Agenda

- Highlights and key events
- Sales update
- R&D update
- Financials and outlook
Forward-looking statements

Novo Nordisk’s reports filed with or furnished to the US Securities and Exchange Commission (SEC), including this presentation as well as the company’s statutory Annual Report 2018 and Form 20-F, which were both filed with the SEC in February 2019 in continuation of the publication of the Annual Report 2018, 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, including 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, 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, 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, failure to recruit and retain the right employees, and failure to maintain a culture of compliance.

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 presentation, reference is made to the overview of risk factors in ‘Risk management enables better decision-making’ on pp 41-43 in the Annual Report 2018.

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 presentation, whether as a result of new information, future events or otherwise.

Important drug information

- Victoza® (liraglutide 1.2 mg and 1.8 mg) is approved for the management of type 2 diabetes only
- Saxenda® (liraglutide 3 mg) is approved in the USA and the EU for the treatment of obesity only
Highlights – First six months of 2019

Sales update

Sales increased by **9%** and by **5%** at CER to **DKK 59.3 billion** driven by:
- **International Operations** sales growth of **13%** and of **12%** at CER
- **North America Operations** sales growth of **5%** and decline of **2%** at CER
- Diabetes and Obesity combined sales growth of **10%** and of **6%** at CER. Diabetes, Obesity, and Biopharmaceuticals grew **4%**, **56%**, and **3%** at CER, respectively
- Sales of Ozempic® were 3,750 million Danish kroner and it has now been launched in 21 countries

R&D events

- Initiation of semaglutide high dose trial (**SUSTAIN FORTE**), along with two outcome trials (**FLOW** and **FOCUS**) and the oral semaglutide CVOT (**SOUL**). The four trials will enrol approximately 15,000 people with type 2 diabetes
- Oral semaglutide submitted in **Japan** for treatment of type 2 diabetes
- Victoza® approved for use in children and adolescents with type 2 diabetes in the US and received positive opinion from the CHMP in the EU
- Xultophy® approved in **Japan** and Ryzodeg® approved in **China**

Financials & outlook

- **Operating profit** increased by **12%** and by **6%** at CER to **DKK 27.7 billion**
- **Net profit** decreased by **5%** to **DKK 20.0 billion** and diluted earnings per share decreased by **3%** to **DKK 8.39**

2019 financial outlook reflects robust sales growth outlook and continued focus on cost control
- Sales growth now expected to be **4-6%** at CER (reported: around 3%-points higher than at CER)
- Operating profit growth now expected to be **4-6%** at CER (reported: around 5%-points higher than at CER)

An **interim dividend** of DKK 3.00 for each Novo Nordisk A and B share of DKK 0.20, which will be paid in August 2019

Note: Unless otherwise specified sales and growth numbers are as reported in Danish kroner
CER: Constant exchange rates; CHMP: Committee for Medicinal Products for Human Use; CVOT: Cardiovascular outcomes trials; FLOW: Semaglutide in chronic kidney disease; FOCUS: Semaglutide in diabetic retinopathy
Executive management as of 1 September 2019

President & CEO
Lars Fruergaard Jørgensen

People & Organisation
- Monique Carter
- Maziar Mike Doustdar¹

International Operations
- Ludovic Helfgott¹

Biopharm
- Karsten Munk Knudsen

Chief Financial Officer
- Doug Langa¹

North America Operations
- Camilla Sylvest

Commercial Strategy & Corporate Affairs
- Mads Krogsgaard Thomsen

Chief Science Officer
- Henrik Wulff

Product Supply, Quality & IT

¹ Not registered with the Danish Business Authority
Sales growth of 5% driven by 12% growth in IO, partly offset by 2% decline in NAO

**Reported sales split for first half of 2019**

- **IO**: International Operations
- **Region Europe**: Africa, Asia, Middle East & Oceania
- **Region AAMEO**: Africa, Asia, Middle East & Oceania
- **Region China**: China
- **Region J&K**: Japan & Korea
- **Region LATAM**: Latin America
- **NAO**: North America Operations

**Growth drivers for first half of 2019**

**IO sales growth of 12% supported by all regions** driven by increasing sales across all therapy areas
- Broad innovative portfolio of products and new product launches
- Solid commercial execution driven by a Market Fit approach
- Underlying demographic trends across IO countries

**North America Operations sales declined by 2% driven by the US partly offset by Canada**
- Sales growth in GLP-1 (+14%) and Obesity (+28%), offset by declining insulin sales (-15%)
Sales growth of 5% driven by GLP-1 and Obesity, partly offset by insulin sales decline

Added reported sales and growth per therapy area and operational units at CER

Growth drivers for first half of 2019

- Novo Nordisk expands global diabetes value market leadership by 0.8%-point to 28.3%
- Global insulin volume market share increased 0.3%-point to 46.8% with IO expanding 0.2%-point to 49.7% and NAO expanding 0.5%-point to 40.0%
- GLP-1 value share of the total diabetes market increased 3.2%-points to 16.2%. Novo Nordisk retains GLP-1 market leadership with 46.4% value market share
- Obesity sales supported by the global roll-out of Saxenda®, which has now been launched in 43 countries
- Biopharm sales increased 3% driven by Region AAMEO, Region Latin America, Region Japan & Korea, and Region China

1 "Other diabetes" is included in Total
CER: Constant exchange rates

Source: IQVIA MAT, May 2019
AAMEO: Asia, Africa, Middle East, and Oceania; IO: International Operations; NAO: North America Operations; MAT: Moving annual total
Global diabetes market leadership strengthened to 28.3%, partly driven by increased insulin volume market share

Expanded global diabetes value market leadership by 0.8%-point to 28.3%

- Value market share
  - Global: 28.3%
  - IO: 21.9%
  - NAO: 30.6%

Global insulin volume market share increased 0.3%-point to 46.8%

- Volume market share
  - Global: 46.8%
  - IO: 49.7%
  - NAO: 40.0%

Source: IQVIA MAT, May 2019
IO: International Operations; NAO: North America Operations
Ozempic® now launched in 18 European markets, fuelling Novo Nordisk GLP-1 share of growth increase

Ozempic® monthly volume market share uptake across Europe

GLP-1 value share of growth in European launch markets

Source: IQVIA monthly, May 2019
Note: First European launch of Ozempic® was in August 2018

Source: IQVIA MAT, May 2019
Countries included: Belgium, Denmark, Finland, France, Hungary, Ireland, Netherlands, Spain, Sweden, Switzerland and the UK
CV: Cardiovascular
US Ozempic® launch has increased Novo Nordisk GLP-1 NBRx and stabilised TRx market share at around 45%
Global roll-out and promotional activities drive continued solid Saxenda® sales growth

Reported sales split in operational units

DKK billion

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
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<tr>
<td>0.0</td>
<td>0.4</td>
<td>0.8</td>
<td>1.2</td>
<td>1.6</td>
<td>1.6</td>
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<td>1.6</td>
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</tr>
</tbody>
</table>

- International Operations
- North America Operations
- YoY growth at CER

Novo Nordisk remains global market leader

- Novo Nordisk maintains market leadership with 50% value market share
- Saxenda® is now launched in 43 countries

IO

- Sales growth of 121% driven by Region AAMEO, Region Latin America and Region Europe
- Novo Nordisk is market leader in IO with a 38% value market share

NAO

- Sales growth of 28% impacted by inventory reductions in first quarter of 2019
- Novo Nordisk currently has a value market share of 68% in the obesity market

Source: IQVIA monthly, May 2019
Note: Growth rates are at CER
IO: International Operations; NAO: North America Operations; AAMEO: Africa, Asia, Middle East & Oceania
Solid commercial execution and global product launches drive 3% Biopharm sales growth

Added reported Biopharm sales across products

<table>
<thead>
<tr>
<th>Biopharm sales supported by global commercial execution</th>
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</thead>
<tbody>
<tr>
<td>Biopharm sales driven by <strong>International Operations growing 5%</strong> and unchanged <strong>North America Operations sales</strong></td>
</tr>
</tbody>
</table>

**Haemophilia sales increased by 5%** driven by
- Modest 1% reduction in NovoSeven® sales, reflecting the solid position in a competitive market
- 17% NovoEight® sales increase
- Continued global roll-out of NovoEight® and Refixia®

Novo Nordisk retains **global market leadership in the human growth disorder market** with a **33%** value market share

‘Return Biopharm to growth’ strategy on track
- Continued focus on commercial execution, progressing internal pipeline and adding complementary assets

Note: ‘Other haemophilia’ comprises NovoThirteen® and Refixia®
Four late-stage trials initiated with semaglutide and oral semaglutide, enrolling around 15,000 people

Two outcomes trials investigating sc sema in diabetes-related complications

- **FLOW**
  - Chronic Kidney Disease
  - >3,000 people with type 2 diabetes and CKD
  - **Sema 1.0 mg sc QW**
  - Placebo
  - Event driven

- **FOCUS**
  - Diabetic Retinopathy
  - ~1,500 people with type 2 diabetes
  - **Sema 0.5-1.0 mg sc QW + SOC**
  - Placebo + SOC
  - 5 years

One trial investigating sc sema at high dose and one large CVOT for oral sema

- **SUSTAIN FORTE**
  - Semaglutide high dose
  - 964 people with type 2 diabetes
  - **Sema 2.0 mg sc QW**
  - Sema 1.0 mg sc QW
  - 2019 - 2020
  - 40 weeks

- **SOUL**
  - Cardiovascular Outcomes Trial
  - 9,642 people with type 2 diabetes
  - **Oral sema 14 mg + SOC**
  - Placebo + SOC
  - Event-driven

Sema: Semaglutide; sc: Subcutaneous; CVOT: Cardiovascular outcomes trial; QW: Once weekly; CKD: Chronic kidney disease; SOC: Standard of care
### Key development milestones

#### Diabetes
- Oral semaglutide submitted for regulatory approval in Japan
- Label update with paediatric data for Victoza® approved in the USA and positive CHMP opinion in the EU based on data from the Ellipse trial
- Xultophy® approved in Japan
- Ryzodeg® approved in China
- Positive phase 2 results with anti-IL-21 and liraglutide in type 1 diabetes
- Phase 1 trial initiated with FSI965, a once daily insulin

#### Obesity
- Phase 1 initiation of LA-GDF15 (Growth Differentiation Factor 15)

#### Biopharm
- Esperoct® (N8-GP) approved in the EU
- NovoEight® submitted for regulatory approval in China
- Phase 3 trial, REAL 4, initiated with somapacitan in children with growth hormone deficiency

#### Other Serious Chronic Diseases
- Phase 2 initiated with semaglutide in combination with Gilead Science’s cilofexor and firsocostat for treatment of NASH

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CHMP: Committee for Medicinal Products for Human Use; NASH: Non-alcoholic steatohepatitis
**R&D milestones in 2019**

<table>
<thead>
<tr>
<th>Project</th>
<th>Q1 2019</th>
<th>Q2 2019</th>
<th>Q3 2019</th>
<th>Q4 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tresiba®</td>
<td>US submission</td>
<td>Phase 3b results (vs glargine U300)</td>
<td>US regulatory decision</td>
<td>Phase 1 results</td>
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<tr>
<td>Ozempic®</td>
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<tr>
<td>Anti-IL-21</td>
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<tr>
<td>LAIsema</td>
<td>Phase 1 initiation</td>
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<tr>
<td>Oral semaglutide</td>
<td>US submission</td>
<td>SOUL4 initiation</td>
<td>US submission</td>
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<td>Fiasp®</td>
<td>Phase 2 initiation</td>
<td>EU approval</td>
<td>EU submission</td>
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<td>Amylin - AM833</td>
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<tr>
<td>Tri-agonist 1706</td>
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<td>PYY 1562</td>
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<tr>
<td>Esperoct®</td>
<td>US approval</td>
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<td>Phase 1 results</td>
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<td>Concizumab</td>
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<tr>
<td>Somapacitan</td>
<td></td>
<td>Phase 3 initiation (GHD)</td>
<td>US and EU submission</td>
<td>Phase 3 initiation</td>
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<tr>
<td>Semaglutide NASH</td>
<td>US submission</td>
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<tr>
<td><strong>Diabetes</strong></td>
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<tr>
<td><strong>Obesity</strong></td>
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<tr>
<td><strong>Haemophilia</strong></td>
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<tr>
<td><strong>Growth disorders</strong></td>
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<tr>
<td><strong>Other serious chronic diseases</strong></td>
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</table>

1 Expected to be published in the given quarter or in the subsequent quarterly company announcement; 2 Diabetic retinopathy outcome trial; 3 Diabetes kidney disease outcome trial; 4 Cardiovascular Outcomes Trial

GHD: Growth hormone deficiency; AGHD: Adult growth hormone deficiency; CVOT: Cardiovascular outcomes trial; CV: Cardiovascular; PoC: Proof of Concept; NASH: Non-alcoholic steatohepatitis

*Note: FS1965 phase 1 initiated in Q2 2019; LA GDP15 phase 1 initiated in Q3 2019*
# Financial results – First six months of 2019

<table>
<thead>
<tr>
<th>In DKK million</th>
<th>First six months of 2019</th>
<th>First six months of 2018</th>
<th>Change (reported)</th>
<th>Change (CER)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>59,327</td>
<td>54,337</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>Gross profit</td>
<td>49,746</td>
<td>45,788</td>
<td>9%</td>
<td></td>
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<tr>
<td>Gross margin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales and distribution costs</td>
<td>14,526</td>
<td>13,541</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Percentage of sales</td>
<td>24.5%</td>
<td>24.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research and development costs</td>
<td>6,235</td>
<td>6,617</td>
<td>(6%)</td>
<td>(7%)</td>
</tr>
<tr>
<td>Percentage of sales</td>
<td>10.5%</td>
<td>12.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration costs</td>
<td>1,763</td>
<td>1,715</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Percentage of sales</td>
<td>3.0%</td>
<td>3.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other operating income, net</td>
<td>469</td>
<td>737</td>
<td>(36%)</td>
<td></td>
</tr>
<tr>
<td>Operating profit</td>
<td>27,691</td>
<td>24,652</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Operating margin</td>
<td>46.7%</td>
<td>45.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial items (net)</td>
<td>(2,324)</td>
<td>1,455</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit before income tax</td>
<td>25,367</td>
<td>26,107</td>
<td>(3%)</td>
<td></td>
</tr>
<tr>
<td>Income taxes</td>
<td>5,327</td>
<td>5,013</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Effective tax rate</td>
<td>21.0%</td>
<td>19.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net profit</td>
<td>20,040</td>
<td>21,094</td>
<td>(5%)</td>
<td></td>
</tr>
<tr>
<td>Diluted earnings per share (DKK)</td>
<td>8.39</td>
<td>8.66</td>
<td>(3%)</td>
<td></td>
</tr>
</tbody>
</table>

CER: Constant exchange rates
## Financial outlook for 2019

<table>
<thead>
<tr>
<th></th>
<th>Expectations 9 Aug 2019</th>
<th>Expectations 3 May 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales growth – at CER</td>
<td>4% to 6%</td>
<td>2% to 5%</td>
</tr>
<tr>
<td>Sales growth - reported</td>
<td>Around 3%-points higher</td>
<td>Around 3%-points higher</td>
</tr>
<tr>
<td>Operating profit growth – at CER</td>
<td>4% to 6%</td>
<td>2% to 6%</td>
</tr>
<tr>
<td>Operating profit growth - reported</td>
<td>Around 5%-points higher</td>
<td>Around 5%-points higher</td>
</tr>
<tr>
<td>Financial items (net)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective tax rate(^1)</td>
<td>20% to 22%</td>
<td>20% to 22%</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>Around DKK 9.0 billion</td>
<td>Around DKK 9.0 billion</td>
</tr>
<tr>
<td>Depreciation, amortisation and impairment losses</td>
<td>Around DKK 4.5 billion</td>
<td>Around DKK 4.5 billion</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>DKK 30 to 34 billion</td>
<td>DKK 29 to 34 billion</td>
</tr>
</tbody>
</table>

### Loss of around DKK 3.5 billion vs. around DKK 3.3 billion

<table>
<thead>
<tr>
<th></th>
<th>3 May 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital expenditure</td>
<td>Around DKK 9.0 billion</td>
</tr>
<tr>
<td>Depreciation, amortisation and impairment losses</td>
<td>Around DKK 4.5 billion</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>DKK 29 to 34 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 5 August 2019.

CER: Constant exchange rates

\(^1\) A potential tax rate from the Swiss tax reform is not included until the legislative process in Canton Zurich has been finalised.
Key take-aways – First six months of 2019

**Diabetes franchise grew 4%** and Novo Nordisk expands global market leadership to 28.3% (up from 27.5%, YoY)

- **Insulin sales** decreased 1% but Novo Nordisk expands volume market leader position to 46.8% insulin market share (up from 46.5%)
- **GLP-1 sales** grew 18% and Novo Nordisk remains market global leader with 46.4% value market share, which has stabilised following the solid launch of Ozempic®
- Three late-stage clinical trials – SUSTAIN FORTE, FLOW and FOCUS – initiated with sc semaglutide; along with the initiation of SOUL, a CVOT with oral semaglutide

**Obesity sales** increased by 56% driven by IO (121% sales growth) and NAO (28% sales growth). Saxenda® is now launched in 43 countries

**Biopharm sales** increased by 3%, driven by increased haemophilia sales and supported by the continued global roll-out of NovoEight® and Refixia®

**Sales growth of 5%** driven by IO (12% sales growth), partly offset by NAO (2% sales decline)

**Operating profit growth of 6%** driven by sales performance and continued focus on cost control

**Sales growth** in 2019 now expected to be **4-6%** with a positive currency impact of 3%-points

**Operating profit growth** in 2019 now expected to be **4-6%** with a positive currency impact of 5%-points

Note: Sales growth numbers are stated in constant exchange rates
IO: International Operations; NAO: North America Operations; CVOT: Cardiovascular outcomes trial; sc: subcutaneous; YoY: Year on Year
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**

01 Nov 2019  Financial statement for the first nine months of 2019
20 Nov 2019  Capital Markets Day
05 Feb 2020  Financial statement for the full year of 2019

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