REGION EUROPE AND REGION JAPAN & KOREA
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® is approved for the management of type 2 diabetes only
- Saxenda® is approved in the USA and the EU for the treatment of obesity only

Note: All notes, sources and abbreviations for this presentation are found in the appendix.
Securing success in Region Europe and Region Japan & Korea is important for continued strong growth in IO

~50% of IO sales

More than 7 million patients treated with Novo Nordisk products and several key markets

Early launch markets and fast adoption of new products
Sales growth in Region Europe has accelerated driven by a clear strategy and sharpened focus on execution.
Sales growth in Region Europe has accelerated driven by a clear strategy and sharpened focus on execution.

Region Europe annual sales growth at CER

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>0.2%</td>
</tr>
<tr>
<td>2015</td>
<td>1.8%</td>
</tr>
<tr>
<td>2016</td>
<td>1.4%</td>
</tr>
<tr>
<td>2017</td>
<td>3.1%</td>
</tr>
<tr>
<td>2018</td>
<td>2.5%</td>
</tr>
<tr>
<td>2019</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

WinEurope2020 strategy

- Shape our healthcare environment
- Lead with a business mind-set
- Excel in operations
- Deliver better care for patients
- Grow Market Share
A clearly defined strategy sets the direction for growing market share and outperforming competition in Europe.
Novo Nordisk takes an active role in driving better understanding and improvements of healthcare

Drug spending and disease burden in Europe across the largest therapy areas

- Autoimmune: 79% Other: 21%
- Oncology: 62% Drug expenditure: 38%
- Diabetes: 93% Other: 7%

Shape our healthcare environment

Grow Market Share

Deliver better care for patients

Lead with a business mind-set

Excel in operations
Delivering better care for patients is driving market share gains

Novo Nordisk GLP-1 value market share and share of growth in European countries where Ozempic® is launched

Deliver better care for patients
Shape our healthcare environment
Lead with a business mind-set
Excel in operations

Grow Market Share

-20%
0%
20%
40%
60%
80%

Sep 2017
Sep 2019

VICTOZA
CV indication
OZEMPIC

Market share
Share of growth

71%
63%
Delivering better care for patients is driving market share gains

Insulin value market share development in France

- Eli Lilly: 16%
- Sanofi: 35%
- Novo Nordisk: 49%

- Grow Market Share
- Shape our healthcare environment
- Deliver better care for patients
- Lead with a business mind-set
- Excel in operations

CAPITAL MARKETS DAY 2019
SLIDE 10
Sales growth in Region Europe has accelerated driven by a clear strategy and sharpened focus on execution.

Region Europe annual sales growth at CER

- 2014: 0.2%
- 2015: 1.8%
- 2016: 1.4%
- 2017: 3.1%
- 2018: 2.5%
- 2019: 6.2%
Sales growth in Region Europe has accelerated driven by a clear strategy and sharpened focus on execution.
Sales growth in Region Europe has accelerated driven by a clear strategy and sharpened focus on execution.

**GLP-1**
- Ensure that Ozempic® and Rybelsus® deliver market share increases and market segment growth

**Insulin**
- Differentiate basal insulin, protect bolus insulin franchise and optimise resource allocation

**Obesity**
- Secure public reimbursement while improving out-of-pocket patient access for Saxenda® and prepare for semaglutide obesity

**Biopharm**
- Excel new haemophilia launches and label extensions
- Excellence in GHD and prepare for somapacitan

**Expected Novo Nordisk Europe share of growth per product class in the short- to mid-term**

- GLP-1: 65%
- Insulin: 18%
- Obesity: 14%
- Biopharm: 3%
REGION JAPAN & KOREA
Region Japan & Korea is going through some notable changes

Patients
- Ageing society
- Longer life expectancy
- More elderly living alone

Healthcare professionals
- Tighter regulation on promotion
- More restriction on physicians visits
- More regulation on interactions with health care professionals and promotional materials

Payers & Regulators
- More use of generics and biosimilars
- New drug pricing policy introduction and expansion of health technology assessments
- Introduction of comprehensive regional care

Competitors
- Increase in brand share of voice by co-promotion
- Entry of new product classes
- Numerous upcoming launches
Novo Nordisk has great potential to improve its market footprint in Japan

Diabetes value market per product class

OAD segment is by far the most dominant in the Japanese diabetes market

5-year CAGR: 5.3%

CAGR per class
- 4%
- 90%
- -9%
- 36%
- 3%

Insulin value market shares

Novo Nordisk has taken market share in the insulin space with new-generation portfolio

GLP-1 value market shares

Novo Nordisk has been under pressure in the GLP-1 space since dulaglutide launch

Diabetes value market per product class

Insulin value market shares

GLP-1 value market shares

OAD segment is by far the most dominant in the Japanese diabetes market

Novo Nordisk has taken market share in the insulin space with new-generation portfolio

Novo Nordisk has been under pressure in the GLP-1 space since dulaglutide launch
A clear strategy in place to outperform competition with a novel product portfolio and the Market Fit approach

**Insulin**
Expand leadership with Xultophy® and continued strong uptake of Ryzodeg®

**GLP-1**
Accelerate class expansion and regain market share by launching Ozempic® and Rybelsus®

**Obesity**
Establish obesity as a disease area that requires medical intervention and prepare for semaglutide obesity

**Biopharm**
Strengthen haemophilia position with full portfolio and leverage GHD leadership to launch somapacitan upon approval
Several exciting launches in Japan & Korea are expected to drive growth in the short- to medium-term.
Launching Rybelsus® in Japan is expected to significantly expand Novo Nordisk’s competitiveness.

The Japanese diabetes market is dominated by OADs

\[ \approx 80\% \]

of people in Japan treated with diabetes medication are on OADs

Strong results in the PIONEER trials including Japanese patients

Rybelsus® is expected to be launched in Japan with a partner to expand reach

HbA1c change from baseline at week 78 in PIONEER 3

-0.3%
-0.4%
-0.7%
-1.1%
-0.4%

 Oral

sema

3 mg

7 mg

4 mg

Sitagliptin

100 mg

33%
67%

Patients with HbA1c > 7% treated by doctors that Novo Nordisk does not visit

Patients with HbA1c > 7% treated by doctors that Novo Nordisk visit
Strong life-cycle management of Norditropin® has made it the single-largest Novo Nordisk sales brand in Japan.

**Norditropin® sales development**

1988 GHD

1988

1991 Turner Syndrome

1993 Norditropin® 241.4U. Nordiject® 241.4U.

1997 Achondroplasia

1997

2000 1st liquid GHT Norditropin® 5 and 10 mg NordiPen® 5 and 10 mg

2000

2004 Norditropin® NordiFlex® 5 and 10 mg

2004

2006 Norditropin® NordiFlex® 15 mg

2006

2008 NordiFlex Penmate®

2008

2009 SGA & Adult GHD

2009

2010 Norditropin® FlexPro® Downsize packaging

2010

2011 FlexPro® Penmate®

2011

2015 Noonan Syndrome

2015

2017 Norditropin® FlexPro®

2017

2018

DKK million

1,600

1,200

800

400

0


5-year CAGR, 2014-19

4.7%

value market share

47%
A clear strategy in place to outperform competition with a novel product portfolio and the Market Fit approach

- **Commercial innovation**: Improve the quality of care patients receive by developing and offering digital health solutions
- **Unmet medical needs**: Bring innovative new drugs to people living with chronic diseases and unmet medical needs
- **Patient health & Social contribution**: Establish more public-private partnerships to generate benefits to the Japanese society
- **People & organisation**: Transform Novo Nordisk Japan into a ‘world-class organisation’ and a leading employer in Japan
Positive experiences on leveraging external partnerships leading to win-win situations

Koriyama City Partnership

Chairmanship of EFPIA Japan has led to a constructive dialogue on how to reward innovation in the Japanese pricing policy

A novel public-private partnership between Koriyama city, Fukushima medical university and Novo Nordisk Japan has generated valuable insights on social, cultural and environmental factors influencing treatment outcomes that can now be addressed.
Closing remarks

~50% of IO sales comes from Region Europe and Region Japan & Korea so it is pivotal to succeed in these regions.

New product launches and sharpened execution are expected to drive continued growth in Region Europe and Region Japan & Korea.

Clear regional strategies are in place to outperform competition and continue to develop the organisations.
Sources, notes and abbreviations – Region Europe and Region Japan & Korea

- **Slide 5 and 6:** First nine months, CER: constant exchange rates
- **Slide 7:** Source: IQVIA million DKK MAT, September 2019
- **Slide 8:** Source: OECD, based on EU28, 2018
- **Slide 9:** Source: IQVIA million DKK 3-month rolling, September 2019
- **Slide 10:** Source: IQVIA million DKK 3-month rolling, September 2019
- **Slide 11 and 12:** First nine months, CER: constant exchange rates
- **Slide 16:** Source: IQVIA million DKK MAT, September 2019
- **Slide 18:** Note: brand name "Rybelsus" is subject to local regulatory review and approval, not yet approved in Japan; New launches constitute showed launches; Older products constitute all other NN products
- **Slide 19:** Source: IQVIA million DKK MAT, September 2019; *Statistically significant in favour of oral semaglutide compared with sitagliptin at a 5% significance level; Rosenstock J, et al. JAMA 2019;321:1466–80; PIONEER 3 included 207 Japanese patients; sema: Semaglutide
- **Slide 20:** Internal sales reports at CER; IQVIA million DKK MAT, September 2019
Region Europe: Diabetes market share and market growth

Diabetes market growth and Novo Nordisk market share

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

Diabetes market size and growth

- DKK billion
- ~7%
- ~8%

Source: IQVIA, September 2019, Value, MAT, all countries
# Region Europe: Insulin market size and volume share of growth and market share

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Novo Nordisk</th>
<th>Competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>46%</td>
<td>29.7</td>
</tr>
<tr>
<td>Basal</td>
<td>37%</td>
<td>14.6</td>
</tr>
<tr>
<td>Bolus</td>
<td>54% 46%</td>
<td>9.4</td>
</tr>
<tr>
<td>Premix</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>Human</td>
<td>3.3</td>
<td></td>
</tr>
</tbody>
</table>

## Market growth and Δ Market share\(^1\)

<table>
<thead>
<tr>
<th>Category</th>
<th>Market growth</th>
<th>Δ Market share(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2%</td>
<td>+0.6%</td>
</tr>
<tr>
<td>Basal</td>
<td>6%</td>
<td>+1.5%</td>
</tr>
<tr>
<td>Bolus</td>
<td>3%</td>
<td>+0.6%</td>
</tr>
<tr>
<td>Premix</td>
<td>-9%</td>
<td>-0.7%</td>
</tr>
</tbody>
</table>

## Insulin volume: Share of growth and market share

![Graph showing market share and volume share for Novo Nordisk and competitors.](image)

### Source
IQVIA, Sep 2019, LHS graph – Value, RHS Graph - Volume, MAT, all countries
Region Europe: GLP-1 market share and market growth

GLP-1 market growth and Novo Nordisk market share

Source: IQVIA, September 2019, Value, MAT, all countries

GLP-1 market size and growth

Source: IQVIA, September 2019, Value, MAT, all countries
Region Europe: Obesity market share and market growth

**Obesity market growth and Novo Nordisk market share**

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

**Obesity market size and growth**

- DKK billion
  - Sep 2018: 0.3
  - Sep 2019: 0.4
  - Saxenda®: 0.1
  - Others: ~39% of 0.3
  - ~26% of 0.3

**Source:** IQVIA, Sep 2019, Value, MAT, all countries
Region Japan & Korea: Diabetes market share and market growth

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Novo Nordisk</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 2016</td>
<td>11%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Sep 2019</td>
<td>10%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Diabetes market size and growth**

- **nn** growth: 10.1%
- **Market growth**: ~11%
- **Boehringer Ingelheim**: 0.6
- **Others**: 2.3
- **Sep 2019**: 31.6

Source: IQVIA, September 2019, Value, MAT, all countries; Share of growth not depicted due to too high numbers
Region Japan & Korea: Insulin market size and volume share of growth and market share

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Market Growth</th>
<th>Δ Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4.2</td>
<td>+0.5%</td>
</tr>
<tr>
<td>Basal</td>
<td>1.7</td>
<td>+0.7%</td>
</tr>
<tr>
<td>Bolus</td>
<td>1.3</td>
<td>-1.0%</td>
</tr>
<tr>
<td>Premix</td>
<td>0.8</td>
<td>+4.1%</td>
</tr>
</tbody>
</table>

### Insulin volume: Share of growth and market share

Source: IQVIA, Sep 2019, LHS graph – Value, RHS Graph - Volume, MAT, all countries; Share of growth not depicted due to too high numbers
Region Japan & Korea: GLP-1 market share and market growth

**GLP-1 market growth and Novo Nordisk market share**

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

**GLP-1 market size and growth**

- **DKK billion**
  - ~33%
  - ~17%
  - 2.2

**Competitors**

- **Novo Nordisk**
- **Lilly**
- **Others**

Source: IQVIA, September 2019, Value, MAT, all countries