordisk reported sales**

<table>
<thead>
<tr>
<th>First quarter of 2023</th>
<th>Sales (mDKK)</th>
<th>Growth&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total GLP-1&lt;sup&gt;3&lt;/sup&gt;</strong></td>
<td>5,048</td>
<td>57%</td>
</tr>
<tr>
<td>Long-acting insulin&lt;sup&gt;4&lt;/sup&gt;</td>
<td>1,899</td>
<td>-5%</td>
</tr>
<tr>
<td>Premix insulin&lt;sup&gt;5&lt;/sup&gt;</td>
<td>705</td>
<td>4%</td>
</tr>
<tr>
<td>Fast-acting insulin&lt;sup&gt;6&lt;/sup&gt;</td>
<td>1,723</td>
<td>-7%</td>
</tr>
<tr>
<td>Human insulin</td>
<td>510</td>
<td>-3%</td>
</tr>
<tr>
<td><strong>Total insulin</strong></td>
<td>4,837</td>
<td>-5%</td>
</tr>
<tr>
<td>Other Diabetes care&lt;sup&gt;7&lt;/sup&gt;</td>
<td>165</td>
<td>-7%</td>
</tr>
<tr>
<td><strong>Diabetes care</strong></td>
<td>10,050</td>
<td>19%</td>
</tr>
<tr>
<td>Obesity care&lt;sup&gt;8&lt;/sup&gt;</td>
<td>1,216</td>
<td>71%</td>
</tr>
<tr>
<td><strong>Diabetes &amp; Obesity care</strong></td>
<td>11,266</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Rare disease</strong></td>
<td>1,476</td>
<td>-12%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12,742</td>
<td>18%</td>
</tr>
</tbody>
</table>

---

<sup>1</sup> CAGR calculated for 5-year period; Competitor insulin value market shares, as of Feb 2023: Novo Nordisk 48%, Sanofi 32% and Eli Lilly 16%; Competitor GLP-1 value market shares, as of Feb 2023: Novo Nordisk 61%, Eli Lilly 37% and AstraZeneca 2%; OAD: Oral anti-diabetic; MS: Market share; Source: IQVIA MAT, Feb 2023 value figures

<sup>2</sup> At Constant exchange rates; <sup>3</sup> Comprises Victoza®, Ozempic®, and Rybelus®; <sup>4</sup> Comprises Tresiba®, Xultophy® and Levemir®; <sup>5</sup> Comprises Ryzodeg® and NovoMix®; <sup>6</sup> Comprises Fiasp® and NovoRapid®; <sup>7</sup> Comprises NovoNorm® and needles; <sup>8</sup> Obesity care comprises Saxenda® and Wegovy®; <sup>9</sup> Comprises primarily NovoSeven®, NovoEight®, NovoThirteen®, Esperoct®, Refixia®, Norditropin®, Vagifem® and Actiswelle®

---

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 10<sup>th</sup> Edition 2021; EMEA: Europe, Middle East and Africa
Diabetes market share and market growth in EMEA

Diabetes market size and growth

Source: IQVIA, Feb 2023, Value, MAT, EMEA: Europe, Middle East and Africa; NN: Novo Nordisk; AZ: AstraZeneca
GLP-1 market share and market growth in EMEA

Source: IQVIA, Feb 2023, Value, MAT, EMEA: Europe, Middle East and Africa; NN: Novo Nordisk
Insulin market size and volume market share in EMEA

Insulin market share and market size (DKK billion)

<table>
<thead>
<tr>
<th>Type</th>
<th>Novo Nordisk</th>
<th>Competitors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-acting</td>
<td>41%</td>
<td>20%</td>
<td>20</td>
</tr>
<tr>
<td>Fast-acting</td>
<td>55%</td>
<td>12%</td>
<td>12</td>
</tr>
<tr>
<td>Premix</td>
<td>74%</td>
<td>3%</td>
<td>3</td>
</tr>
<tr>
<td>Human</td>
<td>43%</td>
<td>3%</td>
<td>3</td>
</tr>
</tbody>
</table>

Market growth and Δ Market share

- Market growth:
  - Total: 1.2%
  - Long-acting: 3.8%
  - Fast-acting: 2.0%
  - Premix: -7.0%
  - Human: -8.9%

- Δ Market share:
  - Total: -0.1%
  - Long-acting: +1.0%
  - Fast-acting: -0.9%
  - Premix: 0.0%
  - Human: -1.0%

Source: IQVIA, Feb 2023. 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

Source: IQVIA, Feb 2023, Value, MAT; EMEA: Europe, Middle East and Africa; NN: Novo Nordisk
Region China at a glance

Diabetes trend

- Population with diabetes
- Diabetes growth rate

Region China covers Mainland China, Taiwan, and Hong Kong


Diabetes market by value and Novo Nordisk market share

- GLP-1 MS
- Insulin MS
- OAD MS

Novo Nordisk reported sales

<table>
<thead>
<tr>
<th></th>
<th>First quarter of 2023</th>
<th>Sales (mDKK)</th>
<th>Growth²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GLP-1³</td>
<td>1,349</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>Long-acting insulin⁴</td>
<td>416</td>
<td>-25%</td>
<td></td>
</tr>
<tr>
<td>Premix insulin⁵</td>
<td>1,310</td>
<td>-13%</td>
<td></td>
</tr>
<tr>
<td>Fast-acting insulin⁶</td>
<td>470</td>
<td>-27%</td>
<td></td>
</tr>
<tr>
<td>Human insulin</td>
<td>391</td>
<td>-38%</td>
<td></td>
</tr>
<tr>
<td>Total insulin</td>
<td>2,587</td>
<td>-22%</td>
<td></td>
</tr>
<tr>
<td>Other Diabetes care⁷</td>
<td>289</td>
<td>-13%</td>
<td></td>
</tr>
<tr>
<td>Diabetes care</td>
<td>4,225</td>
<td>-7%</td>
<td></td>
</tr>
<tr>
<td>Obesity care⁸</td>
<td>53</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>Diabetes &amp; Obesity care</td>
<td>4,278</td>
<td>-6%</td>
<td></td>
</tr>
<tr>
<td>Rare disease⁹</td>
<td>183</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,461</td>
<td>-5%</td>
<td></td>
</tr>
</tbody>
</table>

1 CAGR calculated for last 5-year period
2 At constant exchange rates; ³ Comprises Victoza® and Ozempic®; ⁴ Comprises Tresiba®, Xultophy® and Levemir®; ⁵ Comprises NovoMix® and Ryzodeg®; ⁶ Comprises NovoRapid®; ⁷ Comprises NovoNorm® and needles; ⁸ Comprises Saxenda®; ⁹ Comprises primarily NovoSeven®, NovoLight® 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, Feb 2023, Value, MAT, NN: Novo Nordisk
Region China covers Mainland China, Taiwan, and Hong Kong
GLP-1 market share and market growth in Region China

Source: IQVIA, Feb 2023, Value, MAT; 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

**Insulin market share and market size (DKK billion)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Novo Nordisk</th>
<th>Competitors</th>
<th>Market growth</th>
<th>Δ Market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>53%</td>
<td>47%</td>
<td>-26.1%</td>
<td>+2.9%</td>
</tr>
<tr>
<td>Long-acting</td>
<td>27%</td>
<td>33%</td>
<td>-36.4%</td>
<td>+2.4%</td>
</tr>
<tr>
<td>Fast-acting</td>
<td>76%</td>
<td>24%</td>
<td>-19.1%</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Premix</td>
<td>86%</td>
<td>14%</td>
<td>-19.3%</td>
<td>+5.6%</td>
</tr>
<tr>
<td>Human</td>
<td>32%</td>
<td>68%</td>
<td>-18.2%</td>
<td>-6.1%</td>
</tr>
</tbody>
</table>

**Market growth**

-26.1%, -36.4%, -19.1%, -19.3%, -18.2%

**Δ Market share**

+2.9%, +2.4%, -4.4%, +5.6%, -6.1%

**Insulin volume: market share**

- Source: IQVIA, Feb 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**

- **81%** Sales: Region China
- **19%** Sales: Rest of IO
- **77%** Patients: Region China
- **23%** Patients: Rest of IO

**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 26 bDKK mainly consisting of OAD and insulin
- Diabetes market growth of ~11%

**Bring innovation faster to market**
- **Diabetes**: Rybelsus® and ONWARDS programme for 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

- Population with diabetes
- Diabetes growth rate

Million

<table>
<thead>
<tr>
<th>Year</th>
<th>Population with diabetes</th>
<th>Diabetes growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>187</td>
<td>18%</td>
</tr>
<tr>
<td>2030</td>
<td>227</td>
<td>21%</td>
</tr>
<tr>
<td>2045</td>
<td>286</td>
<td></td>
</tr>
</tbody>
</table>

Diabetes market by value and Novo Nordisk market share

- DKK billion
- %

First quarter of 2023

Sales (mDKK) | Growth²
---|---
Total GLP-1³ | 2,436 | 40%
Long-acting insulin⁴ | 665 | 14%
Premix insulin⁵ | 622 | -2%
Fast-acting insulin⁶ | 544 | -5%
Human insulin | 748 | 8%
Total insulin | 2,579 | 4%
Other Diabetes care⁷ | 114 | -40%
Diabetes care | 5,129 | 17%
Obesity care⁸ | 662 | 57%
Diabetes & Obesity care | 5,791 | 20%
Rare disease⁹ | 1,076 | -27%
Total | 6,867 | 9%

Notes:

1 CAGR calculated for last 5 year period
2 At constant exchange rates; 3 Comprises Victoza®, Ozempic® and Rybelsus®; 4 Comprises Tresba®, Xultophy® and Leumir®; 5 Comprises NovoMix® and Ryzodeg®; 6 Comprises NovoRapid® and Fiasp®; 7 Comprises NovoNordisk® and needles; 8 Comprises Saxenda®, Refixia®, NovoSeven®, NovoEight® and Nordetropin®

Diabetes market share and market growth in Rest of World

**Diabetes market growth and Novo Nordisk market share**

- **NN market share**
- **Market growth (right axis)**
- **NN growth (right axis)**

**Diabetes market size and growth**

- **Novo Nordisk**
- **AZ**
- **Others**

Source: IQVIA, Feb 2023, value, MAT, Rest of world; NN: Novo Nordisk AZ: Astra Zeneca
GLP-1 market share and market growth in Rest of World

GLP-1 market growth and Novo Nordisk market share

![Chart showing GLP-1 market growth and Novo Nordisk market share from Feb 2020 to Feb 2023. The chart indicates a significant increase in market share for Novo Nordisk during this period.]

Source: IQVIA, Feb 2023, Value, MAT; NN: Novo Nordisk

GLP-1 market size and growth

![Chart showing GLP-1 market size and growth from Feb 2022 to Feb 2023. The chart highlights the market size and growth for Novo Nordisk and competitors.]

Source: IQVIA, Feb 2023, Value, MAT; NN: Novo Nordisk
Insulin market size and volume market share in Rest of World

- **Insulin market share and market size (DKK billion)**
  - Total: 58%
  - Long-acting: 42%
  - Fast-acting: 62%
  - Premix: 83%
  - Human: 67%

- **Market growth**:
  - Total: 6.3%
  - Long-acting: 8.2%
  - Fast-acting: 4.5%
  - Premix: 6.5%
  - Human: 4.2%

- **Δ Market share**:
  - Total: +1.1%
  - Long-acting: +1.8%
  - Fast-acting: +0.7%
  - Premix: +0.7%
  - Human: +1.3%

**Insulin volume: Market share**

- **NN market share**
- **Market growth (right axis)**
- **NN growth (right axis)**

Source: IQVIA, Feb 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

Source: IQVIA, Feb 2023, Value, MAT; NN: Novo Nordisk
North America Operations

USA health care system  125
NAO at a glance  126
North America Operations growth has accelerated

North America Operations reported sales growth per therapy area

- GLP-1
- Insulin
- Other diabetes
- Obesity care
- Rare disease
- Growth at CER

Source: Quarterly company announcement

CER: Constant exchange rate
US health insurance is dominated by a few large commercial payers

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Managed care</th>
<th>Uninsured</th>
<th>Medicare</th>
<th>Medicaid/CHIP</th>
<th>Public exchanges</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>5%</td>
<td>9%</td>
<td>23%</td>
<td>18%</td>
<td>45%</td>
</tr>
<tr>
<td>2021</td>
<td>7%</td>
<td>8%</td>
<td>22%</td>
<td>17%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Covered lives by PBM

- **All other PBM**: 9%
- **Express Scripts/Cigna**: 25%
- **Humana Prime**: 3%
- **OptumRx**: 9%
- **IngenioRx**: 20%
- **CVS Caremark**: 5%
- **IngenioRx**: 29%

Development of Novo Nordisk rebates and net sales in the US

- **Rebates, % of gross sales**
- **Net sales**

Source: Novo Nordisk Annual Report 2022

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

Source: Cleveland Research

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
North America Operations at a glance

Diabetes trend in population

- Population with diabetes
- Diabetes growth rate

Million

2021  2030  2045
51    57    63

11%  10%

Diabetes market by value and Novo Nordisk market share

DKK billion

0  200  400  600  800

GLP-1 MS  Insulin MS  OAD MS

0%  20%  40%  60%  80%

Feb 2018  Feb 2023

Novo Nordisk reported sales

<table>
<thead>
<tr>
<th></th>
<th>First quarter of 2023</th>
<th>Sales (mDKK)</th>
<th>Growth²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GLP-1³</td>
<td>17,978</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Long-acting insulin⁴</td>
<td>1,153</td>
<td>-32%</td>
<td></td>
</tr>
<tr>
<td>Premix insulin⁵</td>
<td>139</td>
<td>-18%</td>
<td></td>
</tr>
<tr>
<td>Fast-acting insulin⁶</td>
<td>1,751</td>
<td>-5%</td>
<td></td>
</tr>
<tr>
<td>Human insulin</td>
<td>363</td>
<td>-14%</td>
<td></td>
</tr>
<tr>
<td>Total insulin</td>
<td>3,406</td>
<td>-18%</td>
<td></td>
</tr>
<tr>
<td>Other Diabetes care⁷</td>
<td>161</td>
<td>-30%</td>
<td></td>
</tr>
<tr>
<td>Diabetes care</td>
<td>21,545</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>Obesity care⁸</td>
<td>5,911</td>
<td>156%</td>
<td></td>
</tr>
<tr>
<td>Diabetes &amp; Obesity care</td>
<td>27,456</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>Rare disease⁹</td>
<td>1,841</td>
<td>-14%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29,297</td>
<td>41%</td>
<td></td>
</tr>
</tbody>
</table>

¹ CAGR calculated for 5-year period
² At constant exchange rates; ³ Comprises Victoza®, Ozempic®, and Rybelsus®;
⁴ Comprises Tresiba®, Xultophy® and Levemir®; ⁵ Comprises NovoMix®;
⁶ Comprises Fiasp® and NovoRapid®; ⁷ Comprises NovoNorm® and needles; ⁸ Comprises Saxenda® and Wegovy®; ⁹ Comprises primarily NovoSeven®,
NovoEight®, Esperoct®, NovoThirteen®, Refaxia®, Norditropin®, Vagifem® and Activelle®

Competitor insulin value market shares, as of Feb 2023: Novo Nordisk 43%, Eli Lilly 30% and Sanofi 25%; Competitor GLP-1 value market shares, as of Feb 2023: Novo Nordisk 6.9%, Eli Lilly 46% and AstraZeneca 1%

OAD: Oral anti-diabetic; MS: Market Share; Source: IQVIA MAT, Feb 2023 value figures
Diabetes market share and market growth in North America Operations

Diabetes market growth and Novo Nordisk market share

- NN market share
- NN share of growth
- Market growth
- NN growth

Diabetes market size and growth

- DKK billion
- ~35%
- ~41%
- 32%
- 34%

Source: IQVIA, Feb 2023, value, MAT; NN: Novo Nordisk
GLP-1 market share and market growth in North America Operations

**Source:** IQVIA, Feb 2023, value, MAT; NN: Novo Nordisk
Total Rybelsus® TRx volume is steadily growing in the US

Rybelsus® and SGLT-2i\(^1\) uptake in the US\(^2\) since respective launches

In the first three months of 2023, Rybelsus® sales account for 14% share of growth of NAO sales

- Successful Rybelsus® launch despite COVID-19 impacting the first year of launch
- Rybelsus® TRx continues to steadily increase
- Achieved global blockbuster status in 2022

\(^1\)SGLT-2i is an average of empagliflozin and canagliflozin script count. \(^2\)Rybelsus® is based on Oct 2019 focus launch. Each data points represents a rolling four-week average.

Note: TRx: Total prescription data; NAO: North America Operations; Source: IQVIA Xponent, Week ending 14 April 2023
Novo Nordisk volume market shares in the three insulin segments

1 CAGR for 5-year period; 2 Includes new-generation insulin. MI: Modern insulin; MS: Market Share; NN: Novo Nordisk; tMU: Thousand mega units
Source: IQVIA monthly MAT, Feb 2023 volume figures
Insulin market size and volume market share in North America Operations

**Insulin market share and market size (DKK billion)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Market Share</th>
<th>Market Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>43%</td>
<td>214</td>
</tr>
<tr>
<td>Long-acting</td>
<td>38%</td>
<td>109</td>
</tr>
<tr>
<td>Fast-acting</td>
<td>51%</td>
<td>81</td>
</tr>
<tr>
<td>Premix</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Human</td>
<td>25%</td>
<td>16</td>
</tr>
</tbody>
</table>

**Market growth**
- Total: 5.8%
- Long-acting: 4.8%
- Fast-acting: 8.8%
- Premix: -5.2%
- Human: 3.6%

**Δ Market share**
- Total: +0.6%
- Long-acting: +1.1%
- Fast-acting: +0.1%
- Premix: +1.2%
- Human: -1.5%

**Insulin volume: Market share**

Note: Insulin market numbers do not reflect rebates.
Source: IQVIA, Feb 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**

- **NN market share**
- **Market growth (right axis)**
- **NN growth (right axis)**

**Obesity market size and growth**

- **DKK billion**
- **Obesity care**
- **Others**
- **Feb 2023**

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

Profit and loss, capital allocation  134
Currencies  140
Solid sales growth driven by Diabetes and Obesity care

Reported annual sales 2018-2022

DKK billion

<table>
<thead>
<tr>
<th>Year</th>
<th>Rare disease</th>
<th>Diabetes and Obesity care</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>2019</td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>2020</td>
<td>15%</td>
<td>85%</td>
</tr>
<tr>
<td>2021</td>
<td>14%</td>
<td>86%</td>
</tr>
<tr>
<td>2022</td>
<td>12%</td>
<td>88%</td>
</tr>
</tbody>
</table>

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

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
Solid operating profit growth driven by Diabetes care

Operating profit

- Operating profit growth driven by Diabetes care
- Operating profit split by franchise

CER: Constant exchange rates
Resource allocation in Novo Nordisk is guided by investing in future growth while delivering attractive shareholder returns

Corporate strategy guides resource allocation

- **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

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

Waves of growth

- GLP-1 Diabetes
- Obesity care
- Rare disease
- OSCD: Other serious chronic diseases

ILLUSTRATIVE
Net profit has been converted to cash and returned to shareholders

Cash conversion and allocation (2022)

- **Net profit** (56 billion DKK, 100%)
- **Free cash flow** (57 billion DKK, 88%)
- **Cash return** (25 billion DKK, 88%)

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

- 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

CAPEX investments

- 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 79% 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

**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 8 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

---

**Currency Impact Table**

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

**Earnings per share**

- Basic earnings per share (DKK): 24.51, 20.79
- Diluted earnings per share (DKK): 24.44, 20.74

Note: Example is based on Annual Report 2022
Attractive capital allocation to shareholders

Annual cash return to shareholders

Capital allocation

- The proposed final dividend of 8.15 DKK per share, in addition to the interim dividend of 4.25 DKK per share, corresponds to full year dividend of 12.40 DKK per share in 2022
- Total dividend per share increasing 19% in 2022
- Total capital allocation for 2022 of 49 bDKK to shareholders between share buy back and dividend
- For 2023, we expect to initiate a new 12-month share repurchase programme of up to DKK 30 billion

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. The 2023E interim dividend included for illustrative purposes.
Operating profit expected to be negatively impacted by currencies in 2023, partly countered by net financials

**FY 2022**
- Positive impact on operating profit of DKK 7.6 billion
- Foreign exchange net gain of DKK 2.9 billion

**FY 2023 outlook**
- Currency impact on Operating profit is expected to be -9%-points
- Net financial items is expected to be a gain of DKK 3.0 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 27 April 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  144
Environmental responsibility  147
Social responsibility  149
Governance  154
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

Socially responsible

Sustainably responsible

Financially responsible

The Novo Nordisk Way guides our behaviour

---

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

*Ownership as of 31 March 2023
2022 statement of ESG performance

<table>
<thead>
<tr>
<th>Environmental performance</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy consumption for operations (1,000 GJ)</td>
<td>3,677</td>
<td>3,387</td>
<td>3,191</td>
</tr>
<tr>
<td>Share of renewable power for production sites</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Water consumption for production sites (1,000 m³)</td>
<td>3,918</td>
<td>3,488</td>
<td>3,368</td>
</tr>
<tr>
<td>Breaches of environmental regulatory limit values</td>
<td>75</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Emissions and waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1 emissions (1,000 tonnes)</td>
<td>76</td>
<td>77</td>
<td>75</td>
</tr>
<tr>
<td>Scope 2 emissions (1,000 tonnes)</td>
<td>16</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Scope 3 emissions (1,000 tonnes)⁠¹</td>
<td>2,041</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Waste from production sites (tonnes)</td>
<td>213,505</td>
<td>180,806</td>
<td>140,783</td>
</tr>
<tr>
<td>Social performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients reached with Novo Nordisk’s Diabetes care products (estimate in millions)</td>
<td>36.3</td>
<td>34.6</td>
<td>32.8</td>
</tr>
<tr>
<td>- Hereof reached via the Novo Nordisk Access to Insulin Commitment (estimate in millions)²</td>
<td>1.8</td>
<td>1.7</td>
<td>3.2</td>
</tr>
<tr>
<td>- Hereof children reached through Changing Diabetes® in Children (cumulative)</td>
<td>41,033</td>
<td>31,846</td>
<td>28,296</td>
</tr>
<tr>
<td>People &amp; employees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees (total)</td>
<td>55,185</td>
<td>48,478</td>
<td>45,323</td>
</tr>
<tr>
<td>Employee turnover</td>
<td>8.2%</td>
<td>11.0%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Sustainable Employer Score³</td>
<td>85%</td>
<td>84%</td>
<td>N/A</td>
</tr>
<tr>
<td>Frequency of occupational accidents (number per million working hours)</td>
<td>1.5</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Gender in leadership positions (ratio men:women)</td>
<td>56.44</td>
<td>57.43</td>
<td>50.41</td>
</tr>
<tr>
<td>Gender in senior leadership positions (ratio men:women)</td>
<td>61.39</td>
<td>64.36</td>
<td>65.35</td>
</tr>
<tr>
<td>Gender in the Board of Directors (ratio men:women)</td>
<td>54.46</td>
<td>67.33</td>
<td>62.38</td>
</tr>
<tr>
<td>Societies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total tax contribution (DKK million)</td>
<td>36,003</td>
<td>32,593</td>
<td>26,376</td>
</tr>
<tr>
<td>Donations and other contributions (DKK million)</td>
<td>126</td>
<td>92</td>
<td>158</td>
</tr>
<tr>
<td>Change in average list price across US product portfolio (% change to previous year)</td>
<td>2.4%</td>
<td>1.6%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Change in average net price across US product portfolio (% change to previous year)</td>
<td>-12.7%</td>
<td>-12.3%</td>
<td>-16.9%</td>
</tr>
<tr>
<td>Change in average list price across US insulin portfolio (% change to previous year)</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Change in average net price across US insulin portfolio (% change to previous year)</td>
<td>-19.5%</td>
<td>-10.9%</td>
<td>-26.9%</td>
</tr>
</tbody>
</table>

| 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 3

Key initiatives to reduce CO₂ emissions across all three scopes

Scope 1 - Direct emissions from own sources (18% reduction vs Q1 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 (75% reduction vs Q1 2019)
- **Production**: Sourcing 100% of renewable power at production sites since 2020

Scope 3 - Other indirect emissions across value chain (5% increase vs Q1 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 CO₂ equivalents 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

- **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
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

<table>
<thead>
<tr>
<th>Million patients</th>
<th>Patients reached in 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>36.3</td>
<td>30.8</td>
</tr>
<tr>
<td>5.5</td>
<td></td>
</tr>
</tbody>
</table>

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

**Access to Insulin Commitment**
- 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 commitment

**Changing Diabetes® in Children**
- ~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**
- 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**
- 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)  
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

- 47% Government insurance schemes
- 46% Private insurance schemes
- 7% Uninsured
- 333 million people

Insulin net prices\(^1\) have declined

- List price: 100 in 2019, 101 in 2022
- Net price: 52 in 2021

Net prices\(^1\) across the full Novo Nordisk portfolio\(^2\) declined

- List price: 106 in 2022
- Net price: 65 in 2022

\(^1\)Percentage 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.

\(^2\)NN 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

![Diabetes Compass](image)

### 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

![Thermal solution](image)

### 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

![iCare](image)
The journey towards being a sustainable employer starts with being inclusive and diverse

2025 aspiration supporting Diversity and Inclusion

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Senior leadership¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2022</td>
<td>63%</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Q1 2023</td>
<td>61%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>2025 Aspiration</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>All leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2022</td>
<td>57%</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Q1 2023</td>
<td>55%</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>2025 Aspiration</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
</tr>
</tbody>
</table>

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 has increased from 78% in 2021 to 82% in 2022
• End of Q1 2023 39% of leaders in senior leadership positions were women, compared to 37% end of Q1 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 levels
Structure in place to ensure corporate governance

<table>
<thead>
<tr>
<th>Rules and Regulations</th>
<th>Governance structure</th>
<th>Assurance measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danish and foreign laws and regulations</td>
<td>Shareholders</td>
<td>Audit financial data and review social and environmental data (internal and external)</td>
</tr>
<tr>
<td></td>
<td>A and B share structure</td>
<td></td>
</tr>
<tr>
<td>Corporate governance standards&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Board of Directors&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Facilitation (internal)</td>
</tr>
<tr>
<td></td>
<td>Nine shareholder-elected and four employee-elected board members</td>
<td></td>
</tr>
<tr>
<td>Articles of Association</td>
<td>Chairmanship, Audit Committee, Nomination Committee, Remuneration Committee, R&amp;D Committee</td>
<td>Quality audit and inspections (internal and external)</td>
</tr>
<tr>
<td>Novo Nordisk Way</td>
<td>Executive Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organisation</td>
<td></td>
</tr>
</tbody>
</table>

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
   • Total tax contribution in 2022 around DKK 36 billion

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

<table>
<thead>
<tr>
<th>Region</th>
<th>IP rights¹</th>
<th>Production²</th>
<th>Sales³</th>
<th>Corporate income taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Operations</td>
<td></td>
<td></td>
<td></td>
<td>11.0</td>
</tr>
<tr>
<td>- Denmark</td>
<td></td>
<td></td>
<td></td>
<td>9.6</td>
</tr>
<tr>
<td>- EMEA (excl. Denmark)</td>
<td></td>
<td></td>
<td></td>
<td>0.7</td>
</tr>
<tr>
<td>- Region China</td>
<td></td>
<td></td>
<td></td>
<td>0.4</td>
</tr>
<tr>
<td>- Rest of World</td>
<td></td>
<td></td>
<td></td>
<td>0.3</td>
</tr>
<tr>
<td>North America Operations</td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>- The US</td>
<td></td>
<td></td>
<td></td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>12.0</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>ESG is included in integrated reporting and short- and long-term remuneration</th>
<th>We strive to adhere to sustainability frameworks for our ESG reporting</th>
<th>ESG rankings by third-party agencies recognise Novo Nordisk’s efforts</th>
</tr>
</thead>
</table>

ESG rankings by third-party agencies:
- AAA: Top 13% in industry group ‘pharmaceuticals’
- A (Climate)
- A- (Water)
- Ranked 11th out of 20 companies

CDP: Carbon Disclosure Project; MSCI: Morgan Stanley Capital International; TCFD: Taskforce on Climate-related Financial Disclosures; SASB: Sustainability Accounting Standards Board
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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