



COPENHAGEN
Denmark

CAPITAL MARKETS DAY 2019

Consolidated presentation

CORPORATE STRATEGY



LEANDRO KUSTER
Switzerland
Leandro has haemophilia A

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.

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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.

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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

DRIVING
CHANGE
TO DEFEAT
DIABETES AND
OTHER SERIOUS
CHRONIC
DISEASES

DIABETES CARE

STRENGTHEN LEADERSHIP

BY OFFERING
INNOVATIVE
MEDICINES AND
DRIVING PATIENT
OUTCOMES

SECURE A LEADING POSITION

BY LEVERAGING
FULL PORTFOLIO
AND EXPANDING
INTO ADJACENT AREAS

BIOPHARM

NOVO NORDISK WAY

DRIVING
CHANGE
TO DEFEAT
DIABETES AND
OTHER SERIOUS
CHRONIC
DISEASES

CORE CAPABILITIES

OBESITY CARE

STRENGTHEN TREATMENT OPTIONS

THROUGH MARKET
DEVELOPMENT AND BY
OFFERING INNOVATIVE
MEDICINES AND DRIVING
PATIENT OUTCOMES

ESTABLISH PRESENCE

BY BUILDING
COMPETITIVE
PIPELINE AND
SCIENTIFIC LEADERSHIP

OTHER SERIOUS CHRONIC DISEASES

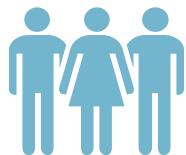
Sustained growth opportunities – strategic aspirations for 2025



Purpose and
sustainability



Innovation and
therapeutic focus



Commercial execution



Financial outlook

Novo Nordisk has come a long way

A photograph of three cyclists in blue and white racing gear competing on a road. They are in a hunched position, pedaling hard. The background shows a body of water and a cloudy sky.

STRENGTHEN
COMMERCIAL EXECUTION

A large, glowing lightbulb with a blue tint, symbolizing innovation and ideas.

INCREASE
INNOVATION BAR

EVOLVE OUR CULTURE

Today's agenda

Timing	Topic
09.00 – 09.15	Corporate strategy
09.15 – 10.15	Diabetes
10.15 – 10.30	Corporate strategy & Diabetes Q&A
10.30 – 10.45	Break
10.45 – 11.20	Obesity
11.20 – 11.50	Biopharm
11.50 – 12.00	Obesity & Biopharm Q&A
12.00 – 13.00	Lunch

Timing	Topic
13.00 – 13.25	North America Operations
13.25 – 13.35	International Operations
13.35 – 13.45	NAO and IO Q&A
13.45 – 14.30	IO regional break-out, part I
14.30 – 15.15	IO regional break-out, part II
15.15 – 15.30	Break
15.30 – 16.00	Emerging therapies
16.00 – 16.30	Product Supply and Financials
16.30 – 17.00	Strategic priorities
17.00 – 18.00	Networking

DIABETES CARE

**STRENGTHEN
LEADERSHIP**
BY OFFERING
INNOVATIVE
MEDICINES AND
DRIVING PATIENT
OUTCOMES



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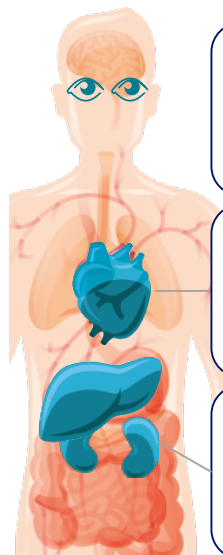
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Note: All notes, sources and abbreviations for this presentation are found on the last page.

People with diabetes have increased mortality risk with 8 years shorter life expectancy, highlighting the importance of innovation

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



Diabetes

- **Life expectancy** 8 years shorter¹
- Driven by **200%** increased risk of **all cause mortality**¹

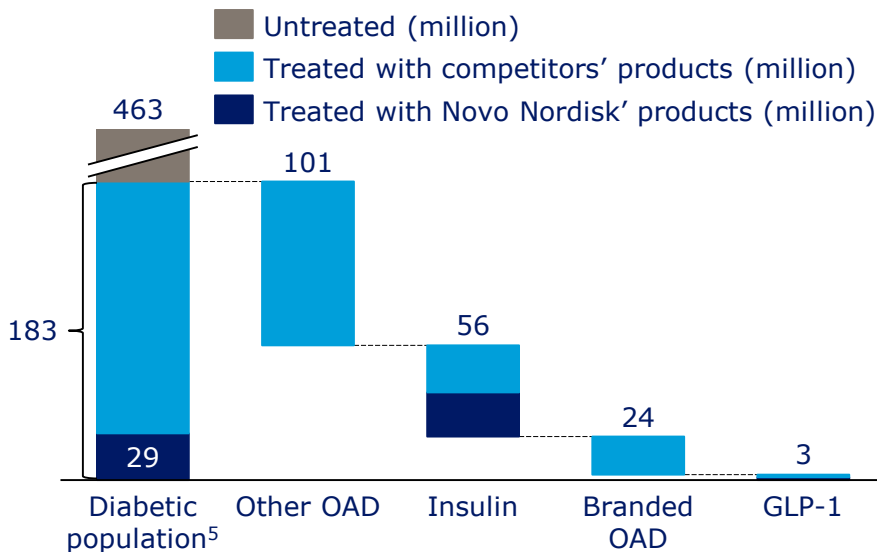
CVD

- **70%** of people with diabetes die from **atherosclerotic CVD**²
- **150%** increase in risk of stroke³

Organs

- Higher likelihood of neuropathy, retinopathy, limb amputation, cancer and cognitive dysfunction⁴

The unmet need remains large within diabetes



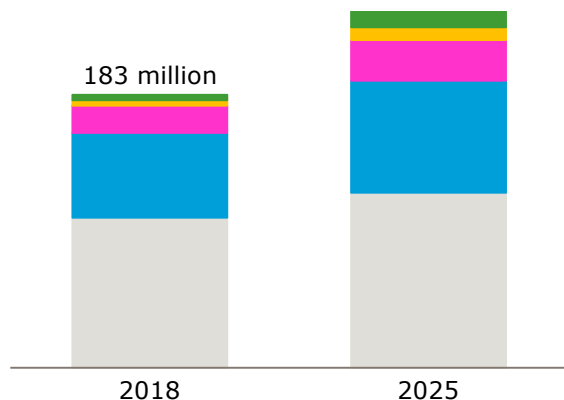
Diabetes volume growth remains solid with 4% growth in a large USD 48 billion diabetes market

The number of treated patients¹ is expected to grow by 4% annually towards 2025



CAGR: +4%

ILLUSTRATIVE

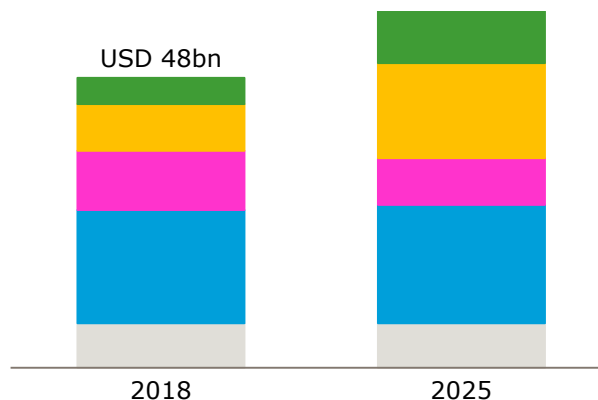


The diabetes realised value² is expected to grow by 4% annually towards 2025



CAGR: +3%
CAGR: +4% excl. DPP-4i

ILLUSTRATIVE



■ SGLT-2i ■ GLP-1 ■ DPP-4i ■ Insulin ■ Other OAD

Key trends in diabetes



Innovation focused on oral GLP-1 and combinations



Biosimilar competition and loss of exclusivity



Diabetes technology with digital health



Patients outcome beyond glucose control



Evolving payer dynamics and market access hurdles



Access and affordability of medicine

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

Develop new and innovative treatments until diabetes is defeated



Ensuring access by making Novo Nordisk medicines available and affordable



Support prevention by building capacity in health systems and societies



RYBELSUS® ONCE-WEEKLY **OZEMPIC®** **TRESIBA®**



US affordability

base
of the
pyramid

access to
insulin
COMMITMENT

changing
diabetes®
in children

PARTNERING
FOR CHANGE
Chronic Care in Humanitarian Cities



WORLD DIABETES FOUNDATION

cities
changing
diabetes

 **NCD**
The Defeat NCD Partnership

New environmental strategy aspiring to have zero environmental impact from operations and transportation by 2030

circular FOR zero

●
SOLVE GLOBAL
ENVIRONMENTAL
CHALLENGES

●
LEAVE ZERO
ENVIRONMENTAL
IMPACT

●
EMBED CIRCULAR
MINDSET ACROSS
ORGANISATION



Circular supply

Novo Nordisk will collaborate proactively with suppliers to embed circular thinking for reduced environmental impact across Novo Nordisk value chain and switch towards circular sourcing and procurement



Circular company

Novo Nordisk will eliminate environmental footprint from Novo Nordisk operations and drive a circular transition across the company aspiring for zero environmental impact

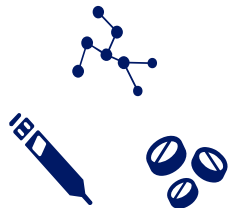


Circular products

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

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

Engineering, formulating, developing and delivering protein-based treatments



Today: Oral solutions to differentiate from competition

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

Efficient large-scale production of proteins



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

Tomorrow: Expand capacity by completion of the US diabetes API facility and continued efficiency gains

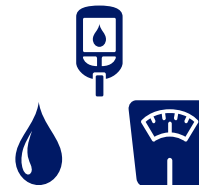
Global commercial reach and leader in chronic disease care



Today: Global reach and Ozempic® was the fastest blockbuster in diabetes

Tomorrow: Continued rollout of injectable diabetes portfolio and launch of Rybelsus®

Deep disease understanding



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

Tomorrow: Normalise living with diabetes supported by digital solutions

Novo Nordisk continues to expand the digital health offerings through partnerships and connected devices

New partnerships and connected devices to expand the digital health offerings

- Multiple non-exclusive partnerships with digital health companies



- Novo Nordisk expects to offer both a connected durable device and a smart add-on device for prefilled pens

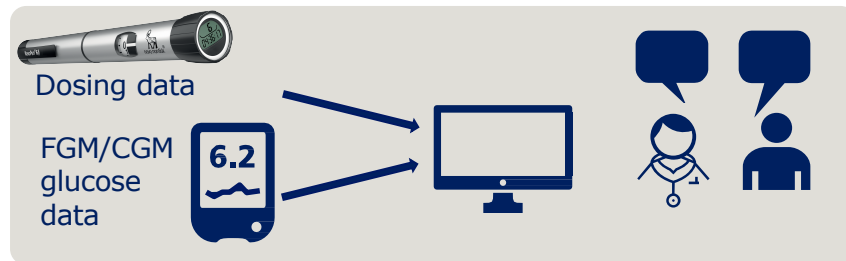


Connected durable device



Smart add-on cap

Reliable data leading to better doctor-patient conversations and treatment results



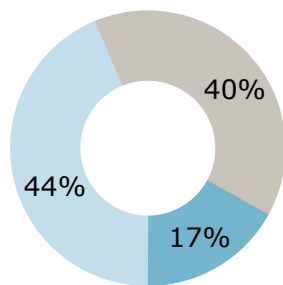
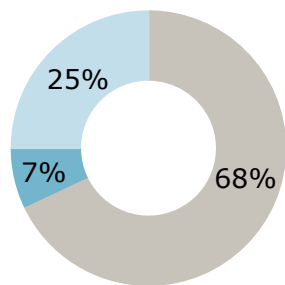
- ↓ 43% fewer missed meal-time insulin injections
- ↑ 28% increase in dose of meal-time insulin
- ↑ 2 additional hours in good glucose control per person per day

Novo Nordisk has a broad portfolio of products to target all segments in diabetes

Novo Nordisk has the ambition to be present and competitive in all diabetes segments

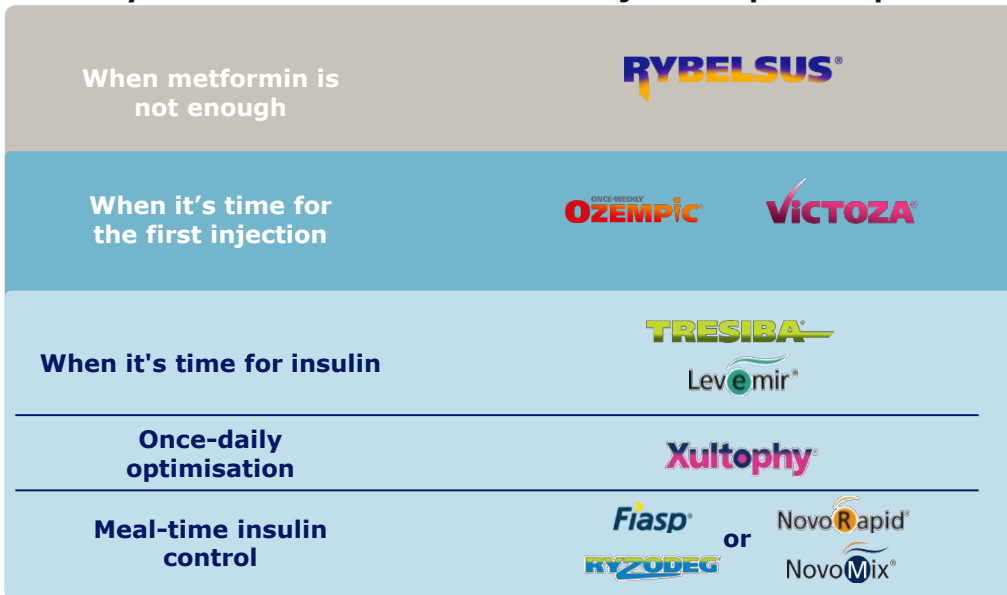
Treated diabetes patients:
183 million

Diabetes market value:
USD 48 billion



Tablets Inj. GLP-1 Insulin

Novo Nordisk is well positioned across the diabetes segments with the only oral GLP-1 and an innovative injectable product portfolio

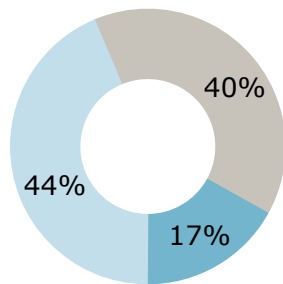
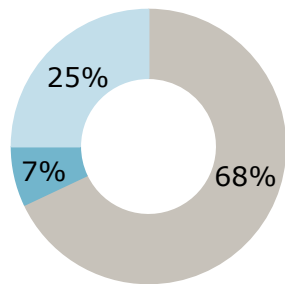


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Gain market share and have the preferred branded tablet

RYBELSUS®

Expand leadership and accelerate market growth

OZEMPIC®

Gain market share in basal insulin

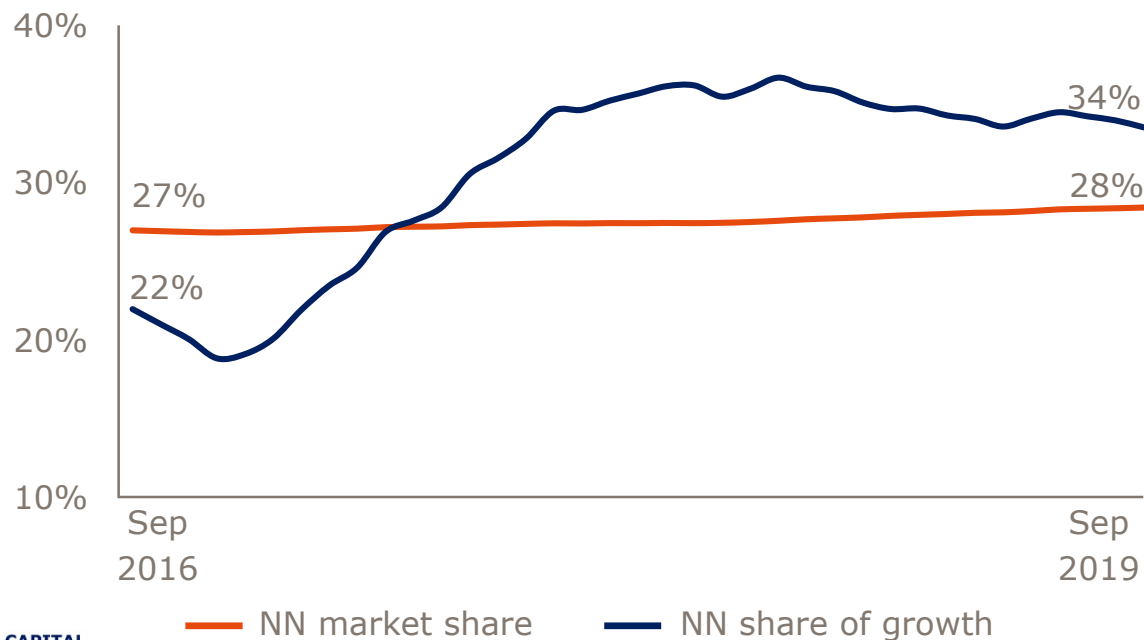
TRESIBA™
Xultophy®

Sustain insulin leadership in short-acting and premix

Fiasp®
RYZODEG®

Novo Nordisk expects to gain market share in a growing USD 48 billion diabetes market

Novo Nordisk has accelerated growth momentum and is well positioned to continue to take diabetes market share



Novo Nordisk diabetes ambitions



Increase market share by 2025 to more than 1/3 in a growing USD 48 billion diabetes market



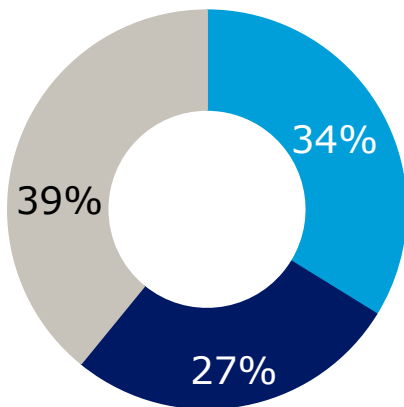
Drive growth via a sustainable business approach and an innovative injectable product portfolio



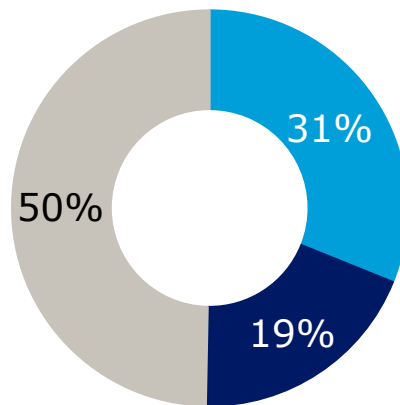
Accelerate growth further with Rybelsus®, the first and only oral GLP-1

Insulin sales remain important with 50% share of revenue but with less dependence on the US insulin sales

2014 sales split



2019 sales split¹



Insulin sales have declined from 61% to 50% of total sales

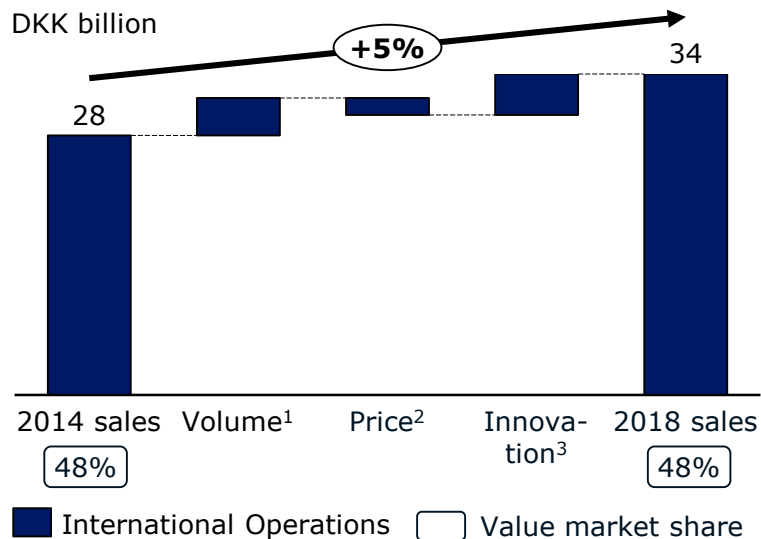
Insulin sales have increased by DKK ~5 billion to DKK ~60 billion between 2014 and 2018

Global leadership insulin leadership has increased from 40% to 44% value market share

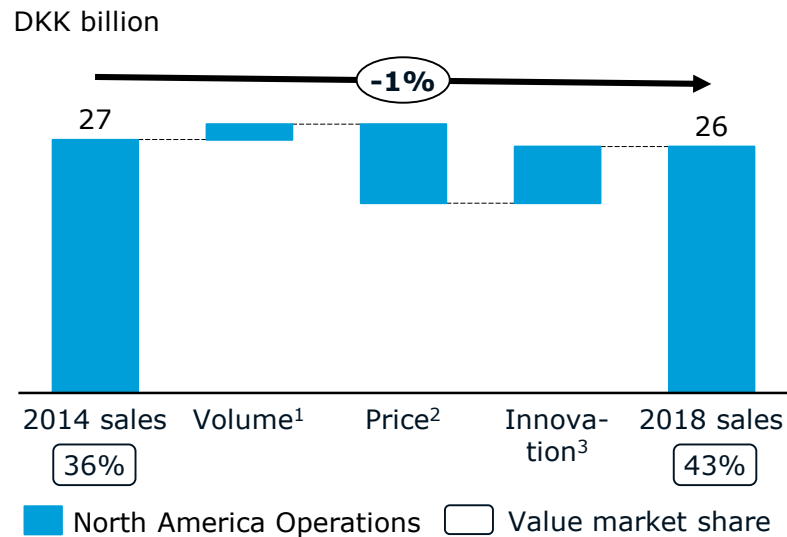
■ IO insulin ■ NAO insulin ■ Other products

Solid insulin sales growth in IO is driven by innovation and volume, partly offset by lower realised prices in NAO

IO insulin sales increased by 5% in CER driven by innovation and volume

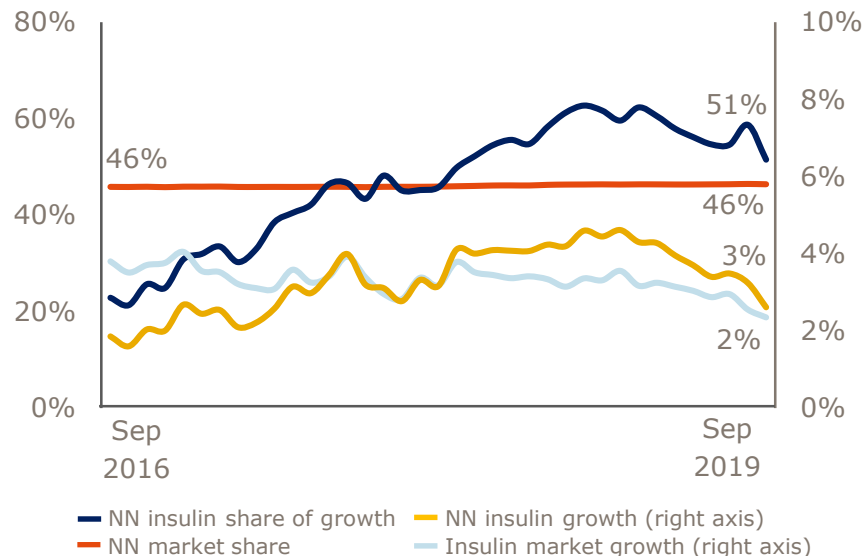


NAO insulin sales decreased by -1% in CER due to lower prices offset by innovation

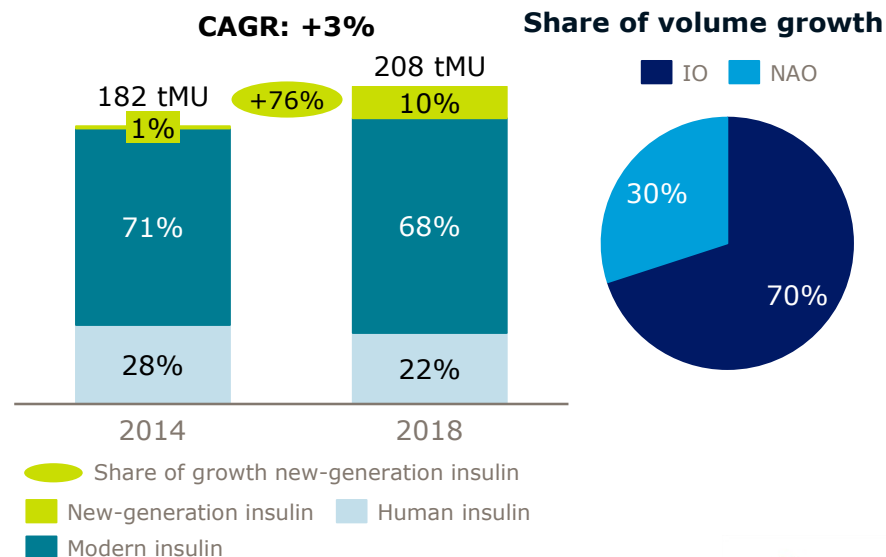


Novo Nordisk insulin volume growth remains stable at around 3% with growth driven by new-generation insulin

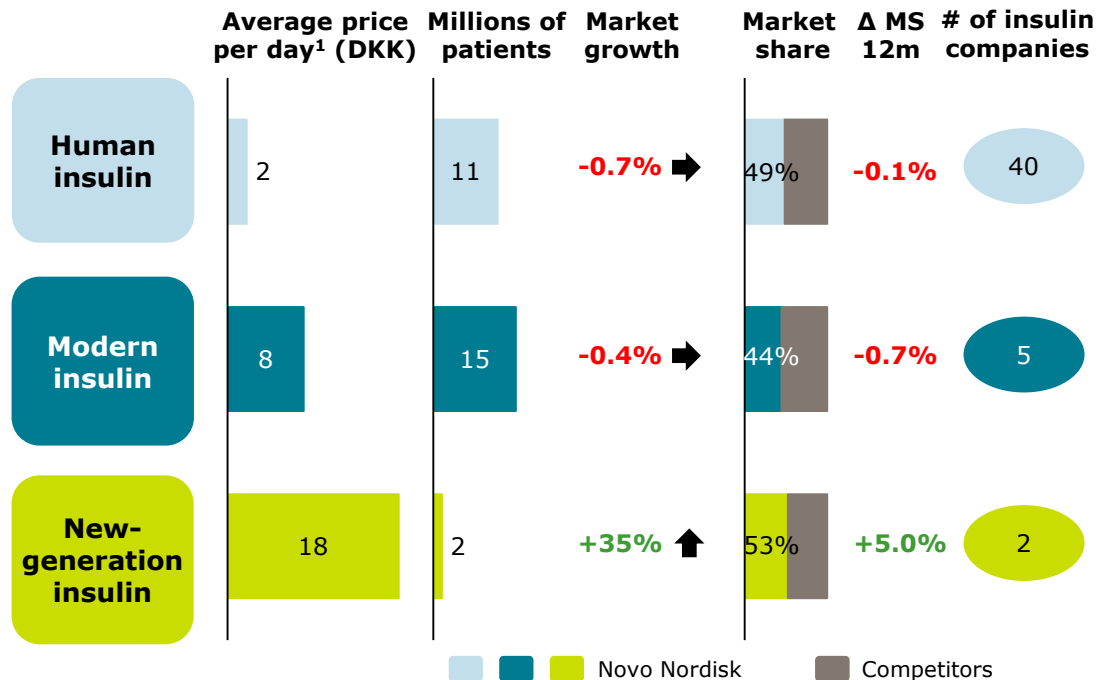
Novo Nordisk has grown on par with the market, but with growth momentum increasing during the last year



Novo Nordisk volume has increased by 3% with new-generation insulin driving 76% share of growth

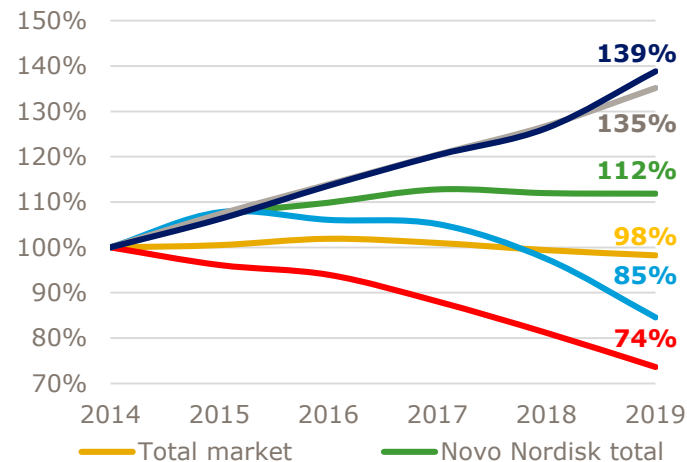


Novo Nordisk focuses on addressing unmet need by ensuring both affordable and innovative insulin are available to the patients



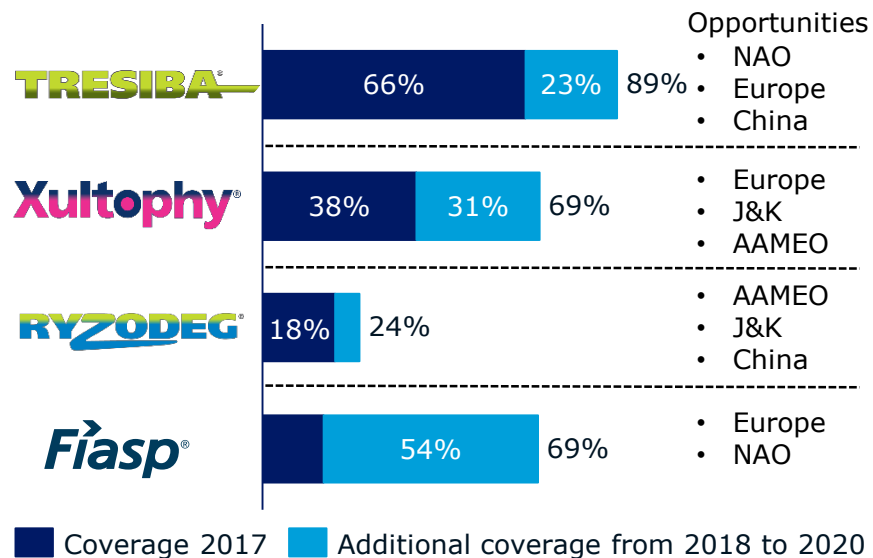
Novo Nordisk insulin sales growth is driven by International Operations²

Sales development



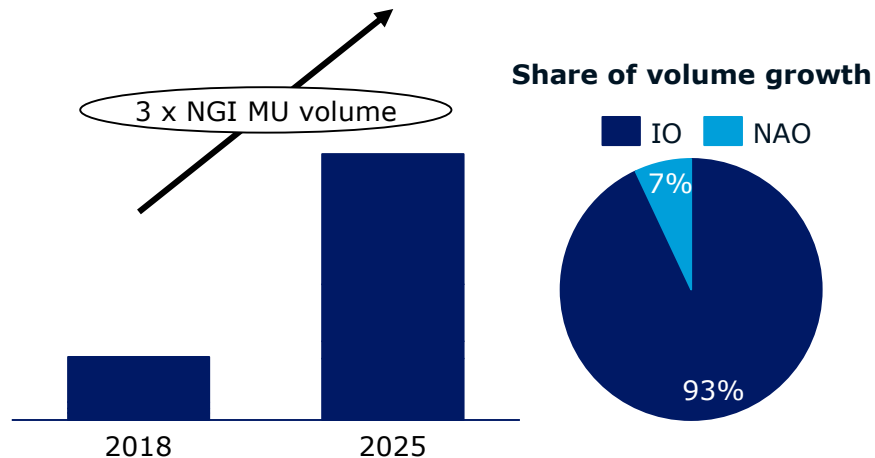
The coverage of new-generation insulin has significantly improved, which supports the ambition to triple the volume

The coverage of the NGI portfolio has increased during the last years



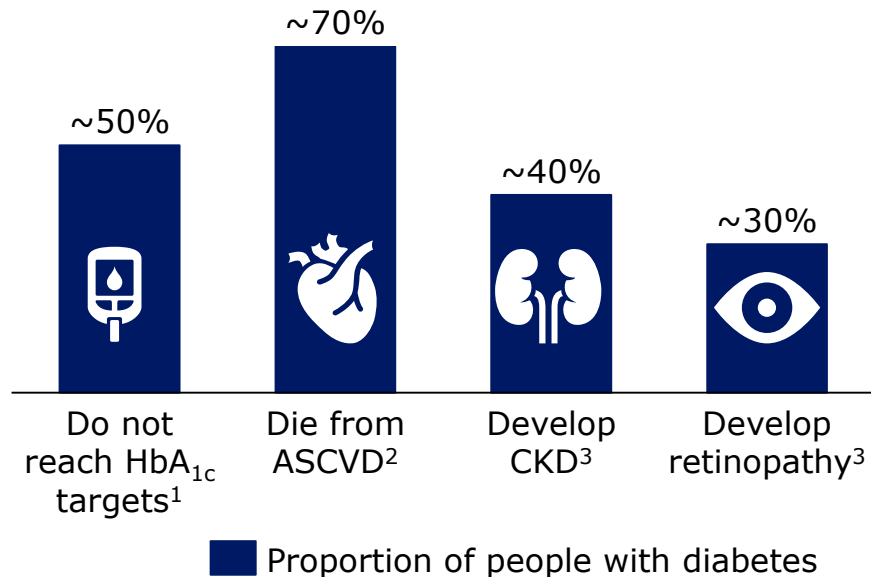
MU: Mega units

NGI portfolio expected to continue to increase volume

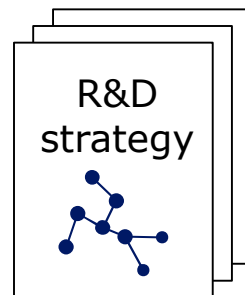


Novo Nordisk innovation targets outcomes beyond HbA_{1c} supporting the aspiration for normalising life with diabetes

The unmet medical need is large with high risk of developing diabetes-related comorbidities

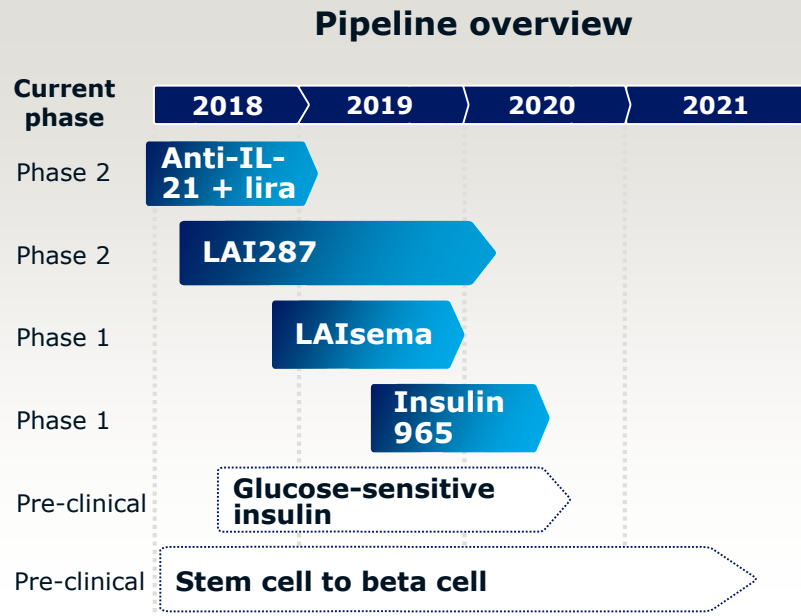
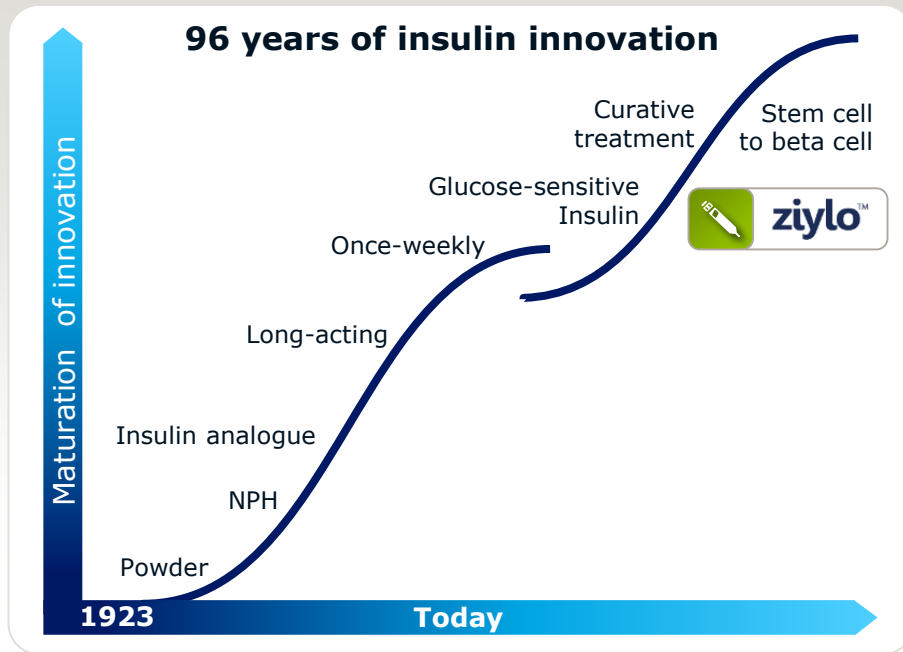


The R&D strategy focuses on further raising the diabetes innovation bar



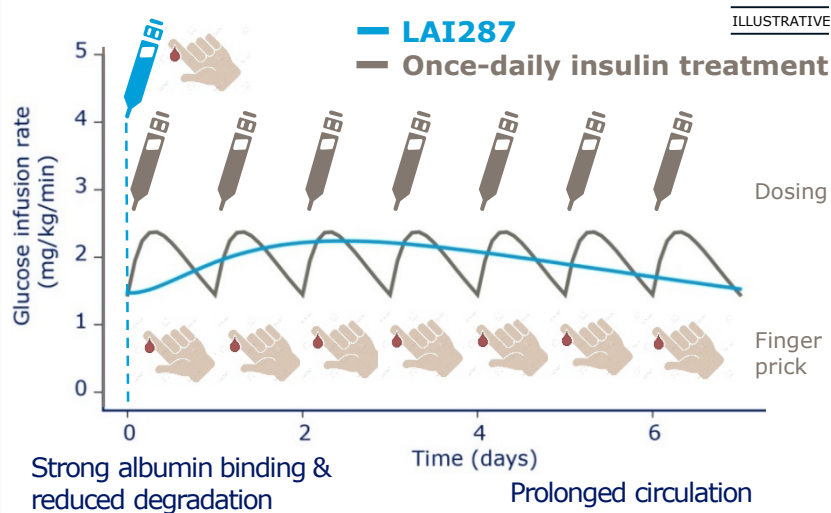
- The focus in diabetes is on driving outcomes beyond HbA_{1c}, targeting diabetes-related comorbidities
- The aspiration is for normalising life with diabetes

Novo Nordisk continues to pursue innovation of insulin with a higher innovation bar to address the current unmet need



LAI287 and insulin 965 are two new basal insulin with raised innovation bar

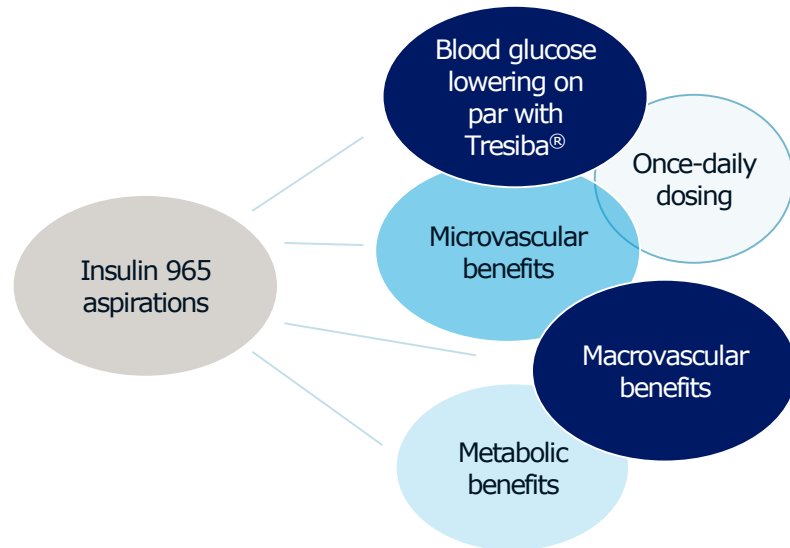
Steady state pharmacodynamic profile of LAI287 is suitable for once-weekly dosing¹



Expected phase 2 results first half 2020

LAI: Long-acting insulin

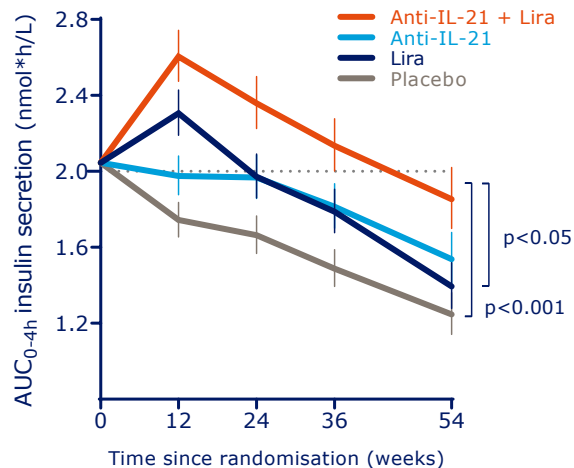
Insulin 965 has entered phase 1



Expected phase 1 results first half 2020

Antibody based mediated therapy can delay progression of T1D and stem cell-derived beta cell transplantation provides a potential cure

Insulin secretion after a meal is preserved with anti-IL21/liraglutide therapy in phase 2



Beta cell function was improved with anti-IL-21/liraglutide vs placebo

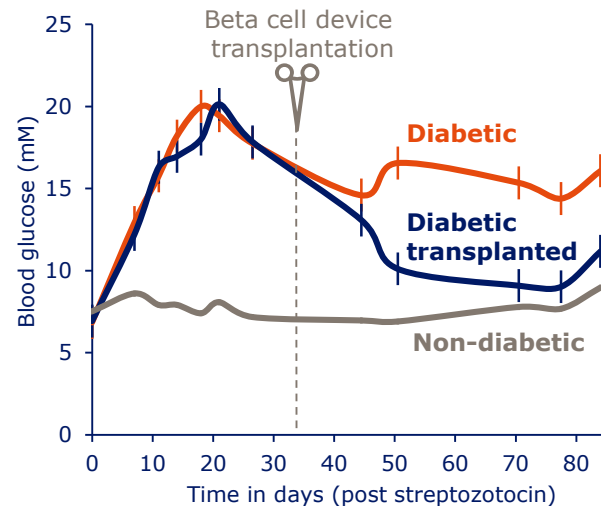


Insulin dose was reduced with anti-IL-21 and liraglutide in combination or alone

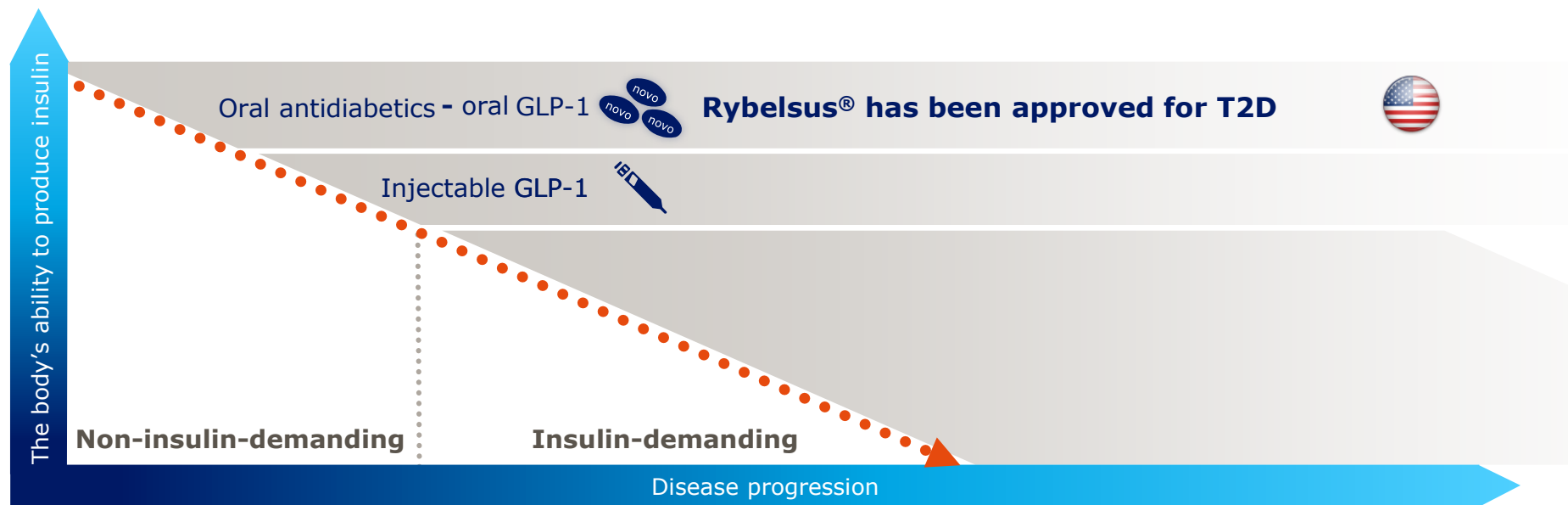


No **safety or tolerability** concerns were reported

Stem cell-derived beta cells normalise glucose levels in mice



GLP-1 should ideally be used as early in the treatment cascade of type 2 diabetes as possible

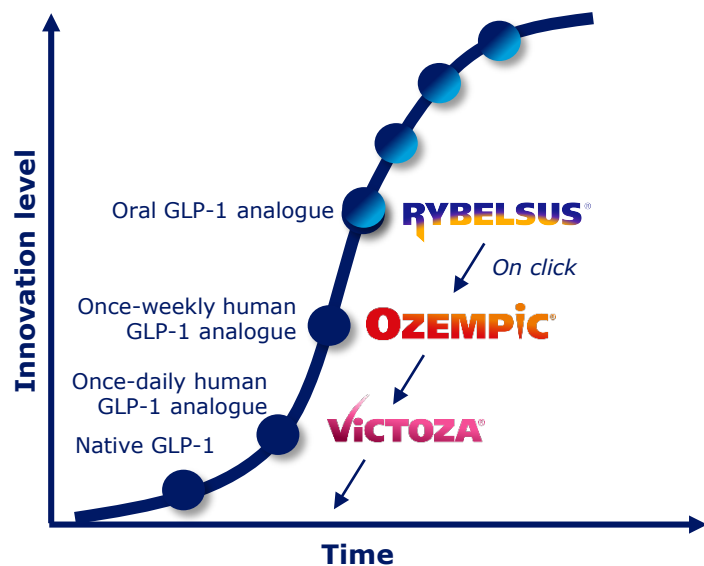


Rybelsus[®] is approved in the US with a competitive label

RYBELSUS[®]



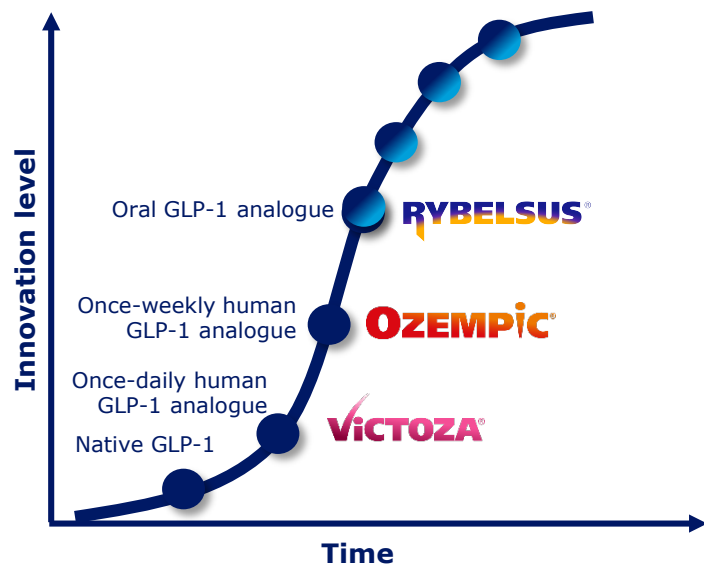
Novo Nordisk is at the forefront of innovation in the GLP-1 class and orally administered delivery devices



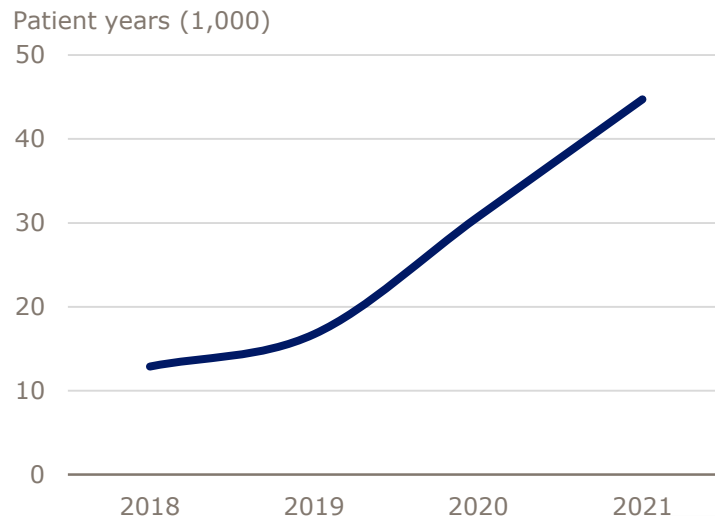
Development projects in progress

- Injectable QW GIP and semaglutide co-formulation
- Oral semaglutide with upgraded formulations
- New oral delivery devices 'Soma' and 'Lumi'
- Use of GLP-1 in additional indications

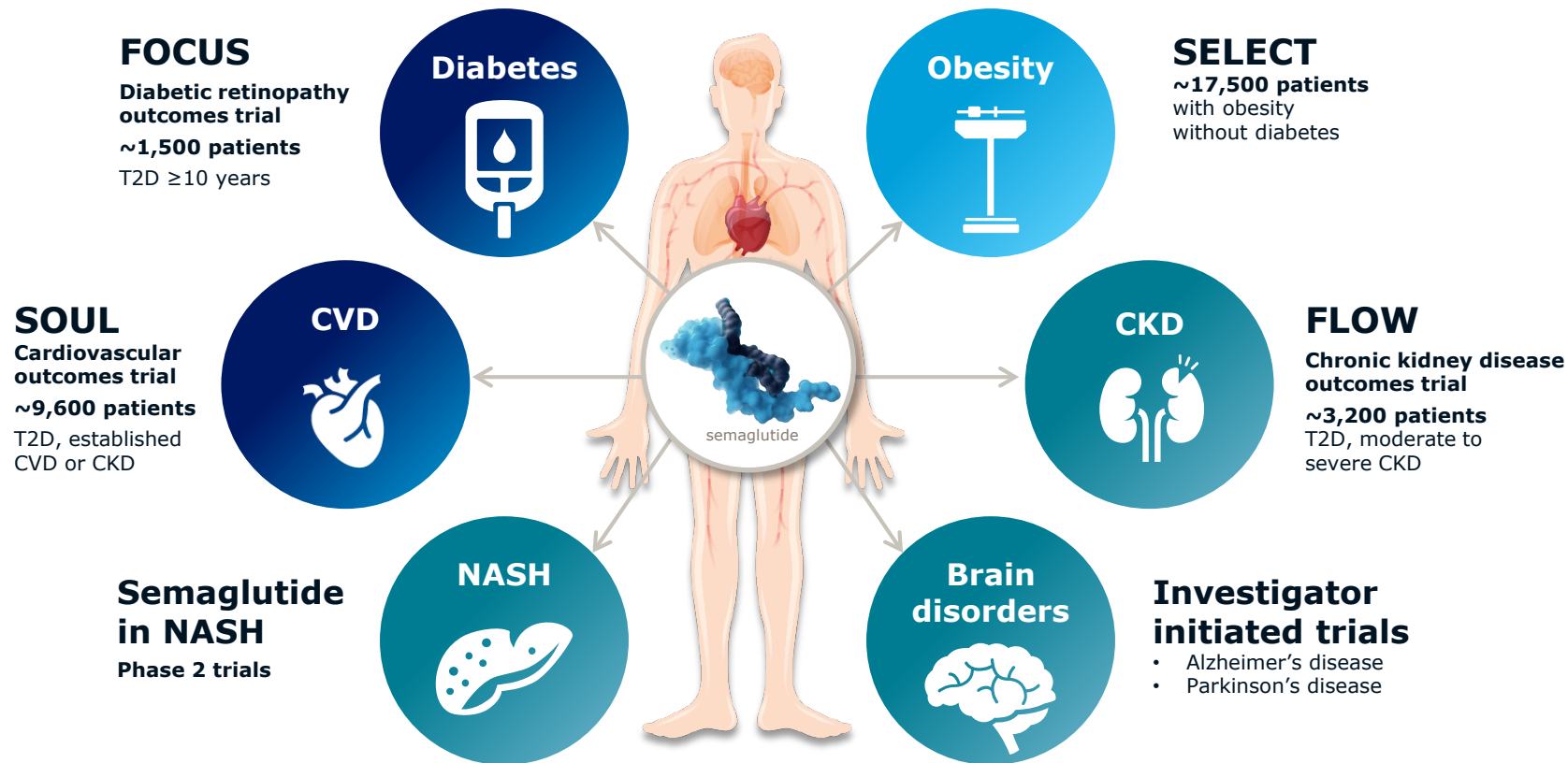
Novo Nordisk is at the forefront of innovation in the GLP-1 class and orally administered delivery devices



The number of patients enrolled in clinical trials is expected to more than triple in three years

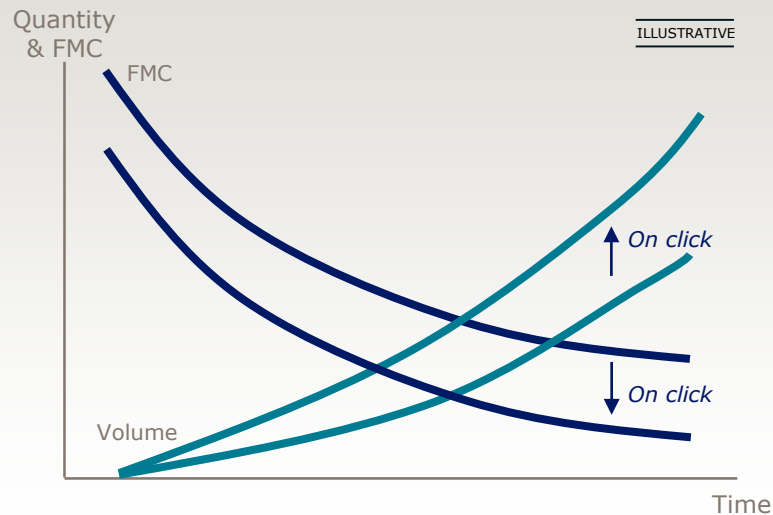


Semaglutide holds a plethora of therapeutic opportunities



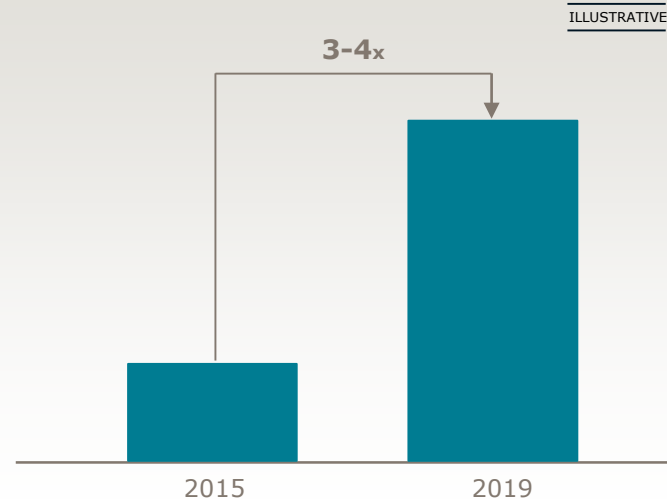
Production cost of Rybelsus® is expected to decrease over time, as volume increases, and capacity is significantly higher

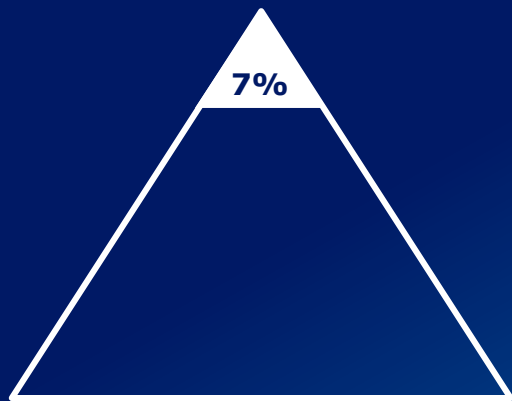
Rybelsus® production cost and volume



FMC: Full manufacturing cost

Production capacity today vs original plan



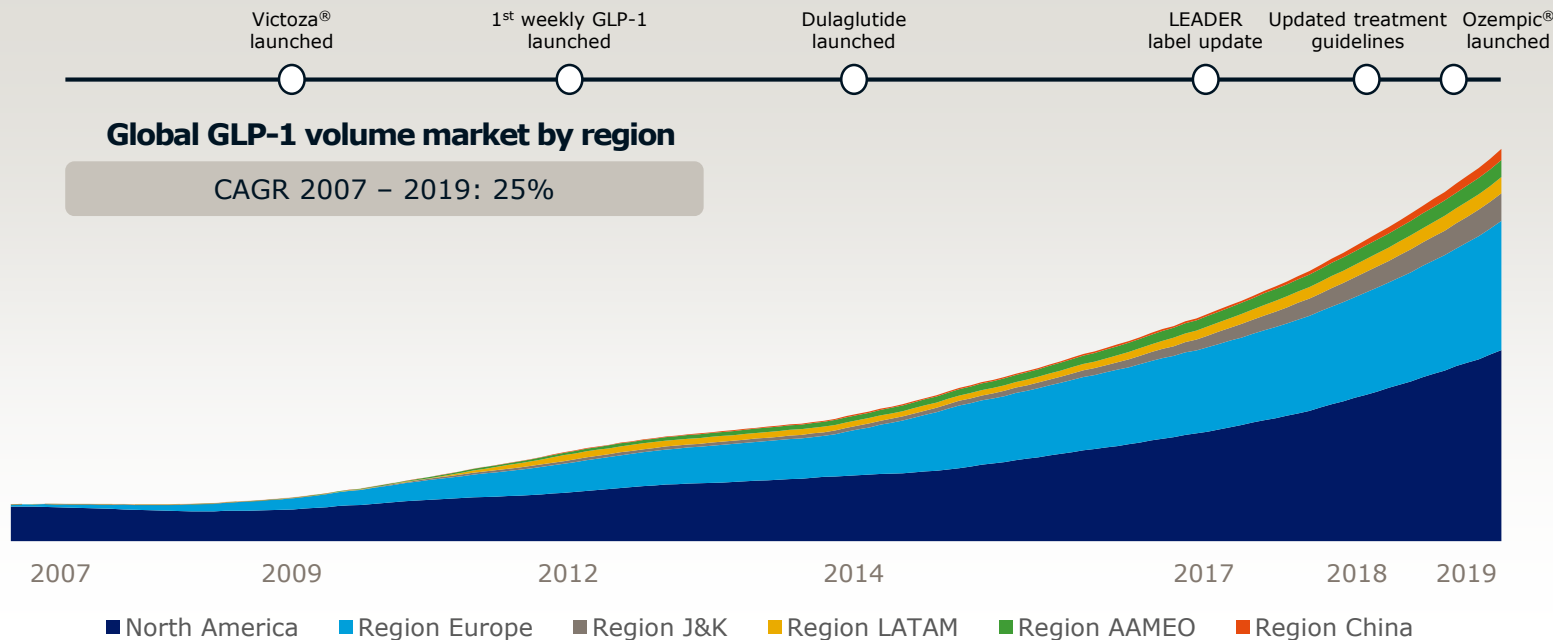


7% of people with type 2 diabetes are treated with a GLP-1 in Western markets

~50%

of patients on oral anti-diabetics are not in good control

The global GLP-1 market has accelerated over time following a string of key events



There are different dynamics across regions and GLP-1 penetration tends to be correlated with key events

Ozempic®
launched

Updated treatment
guidelines

LEADER
results

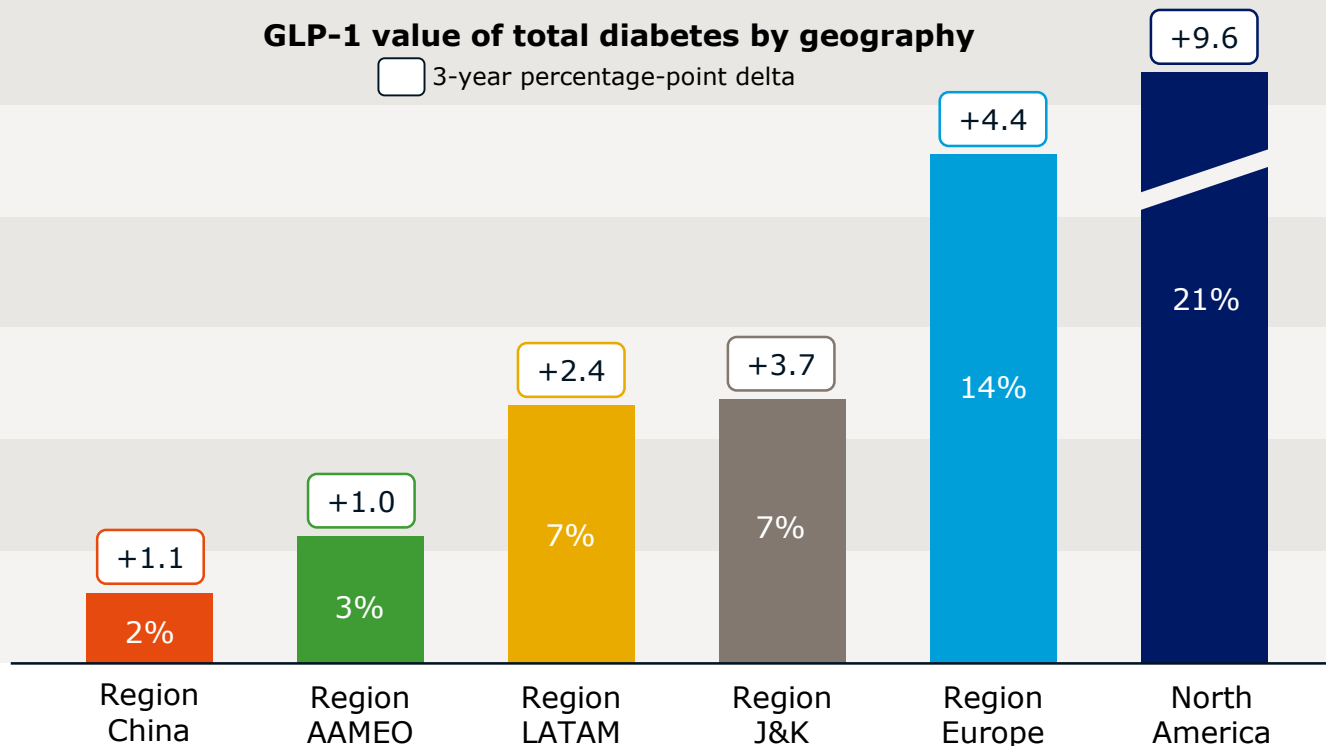
Dulaglutide
launched

1st weekly GLP-1
launched

Victoza®
launched

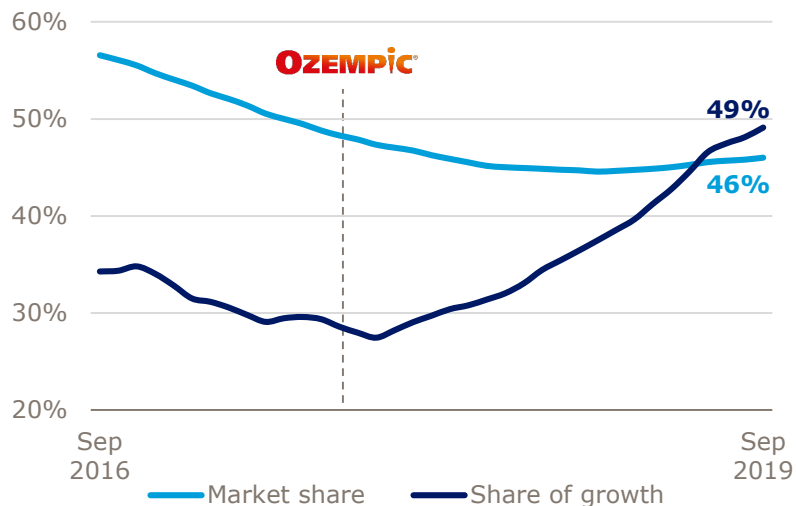
GLP-1 value of total diabetes by geography

3-year percentage-point delta

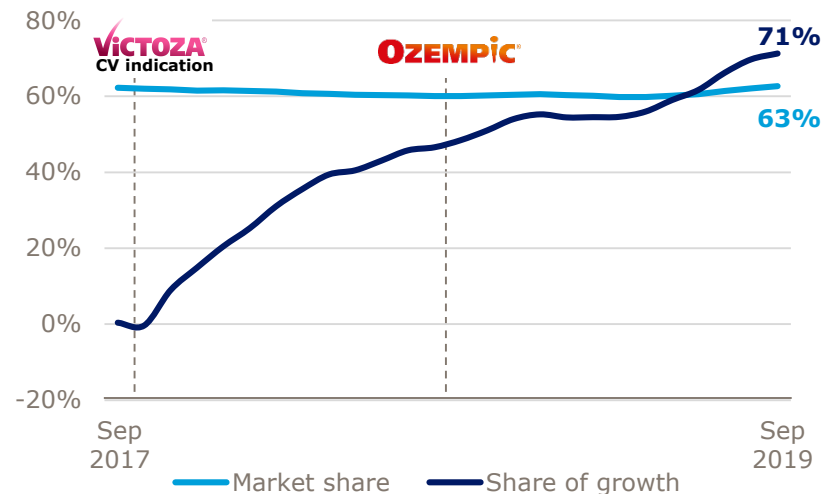


Ozempic® launch has turned around a declining market share trend

Novo Nordisk US GLP-1 value market share and share of growth

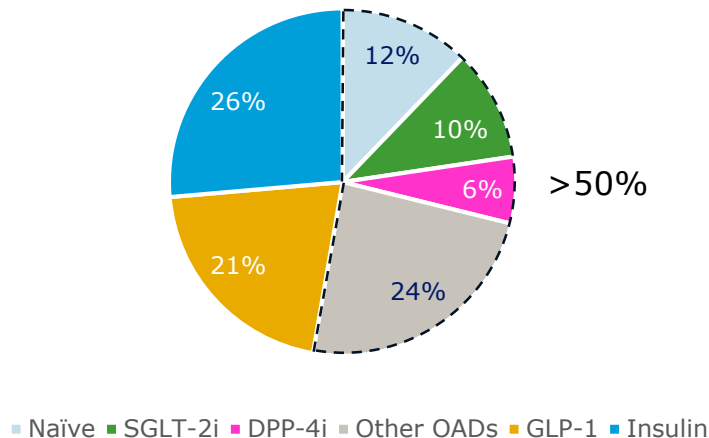


Novo Nordisk GLP-1 value market share and share of growth in European countries where Ozempic® is launched

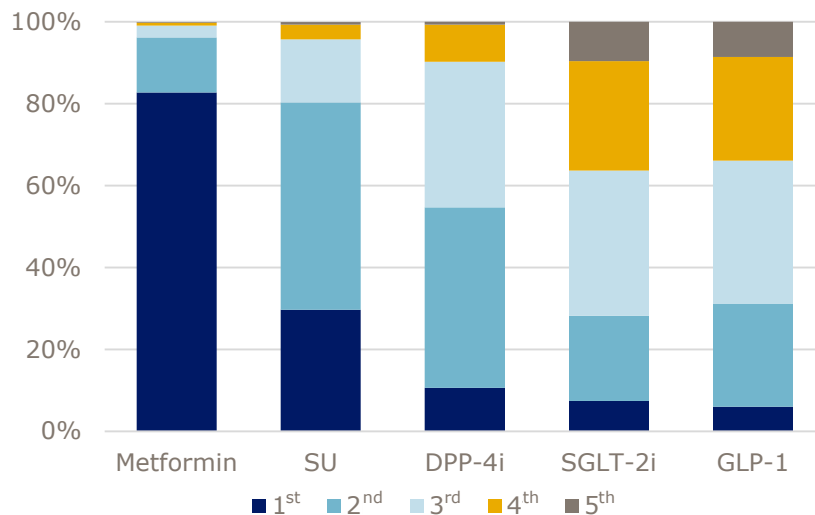


Ozempic® sourcing is primarily from outside the GLP-1 class but GLP-1s are still typically used after failure on other products

US TRx volume and Ozempic® source of patients

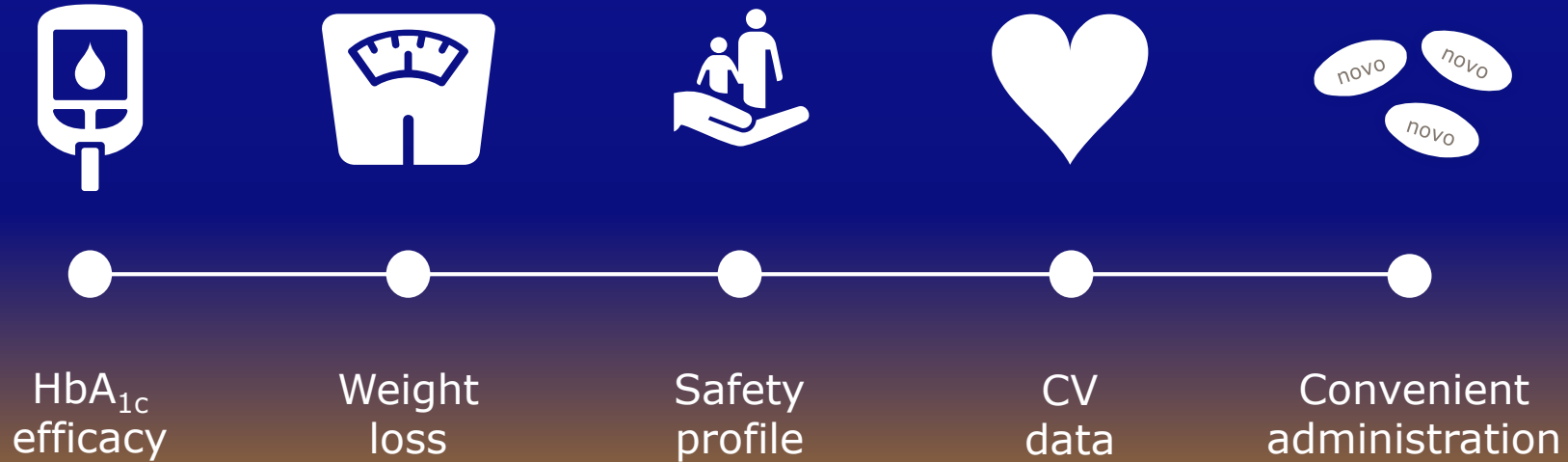


US 'line of usage' across product classes



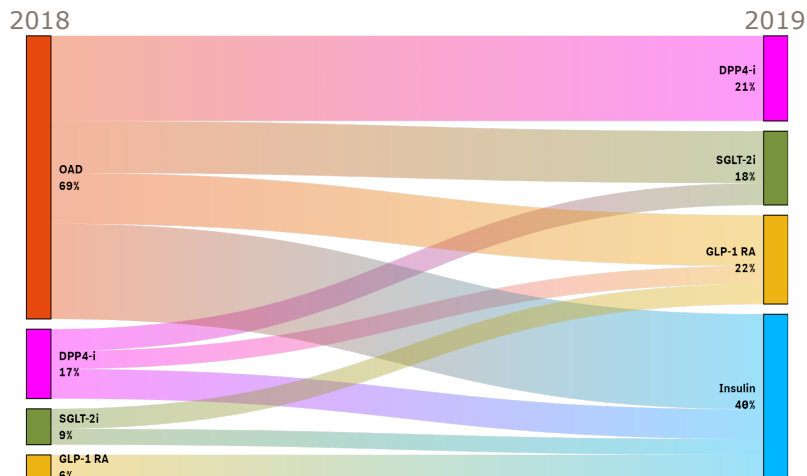
RYBELSUS®

Doctors are excited for Rybelsus® - the first and only oral GLP-1



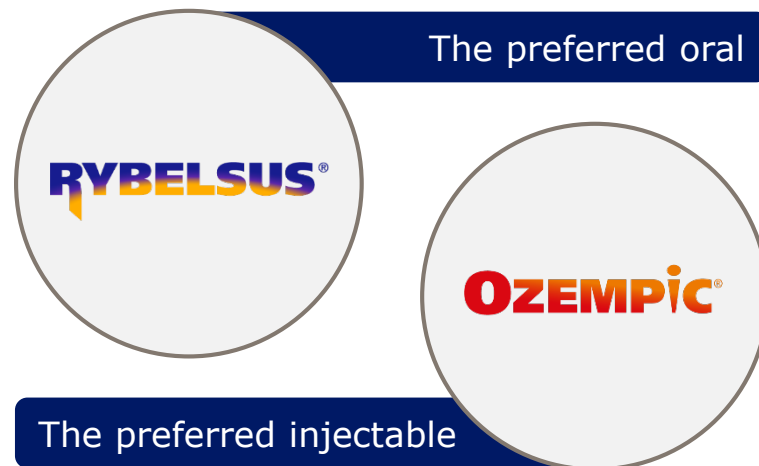
There is room for both oral and injectable GLP-1s to drive class growth

US patient dynamics in early type 2 diabetes treatment



~2 million patients in early type 2 diabetes treatment move to a more advanced regimen in any given year

Novo Nordisk's leading GLP-1 offerings



There is room for both oral and injectable GLP-1s to drive class growth – and Novo Nordisk has a best-in-class portfolio

Market Fit approach

Continued
expansion in
markets
without
Ozempic®

VICTOZA®

Controlled
migration in
markets
with
Ozempic®

The preferred oral

RYBELSUS®

OZEMPIC®

The preferred injectable

Closing remarks

The unmet need within diabetes is large and Novo Nordisk, with its core capabilities, is well positioned to drive change to defeat diabetes through a sustainable business approach



Further raise the innovation bar for diabetes treatment by driving outcomes beyond HbA_{1c} targeting diabetes-related comorbidities



Novo Nordisk is well positioned to **strengthen diabetes leadership position and aiming at a global value market share of more than 1/3**

Novo Nordisk has a strong outlook for continued global GLP-1 market leadership with best-in-class GLP-1 portfolio

Sources, notes and abbreviations – Diabetes strategy

Diabetes Strategy

- **Slide 10:** ¹ Diabetes Care 2017 Mar; 40 (3): 338-345; ² https://www.who.int/cardiovascular_diseases/en/; ³ <https://www.diabetes.org/diabetes/complications/stroke>; ⁴ Diabetes Care 2005 Jan; 28(1): 164-176; 5 IDF diabetes world atlas, 2019, 9th edition
- **Slide 11:** Sources: ¹ Patient data: Novo Nordisk forecast; ² Value data: 2018 data based on company reported sales and 2025 is based on a projection of diabetes market realised sales; Note: GLP-1+basal insulin combination sales are included in insulin; Other OAD includes metformin, SU and TZDs; DPP-4i+SGLT-2i products are included in the SGLT-2i group. Growth rates are compound annual growth rates (CAGR).
- **Slide 15:** Adolfsson P. et. al. ADA 2019; Increased Time-in-Range (TIR) Observed after Introduction of a connected Insulin Pen. 1076-P; Adolfsson P. et. al. ADA 2019; Improved Insulin Adherence after Introduction of a Smart Connected Insulin Pen. 126-LB
- **Slide 16 and 17:** Source: IQVIA PharMetrix claims data, IQVIA disease analyser, IQVIA MIDAS; value figures based on IQVIA MAT, Aug 2019. Patient data: Novo Nordisk forecast: GLP-1+Basal patients are included in insulin group; Diabetes market value data: 2018 data based on company reported sales; Note: Patient distribution across treatment classes is indicative and based on data for the USA, the UK, Germany and France. Other OADs cover: metformin, sulfonylurea, thiazolidinediones. Numbers do not add up to 100% due to rounding
Abbreviations: OAD: Oral anti-diabetic
- **Slide 18:** Source: IQVIA, Aug 2019, SPOT rate, value, MAT

Sources, notes and abbreviations – Insulin

Insulin

- **Slide 19:** Source: Reported sales split; ¹ based on first nine months of 2019
- **Slide 20:** ¹ Volume: Volume development for human insulin and modern insulin; ² Price: Price decline on human insulin and modern insulin; ³ Innovation: New-generation insulin
- **Slide 21:** Source: IQVIA, Sep 2019, volume, MAT, all countries
- **Slide 22:** Source for market shares and market growth and # insulin companies: IQVIA volume, MAT, Sep 2019; ¹ Calculation based on Novo Nordisk reported sales FY 2018 divided by volume (in units) sold in 2018, multiplied by the average dose for people using insulin (40 units); ² Includes reported sales from: Novo Nordisk, Sanofi and Eli Lilly; Sales in constant exchange rates. 2019 based on first nine months
- **Slide 23:** Note: Coverage is calculated based on the IQVIA, SPOT, value Sep 2019 in each country, where Novo Nordisk has launched the products and based on the coverage in the country e.g. US numbers is based on formulary coverage multiplied by the group average rebate for 2018.

Insulin innovation

- **Slide 24:** Sources: ¹ Achievement of Goals in U.S. Diabetes Care, 1999–2010, New England Journal of Medicine 2013; 368:1613-1624; ² https://www.who.int/cardiovascular_diseases/en/; ³ Diabetes Care 2005 Jan; 28(1): 164-176/
- **Slide 26:** ¹ Predicted profiles based on modelled phase 1 data
- **Slide 27:** Note: Insulin secretion AUC is based on a mixed meal tolerance test on the estimated means of AUC 0-4 h of C-peptide mean calculated on log-transformed observed and imputed concentrations +/- SEM; Abbreviation: T1D: Type 1 diabetes

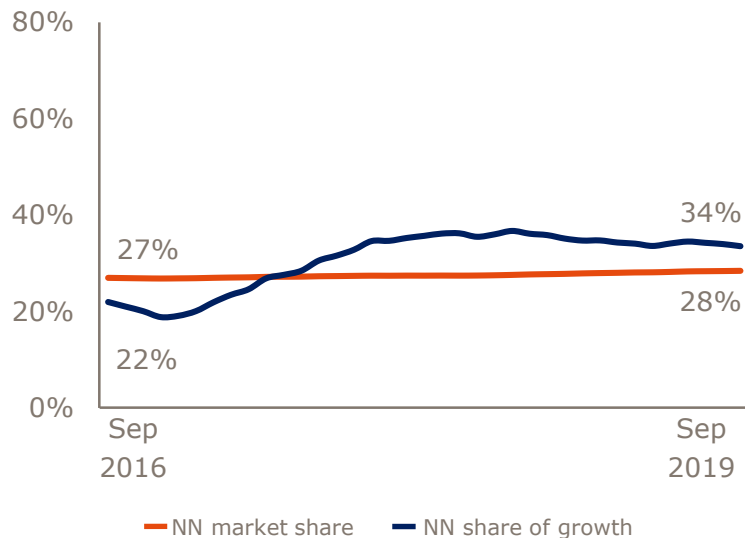
Sources, notes and abbreviations – GLP-1

GLP-1

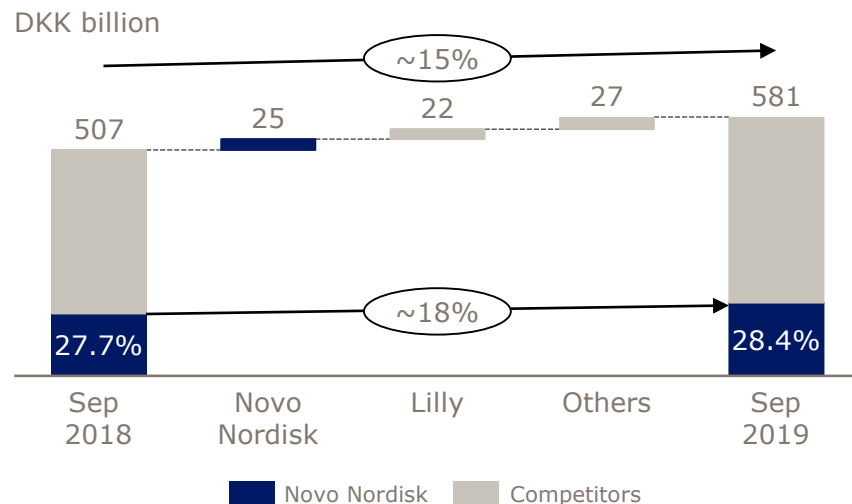
- **Slide 29:** Based on the PIONEER programme
- **Slide 30:** QW: once-weekly
- **Slide 34:** Source: IQVIA PharMetrix claims based on data from the USA, the UK, Germany and France
- **Slide 35:** Source: IQVIA MAT volume, Sep 2019
- **Slide 36:** Source: IQVIA MAT mDKK, Sep 2019
- **Slide 37:** Source: IQVIA MAT mDKK for USA and 3M rolling for Ozempic® EU launch countries, September 2019 latest observation
- **Slide 38:** Source: LRx we 23/08/2019, total writers YTD: 72,747; IQVIA LRx & Pharmetrics (US), n = >1 million patients
- **Slide 41:** Source: IQVIA in-market, LRx & Dx & LAAD & Pharmetrics 2019 (USA)

Novo Nordisk: Diabetes market share and market growth

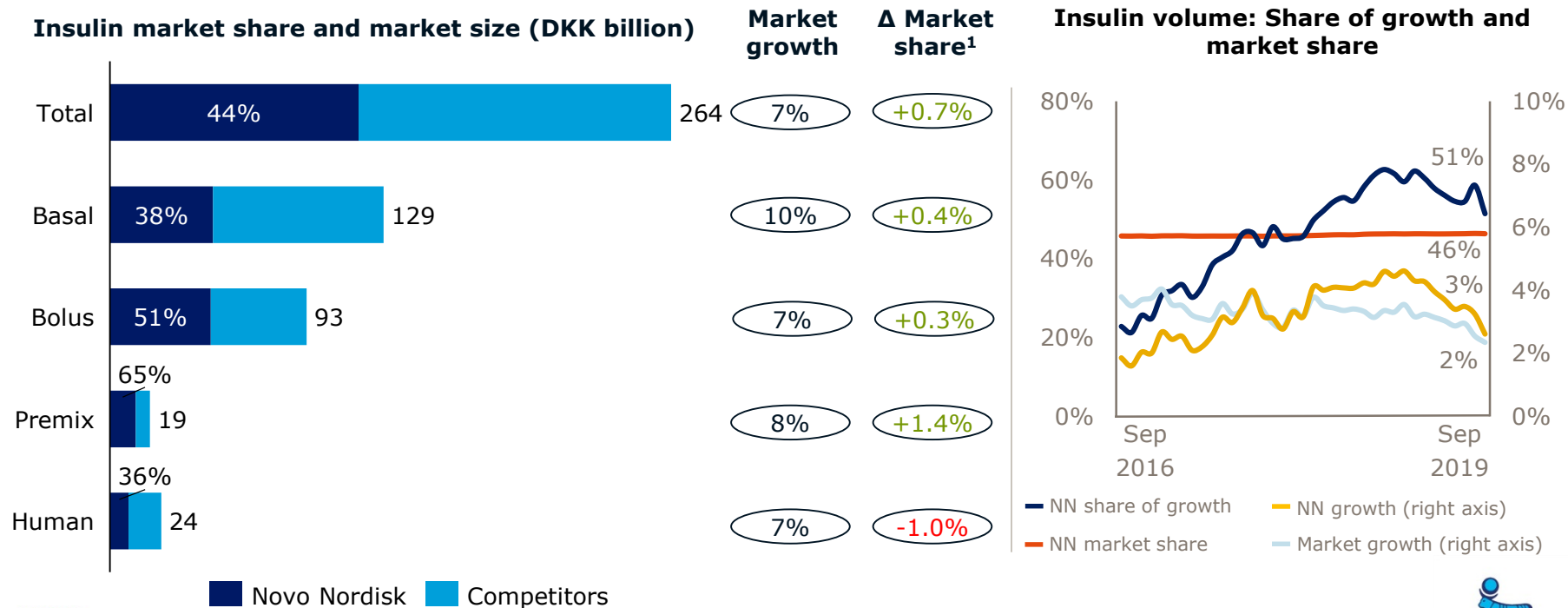
Diabetes market growth and Novo Nordisk market share



Diabetes market size and growth

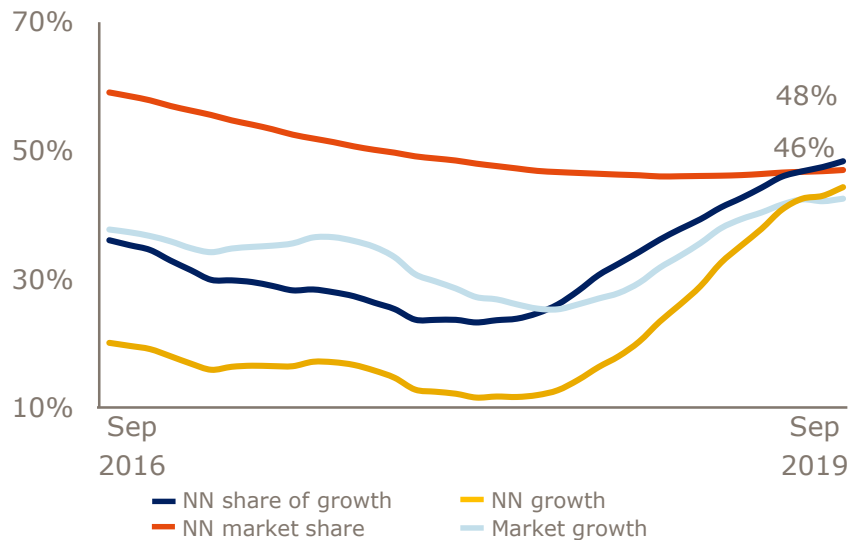


Novo Nordisk: Insulin market size and volume share of growth and market share

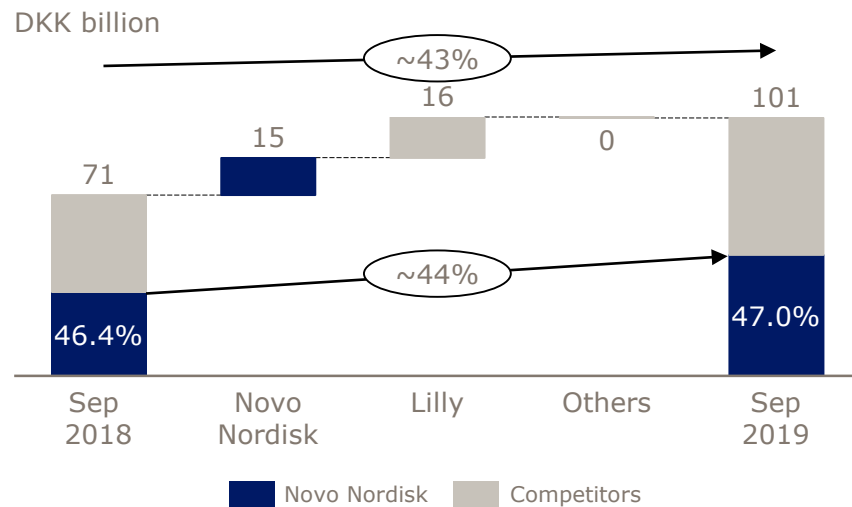


Novo Nordisk: GLP-1 market share and market growth

GLP-1 market growth and Novo Nordisk market share



GLP-1 market size and growth



OBESITY CARE

**STRENGTHEN
TREATMENT OPTIONS**
THROUGH MARKET
DEVELOPMENT AND BY
OFFERING INNOVATIVE
MEDICINES AND DRIVING
PATIENT OUTCOMES



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- Saxenda® is approved in the USA and the EU for the treatment of obesity only

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The global burden of obesity

650 MILLION
adults have obesity

120 MILLION
children have obesity

3.4 MILLION
deaths were caused by obesity in 2010

2 TRILLION
US dollars in annual global cost of obesity

Changing Obesity is a cornerstone of Novo Nordisk's commitment to people living with obesity

PREVENTION



Novo Nordisk works to build healthier environments to enable improved health

RECOGNITION



Novo Nordisk works to foster empathy for people with obesity and make obesity a healthcare priority

CARE



Novo Nordisk works to ensure people with obesity have access to science-based and comprehensive care

The global burden of obesity

650 MILLION
adults have obesity

120 MILLION
children have obesity

3.4 MILLION
deaths were caused by obesity in 2010

2 TRILLION
US dollars in annual global cost of obesity

Novo Nordisk and UNICEF enters partnership to help prevent childhood overweight and obesity



Enhance knowledge about successful prevention policies in middle-income countries

Build awareness of the impact of overweight and obesity on children

Drive and strengthen multi-sector interventions in Latin America

Working together to prevent childhood overweight and obesity



in support of



UNICEF does not endorse any company, product, brand or service

MISSION

Change how the world sees people with obesity and **make obesity a healthcare priority**

Develop a leading portfolio of **superior treatment solutions**

2025

ILLUSTRATIVE

TODAY

Anti-obesity medication market:
~15 million patients

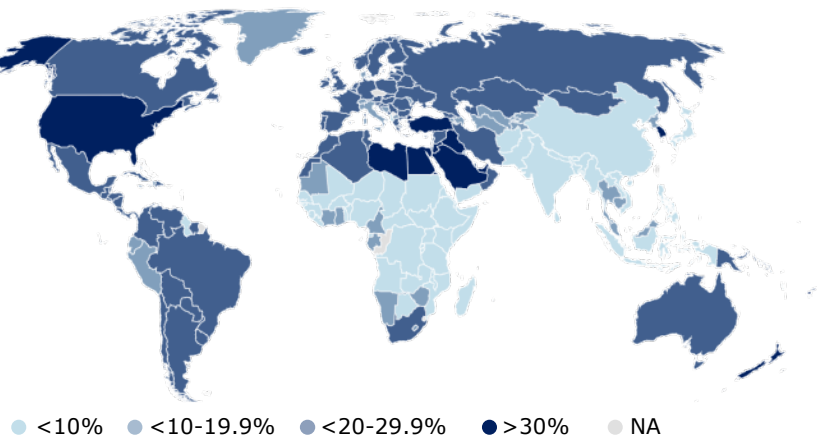
Anti-obesity medication market in 2025:
~24 million patients

- People treated with Novo Nordisk products

Saxenda® addresses a global unmet need for medical weight management

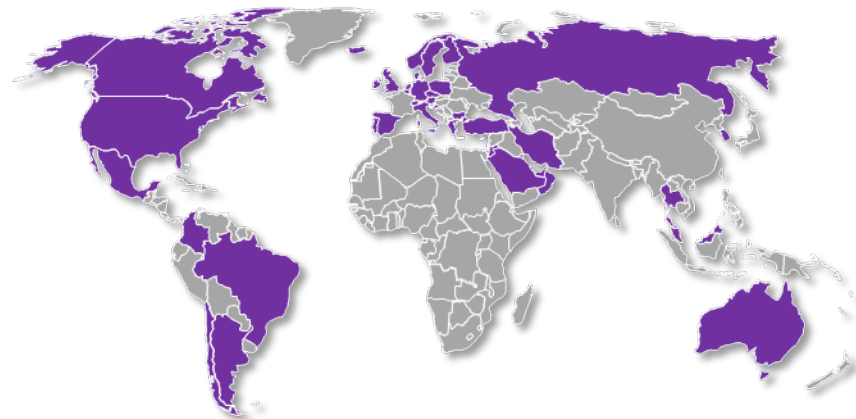
Global obesity prevalence

Percent with BMI >30



Saxenda® launched countries

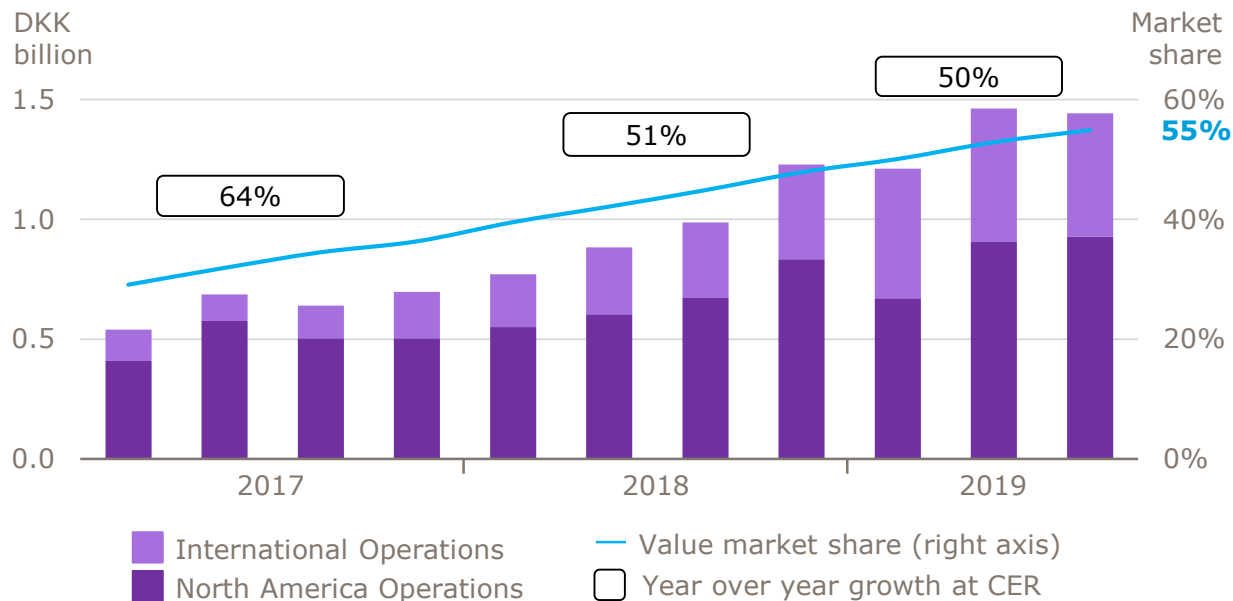
● Saxenda® launched countries



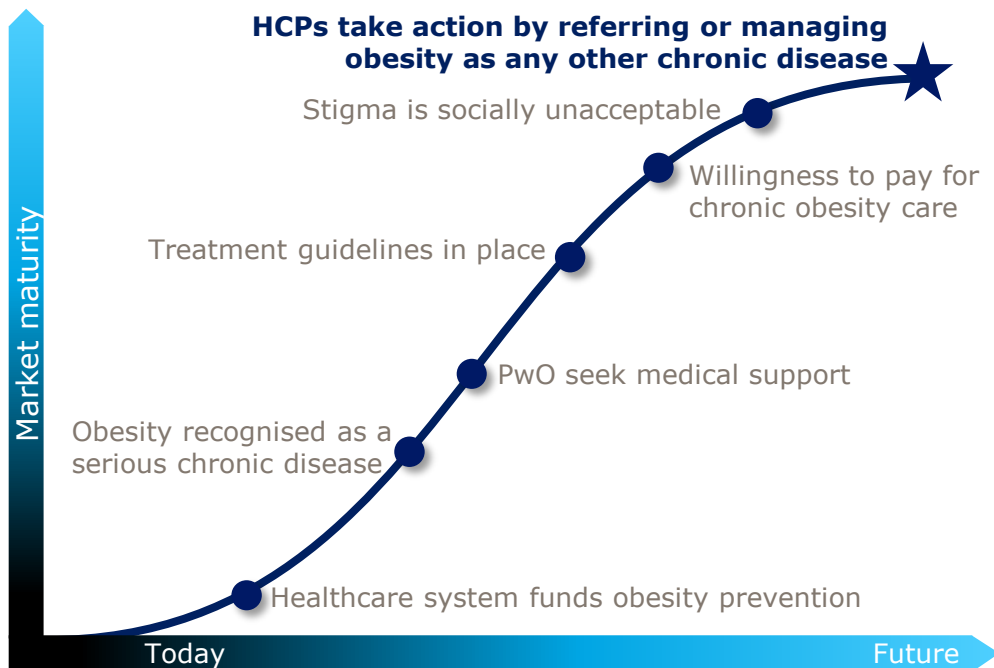
Saxenda® now launched in **45 countries**
with **15 more** to come by 2022

Novo Nordisk aims at doubling obesity sales and strengthening market leadership by 2025

Global obesity value market leadership expanded to 55% with steadily increasing Saxenda® sales since launch



Making obesity a healthcare priority requires stakeholder engagement

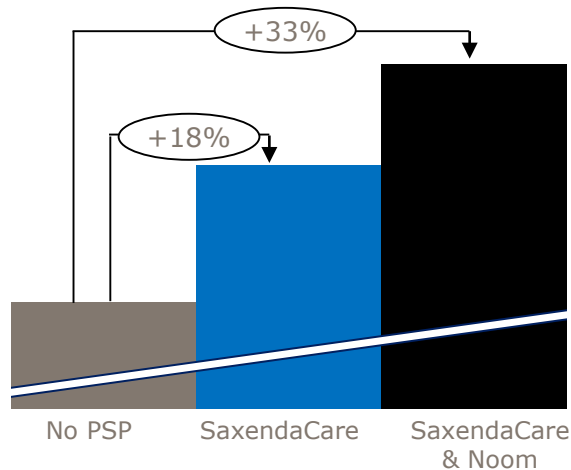


Addressing market development barriers

- 1 Patient demand and support**
Reduce stigma and bias and engage people with obesity to seek medical care
- 2 Prescriber focus**
Support prescribers on obesity care and how to treat obesity as a chronic disease
- 3 Policymaker priorities**
Prioritise obesity care in comparison to treating complications
- 4 Payer willingness**
Build understanding of the long-term cost benefits of obesity care

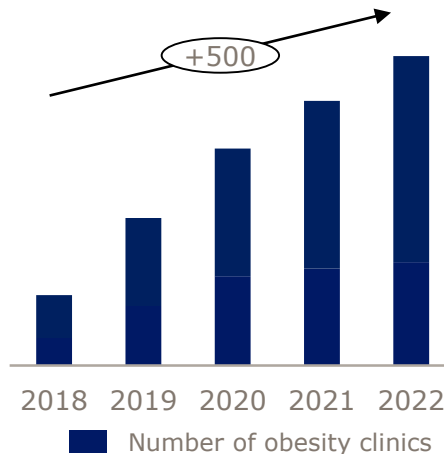
Supporting patients and prescribers is crucial to improve patient outcomes

1 Patient support programmes and digital solutions **increase adherence**



2 Support prescribers to address obesity with their patients

Advance quality of care
in obesity clinics



Partnering to support
education and advocacy



Engaging with a broad range of coalition partners is instrumental to drive the call to action for improved obesity care

3

Policymakers prioritising funding for obesity care



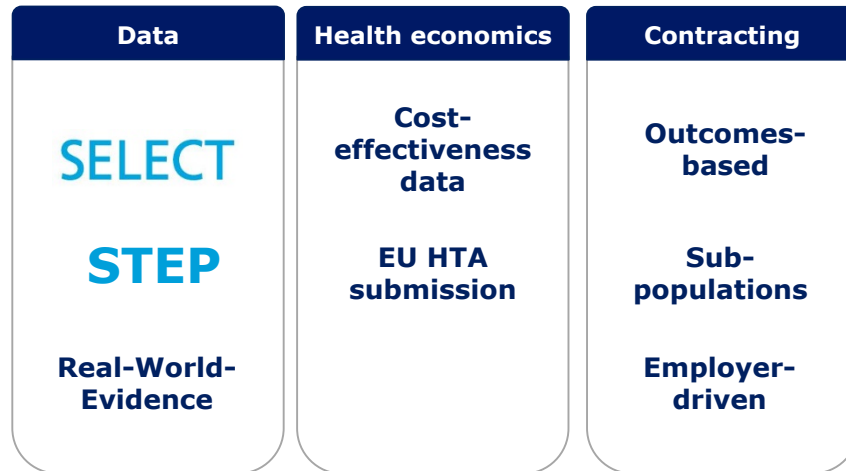
- Bring together obesity experts and policy makers to discuss obesity solutions
- Objective to secure increased willingness to pay for anti-obesity medication treatment



- Bipartisan bill to expand Medicare coverage
- Includes screening, obesity care and FDA approved medications for chronic weight management

4

Provide **payers** with evidence of **cost benefits** of obesity care



Novo Nordisk is committed to drive change for people with obesity through market development activities and continued innovation



Strengthen leadership and double current sales by 2025

Ensuring continued global rollout of Saxenda® and market development activities as well as bringing semaglutide obesity to market



Improve disease awareness

Address stigma and weight bias in society as well as increase understanding of obesity as a chronic disease



Expand anti-obesity medication usage

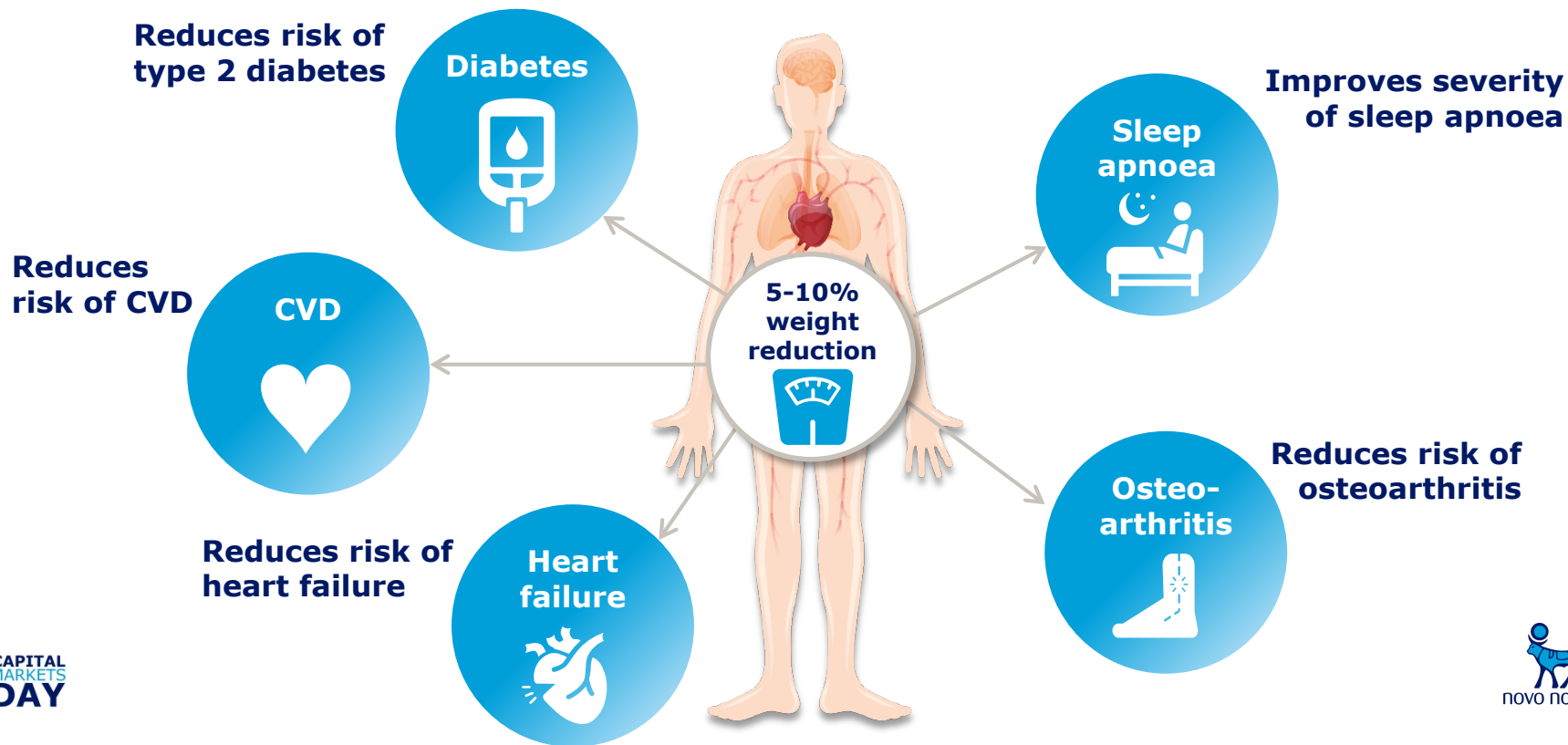
Address the patient stigma, prescriber focus, policymaker priorities and payer willingness with specific strategic actions



Offer individualised treatment solutions

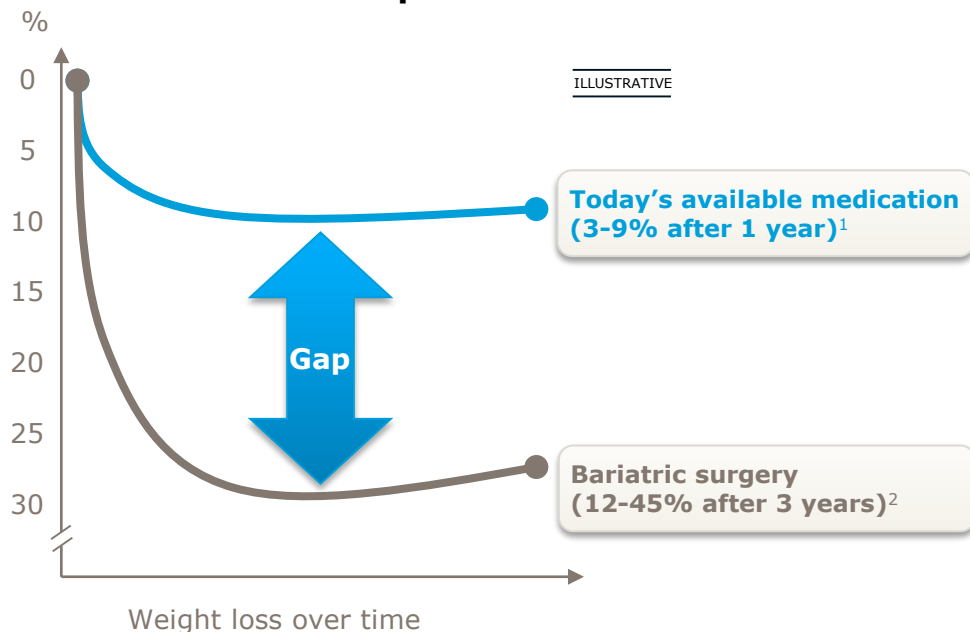
Develop treatments meeting the unmet needs of people with obesity

People with obesity are at an increased risk of developing severe comorbidities that are life-threatening and costly for society



Novo Nordisk aims at closing the gap between available medication and surgery by increasing number of treatment options

Treatment options

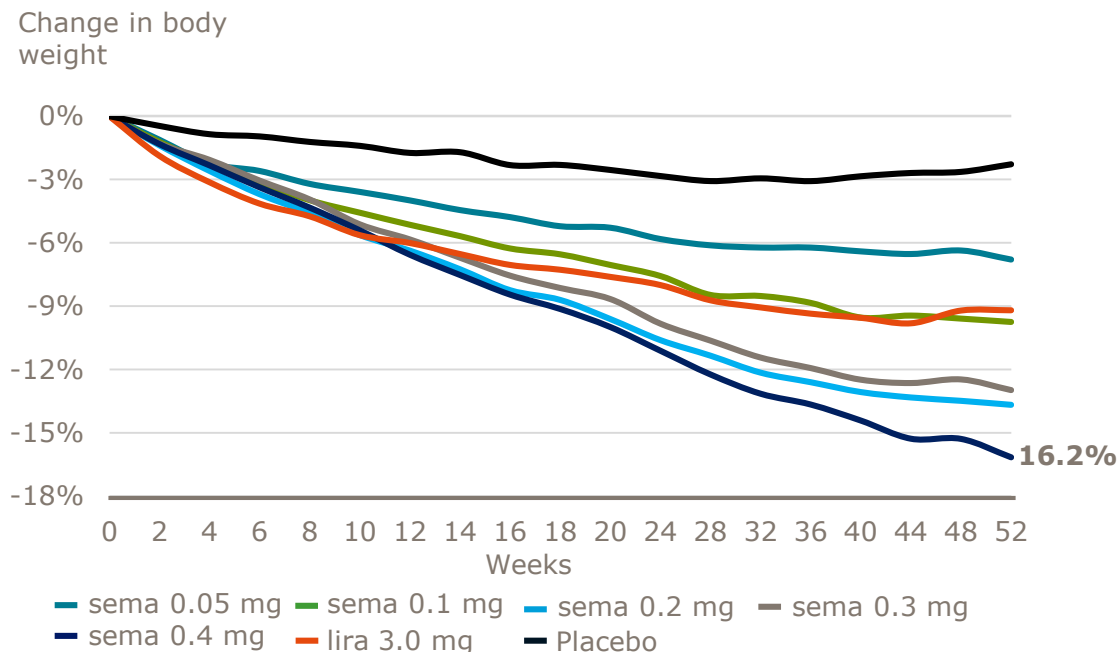


Innovation curve



Phase 2 trial for semaglutide obesity showed a 16.2% weight loss after 1 year

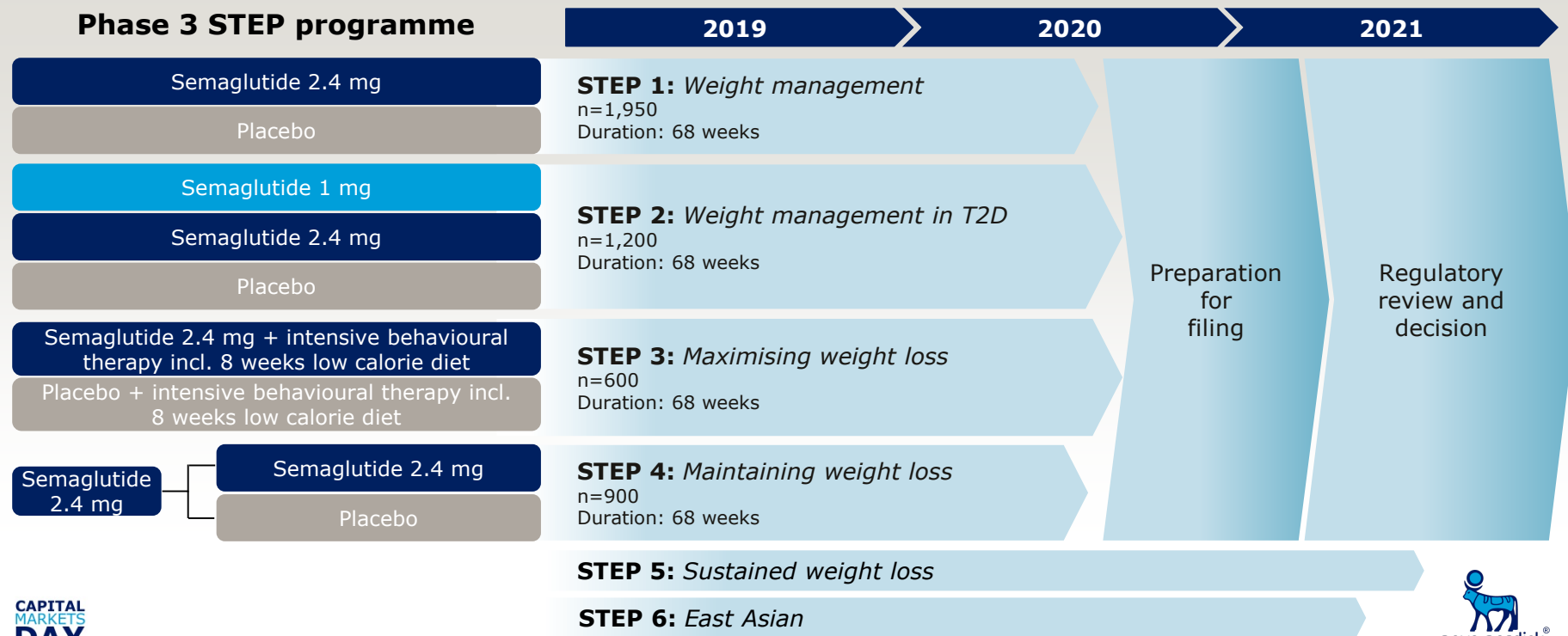
Weight loss for different doses of semaglutide in phase 2



Key points

- No weight loss plateau on highest dose over trial duration leading to a 16.2% weight loss
- Nearly two out of three experienced >10% weight loss on highest dose
- 80% of patients completed the trial

Semaglutide obesity is the first STEP towards bringing more efficacious treatment options to market



SELECT CVOT is expected to generate evidence of the benefits beyond weight loss of obesity managed as a chronic disease



Obesity contributes to all-cause death primarily through CV death.

In 2015,
high BMI contributed to
7.2% of all-cause death
globally

41% of BMI-related deaths are
secondary to CVD for PwO



Can semaglutide 2.4 mg reduce
risk of MACE?

In 2018,
SELECT CVOT was initiated
enrolling
17,500 people

Event-driven trial with expected
read-out in **2024**

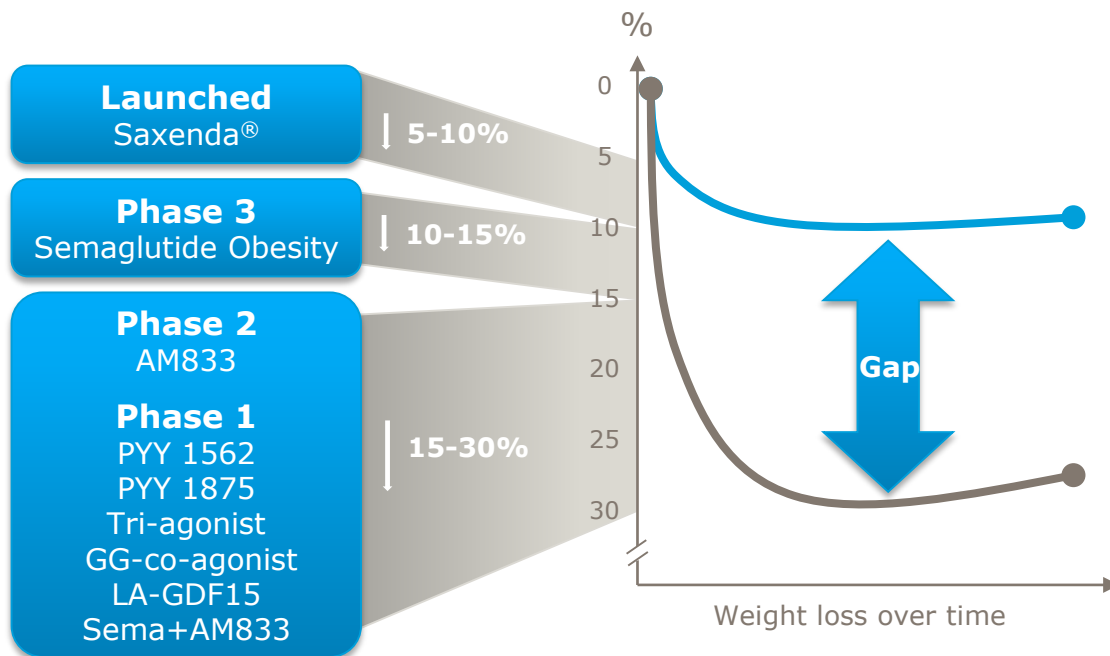


People with diabetes need to manage
blood glucose levels

In 1998,
the **UKPDS** investigated whether
improved HbA_{1c} levels reduce risk of
complications

Intensive glucose control **improved**
microvascular morbidity

Novo Nordisk obesity pipeline supports efforts to close the treatment gap

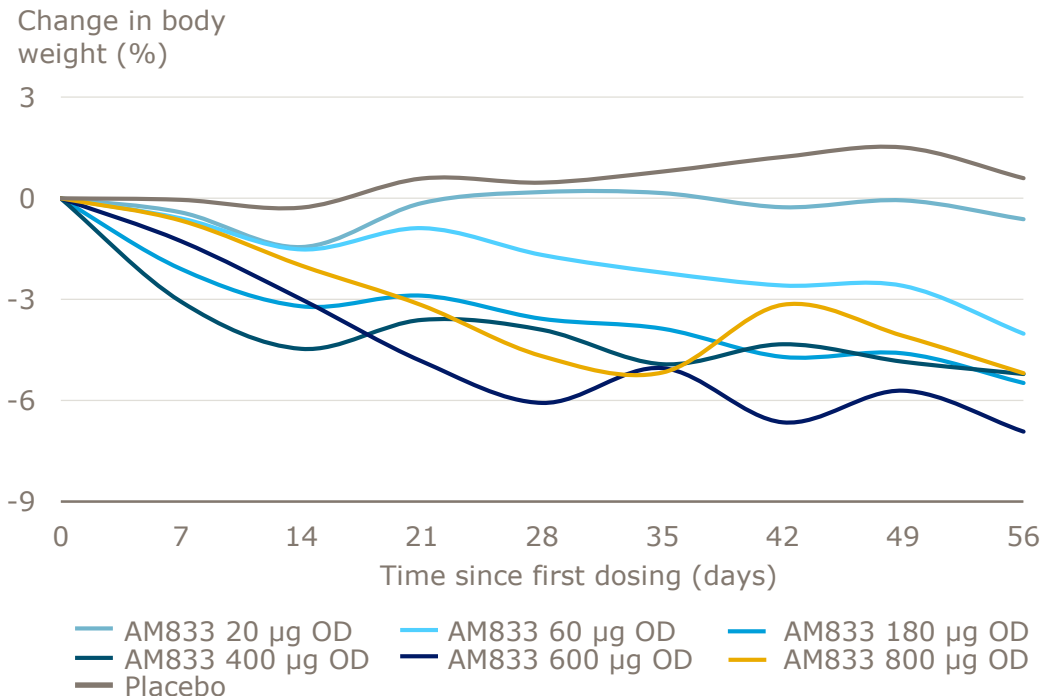


Obesity pipeline priorities

- Increase weight loss towards 15-30%
- Investigate product combinations
- Provide data applicable for individualised treatment

Promising phase 1 results for AM833 and the phase 2 trial is ongoing

Weight loss for different doses of AM833 in phase 1



Key points

- Amylin directly targets the central nervous system to reduce appetite and body weight
- AM833 is a long-acting human amylin analogue
- AM833 was well-tolerated and demonstrated strong weight loss during 8 weeks of dosing
- AM833 phase 2 and combined semaglutide obesity and AM833 phase 1 results in H1 2020

Closing remarks



Strengthen leadership and **double current sales** by 2025

Change the perception of obesity and make obesity a healthcare **priority**



Develop a **leading portfolio** of superior treatment **solutions**

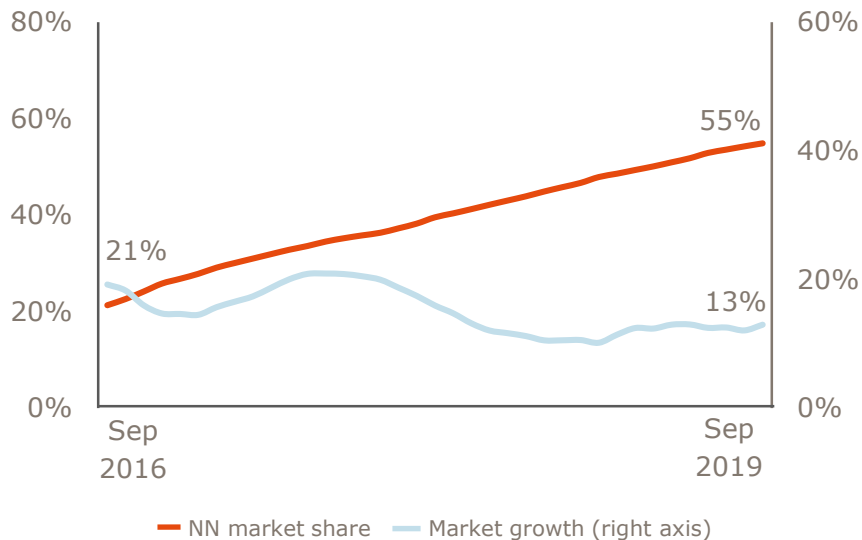
Ensure more people with obesity **receive treatment** and improved outcomes

Sources, notes and abbreviations – Obesity

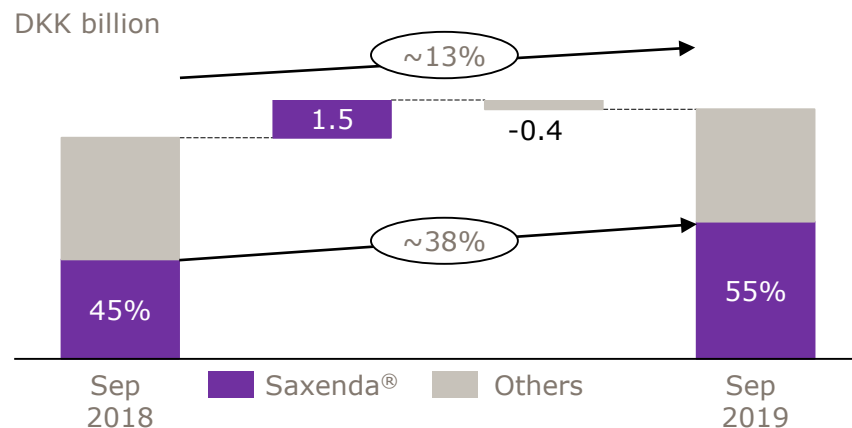
- **Slide 52/53:** Source: World Health Organisation (WHO), 2016. Adults are age ≥ 18 years and obesity is defined as BMI ≥ 30 . BMI: Body Mass Index
- **Slide 54:** Estimated around 2% of people with obesity receive anti-obesity medication treatment. WHO, 2016
- **Slide 55:** WHO, 2016; BMI: Body Mass Index
- **Slide 56:** Company reported sales, IQVIA MAT value DKK, Sep 2019. CER: Constant exchange rates
- **Slide 58:** Results are based on US real-world evidence. Percentages refer to Rx fill rates increases. PSP: Patient support programme; Noom: Leader in mobile health coaching the power of technology with the empathy of human coaches to deliver successful behaviour change at scale
- **Slide 59:** OPEN: Obesity Policy Engagement Network; TROA: Treat and Reduce Obesity Act; HTA: Health technology assessment
- **Slide 61:** CVD: Cardiovascular disease
- **Slide 62:** Note: WHO: <http://www.who.int/en/news-room/fact-sheets/detail/obesity-and-overweight>. Date last accessed December 2018; ¹ Long-term Drug Treatment for Obesity: A Systematic and Clinical Review; Susan Z. Yanovski, MD; Jack A. Yanovski, MD, PhD JAMA. 2014;311(1):74-86; ² Treatment of Obesity: Weight Loss and Bariatric Surgery Bruce M. Wolfe Elizaveta Kvach and Robert H. Eckel Circulation Research. 2016;118:1844-1855
- **Slide 65:** Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5477817/> New England Journal Med 2017 June 12, Health Effects of Overweight and Obesity in 195 countries over 25 years; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2014359/> BR J Clin Pharmacol 1999, The UK Prospective Diabetes Study (UKPDS): clinical and therapeutic implications for type 2 diabetes. PwO: People with obesity

Novo Nordisk: Obesity market share and market growth

Obesity market growth and Novo Nordisk market share



Obesity market size and growth



BIOPHARM

SECURE A
LEADING
POSITION

BY LEVERAGING
FULL PORTFOLIO
AND EXPANDING
INTO ADJACENT AREAS



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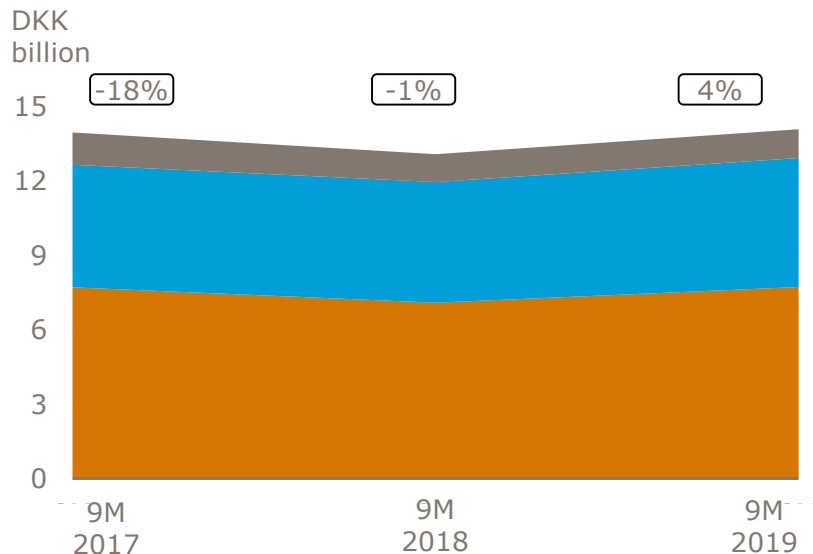
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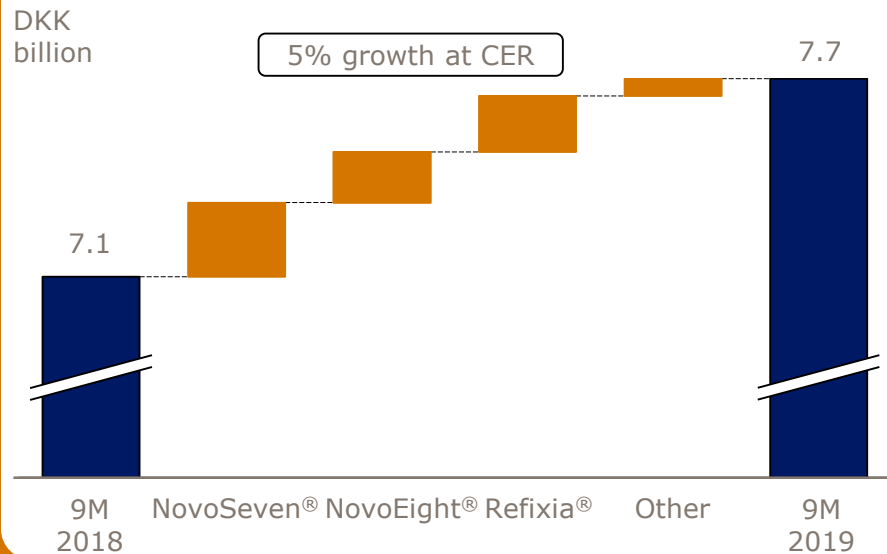
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Solid commercial execution is driving 4% sales growth in first nine months of 2019

Biopharm has returned to growth with 4% sales growth in first nine months of 2019

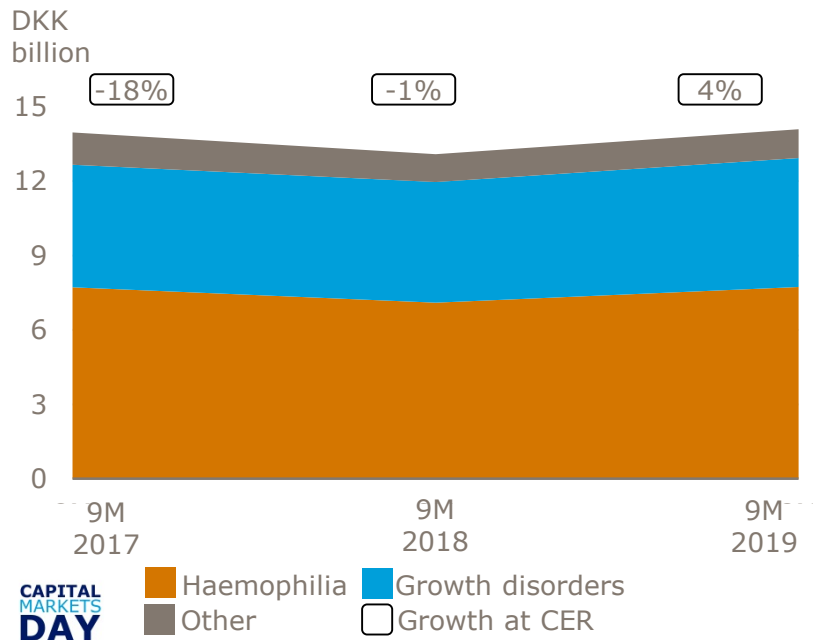


Added sales in the haemophilia product portfolio

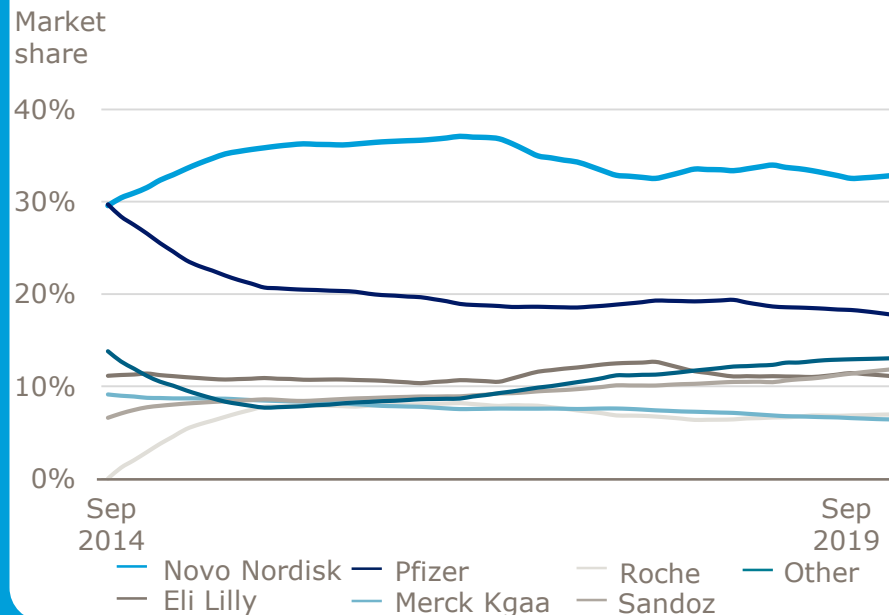


Solid commercial execution is driving 4% sales growth in first nine months of 2019

Biopharm has returned to growth with 4% sales growth in first nine months of 2019

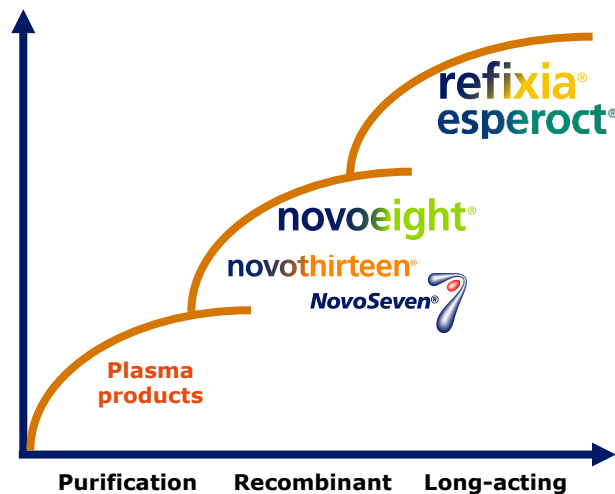


Norditropin® value leadership maintained despite increasing competition



Current and future growth is supported by a genuine portfolio of products and devices with an intensive launch agenda

Well-positioned with a full haemophilia product portfolio



Evolution through product and device upgrades for GHD

Product upgrade

Nanormon® → norditropin®

Device upgrade

norditropin® simpleXx® → norditropin® flexpro®

norditropin® nordilet® → norditropin® nordiflex®

Uninterrupted global launches and new indications

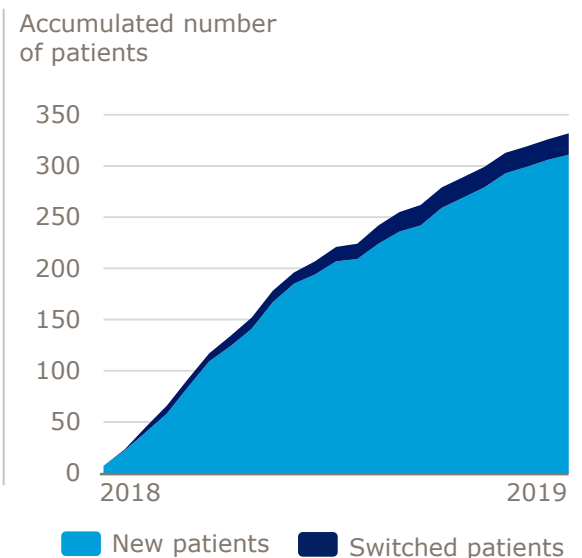
	Current launches		Towards 2022
refixia®	15	+	15
esperoct®	2	+	25
norditropin® Noonan syndrome, EU device upgrades	16	+	30

Biopharm exhibits the traditional features of a strong speciality care unit

Biopharm ticks all speciality care boxes

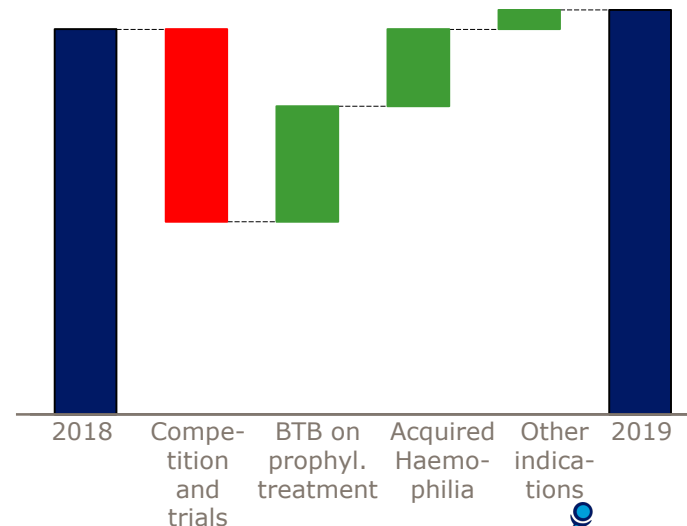
- ✓ **Focused health care professional base**
- ✓ **Skilled scientific medical sales force and commercial unit**
- ✓ **Deep scientific knowledge**
- ✓ **Robust life-cycle management**

Identify new patients in rare diseases, such as Noonan syndrome in Japan

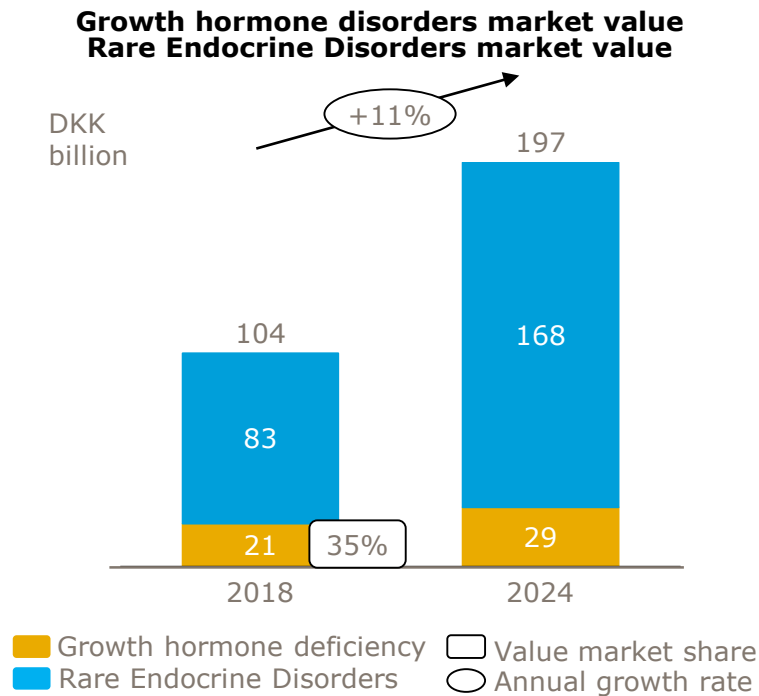
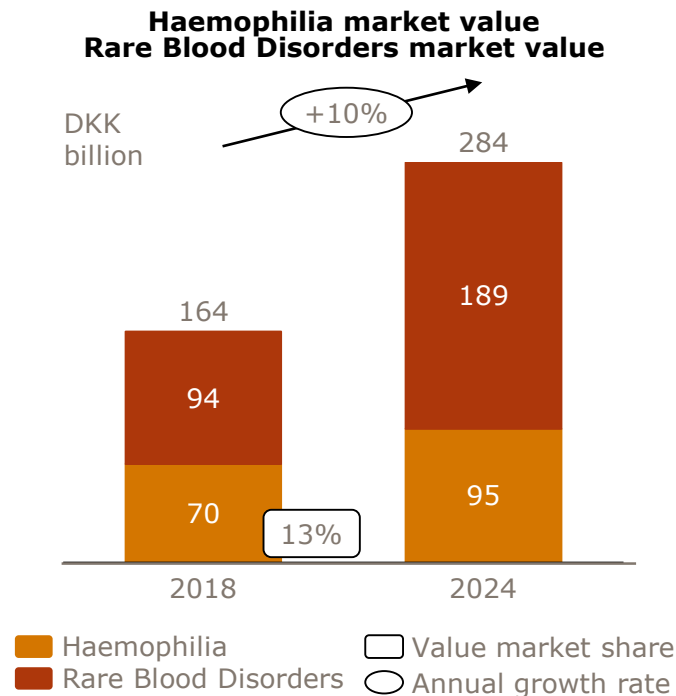


Leveraging a deep disease understanding with NovoSeven®

ILLUSTRATIVE



Biopharm has a strategic path forward in rare blood disorders and rare endocrine disorders



Biopharm sustained growth outlook is supported by innovation and utilisation of core capabilities

Internal and external innovation to drive long-term growth



Bringing **internal innovation** to market by pipeline progression



Ensuring future growth by leveraging **external innovation**

Core capabilities within research and development to drive long-term growth

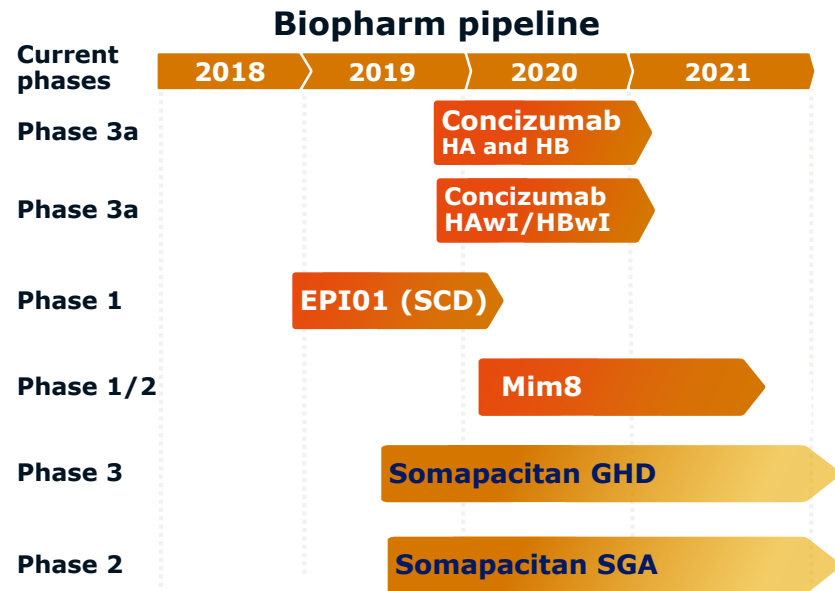
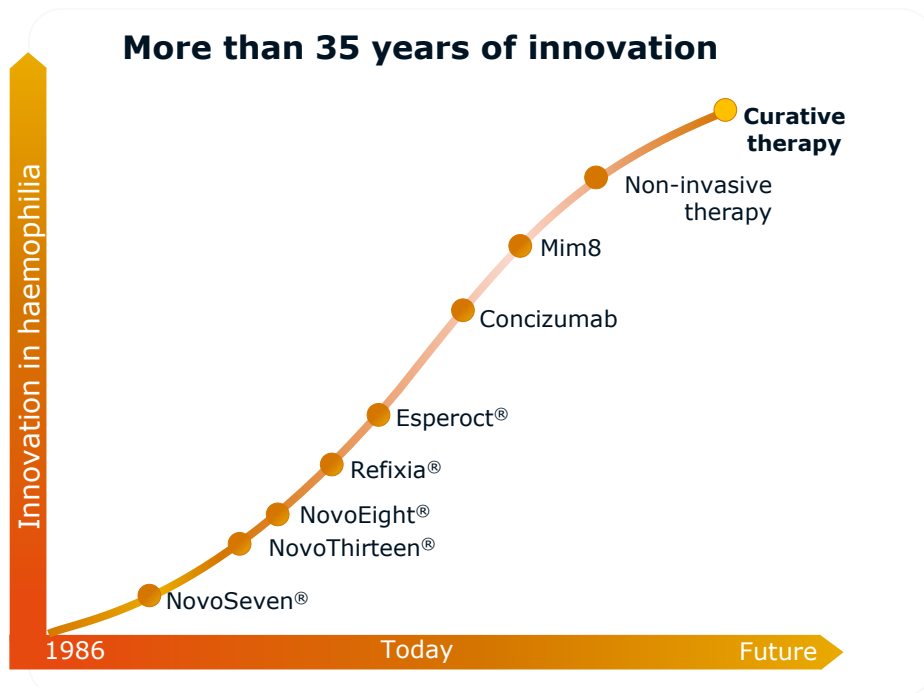


Exploring new technologies by utilising added **research platforms**



Leveraging deep **biological understanding** for future growth

Scientific excellence ensures an innovative and competitive pipeline with therapeutic solutions for severe conditions



Phase 3 initiated with concizumab for HA, HB with and without inhibitors

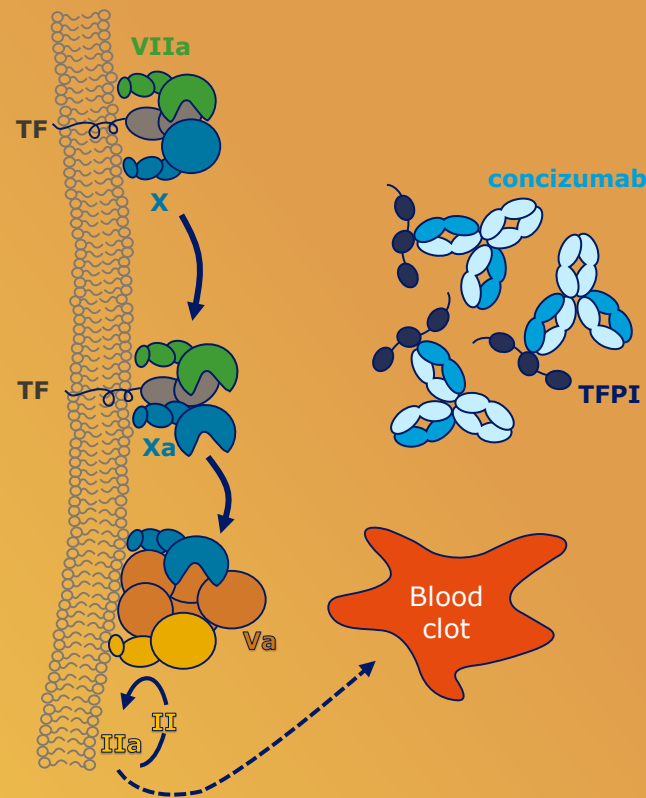
High affinity,
humanised
monoclonal IgG4
antibody

First-in-class anti-TFPI
boosting the initiation
phase to restore
haemostasis

Delivered once-
daily in a
convenient
Flextouch® pen

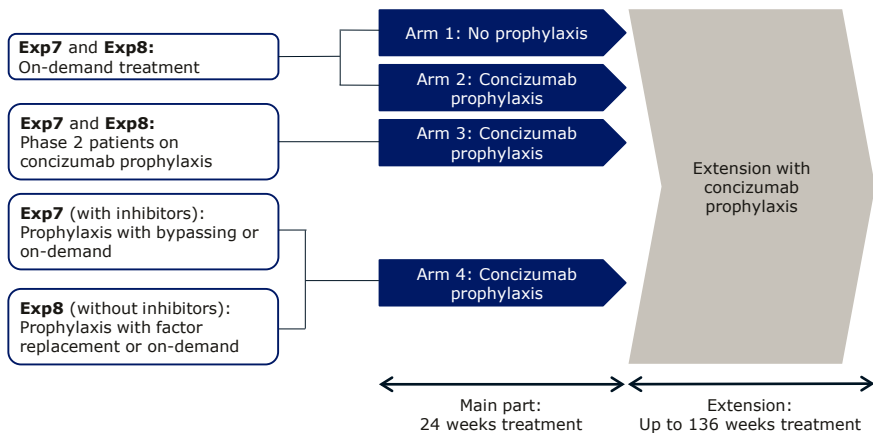
Safe and well-tolerated
in phase 2 and efficacy
comparable to factor
replacement¹

Concizumab mode of action

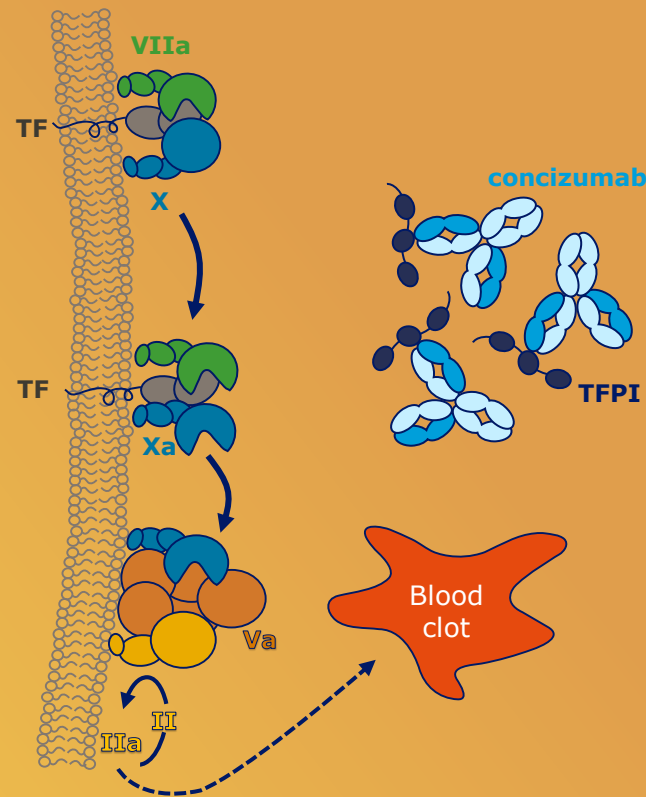


Phase 3 initiated with concizumab for HA, HB with and without inhibitors

Phase 3 trials with data expected first half of 2021



Concizumab mode of action



Next-generation FVIII mimetic, Mim8, is a bispecific antibody for subcutaneous prophylaxis treatment in people with haemophilia A

Strong activity at site of bleeding

Minimised target binding in circulation

Delivered in an **innovative device**

Mim8

Fc

Anti-FX arm

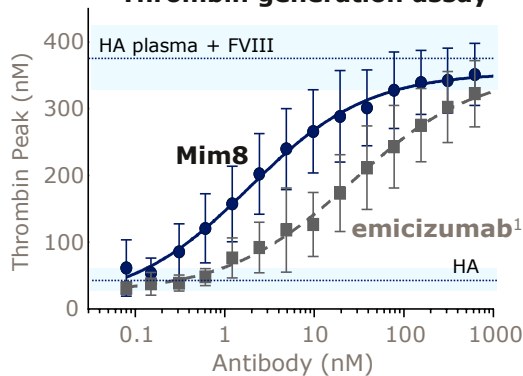
Anti-FIXa arm

FIXa

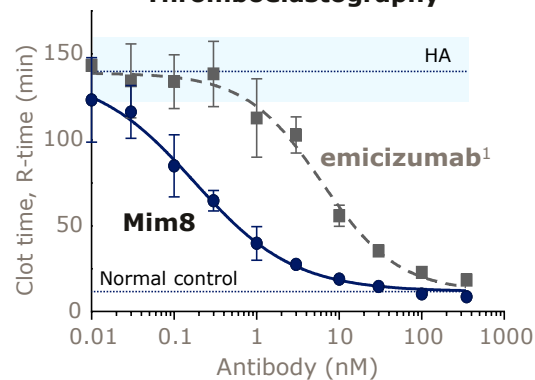
FX

Activated platelet

Thrombin generation assay



Thromboelastography



Mim8 potently stimulates FX activation resulting in efficacious haemostasis *in vitro* and *in vivo*



Mim8 effectively stops severe bleeds in mouse models

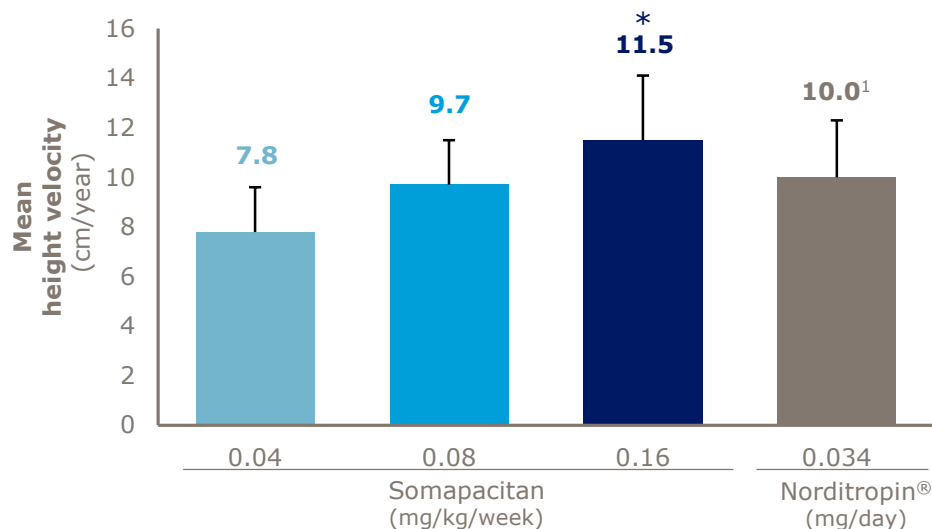


Phase 1/2 is expected to be **initiated H1 2020**

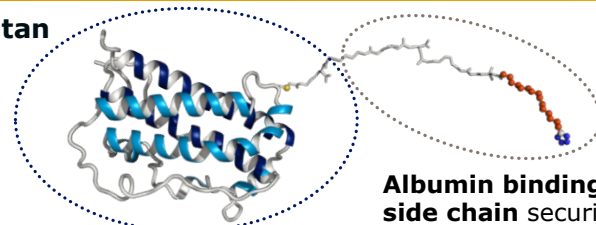
¹ Sequence-identical-analogue (SIA) of the FVIII-mimicking bispecific antibody emicizumab

Once-weekly, biodegradable somapacitan has entered phase 3 for GHD and is filed with the US and EU regulators for AGHD indication

Phase 2 trial in GHD with 1-year efficacy and safety



Somapacitan



Growth hormone with a single amino acid substitution

Albumin binding side chain securing reversible binding to endogenous albumin

Next steps

Somapacitan in children (GHD)

- Phase 3 trial (REAL 4) has been initiated
- Somapacitan dose 0.16 mg/kg/week

Somapacitan in children (SGA)

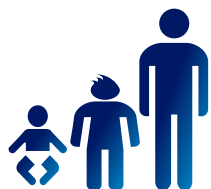
- Phase 2 trial (REAL 5) has been initiated

Somapacitan in adults (AGHD)

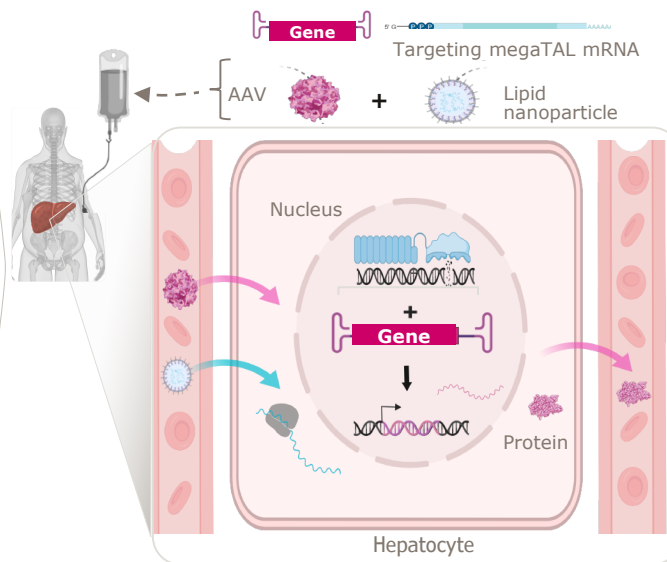
- Has been submitted in the US and the EU
- Japan submission planned for first half of 2020

Novo Nordisk and bluebird bio join forces in next-generation genome editing for children and adult patients with haemophilia A

Potential curative treatment in haemophilia A



- mRNA-based megaTAL™-driven gene editing
- **Highly specific and efficient** way to silence, edit or insert genetic components.
- Allows for **gene editing in all age groups**



bluebird bio/Novo Nordisk's joint approach



- **megaTAL™**: Proprietary, patented technology, broad IP
- Correcting FVIII-clotting factor deficiency
- Potential **life long** effect
- Possibility to explore additional therapeutic targets

Closing remarks



Secure a sustained growth outlook for Biopharm by leveraging commercial competencies and ensure frequent launches



Strengthen and progress the Biopharm pipeline

Sources, notes and abbreviations – Biopharm

- **Slide 73:** Company reported sales; CER: Constant exchange rates
- **Slide 74:** Company reported sales, IQVIA, MAT value DKK, Sep 2019
- **Slide 75:** GHD: Growth hormone deficiency
- **Slide 76:** Company numbers for patient count
- **Slide 77:** Market size is based on EvaluatePharma, 2018. Market share for haemophilia is based on company reported sales. Market share for GHD is IQVIA, MAT, DKK, Sep 2019.
- **Slide 79:** HwI: Haemophilia A or B patients with inhibitors; SGA: small for gestational age; GHD: Growth hormone deficiency
- **Slide 80:** Source: Hilden I, et al. Blood 2012, 1 Shapiro et al. Blood 2019. II: factor II; Iia: factor IIa; VIIa: factor VIIa; TF: tissue factor; TFPI: tissue factor pathway inhibitor; Va: factor Va; X: factor X; Xa: factor Xa; IgG4: immunoglobulin G4; Sc.: subcutaneous; HA: Haemophilia A; HB: Haemophilia B
- **Slide 82:** GHD: Growth hormone deficiency; AGHD: Adult growth hormone deficiency; SGA: Small for gestational age
- **Slide 83:** Data are mean height velocity (cm/year) \pm SD at week (wk) 52. Doses are mg/kg/time. * Denotes statistical significance difference compared to once-daily Norditropin®. GHD: Growth hormone deficiency; AGHD: Adult-onset growth hormone deficiency. ¹ Value was 9.8 for the full analysis set. Value of 10.0 is from a post-hoc analysis that excluded 4 visits of one patient who discontinued prematurely at week 6

TEAM NOVO NORDISK
Professional cycling team

NORTH AMERICA OPERATIONS



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Important drug information

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- Saxenda® is approved in the USA and the EU for the treatment of obesity only

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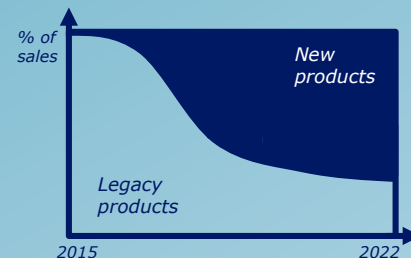
In a few years, Novo Nordisk USA is expected to have



two new blockbusters
on the market



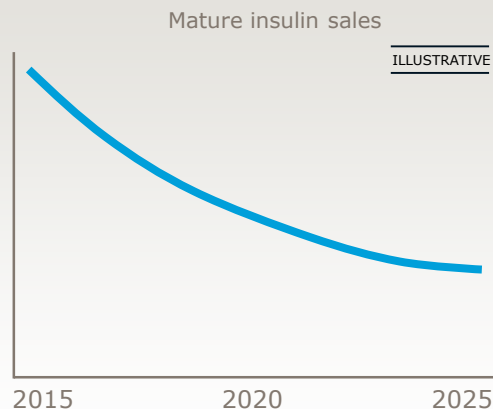
notably increased the
number of patients treated



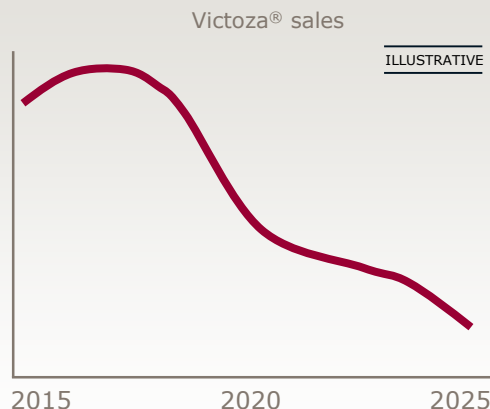
turned around
~70% of sales

Novo Nordisk's legacy products are expected to continue their decline in the coming years in the USA

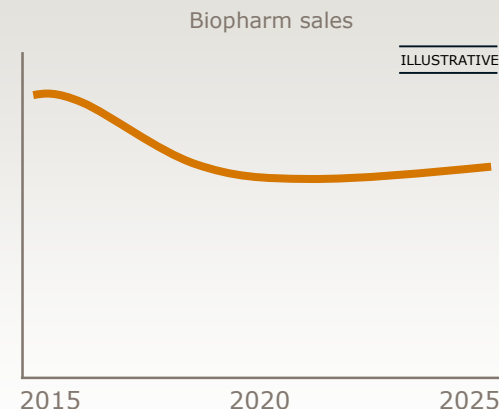
Mature insulin products are expected to continue declining



Victoza® is expected to continue being a significant drag on GLP-1 sales



Biopharm is expected to remain under competitive pressure



Innovation drives the largest transition in the history of Novo Nordisk USA, turning around 70% of sales in just seven years

Directional growth drivers and catalysts

GLP-1

- Ozempic® launch
- Rybelsus® launch
- Victoza® LoE



Obesity

- Semaglutide obesity launch
- Saxenda® LoE



Insulin

- Continued price pressure
- Biosimilar competition



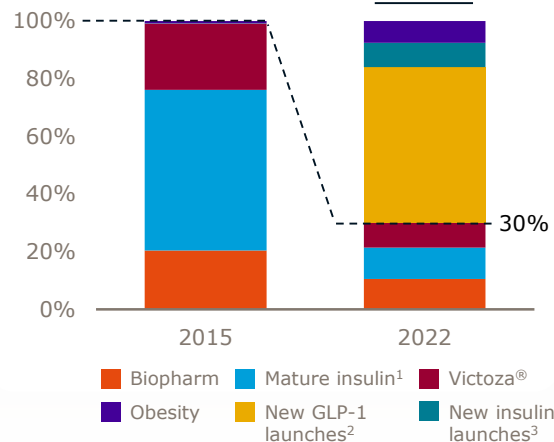
Biopharm

- Competitive pressure
- New product launches



Relative sales composition

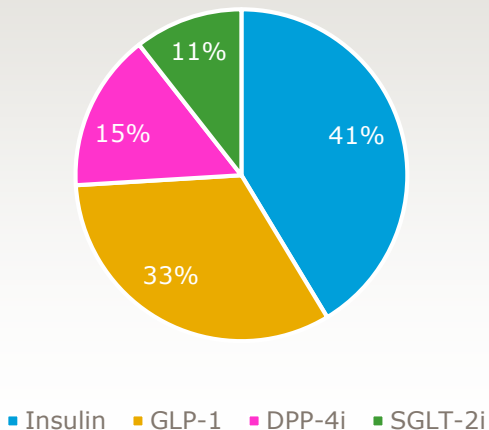
ILLUSTRATIVE



The value of the US diabetes market has plateaued but dynamics across product classes are very different

US branded diabetes market in value per product class, 9M 2019

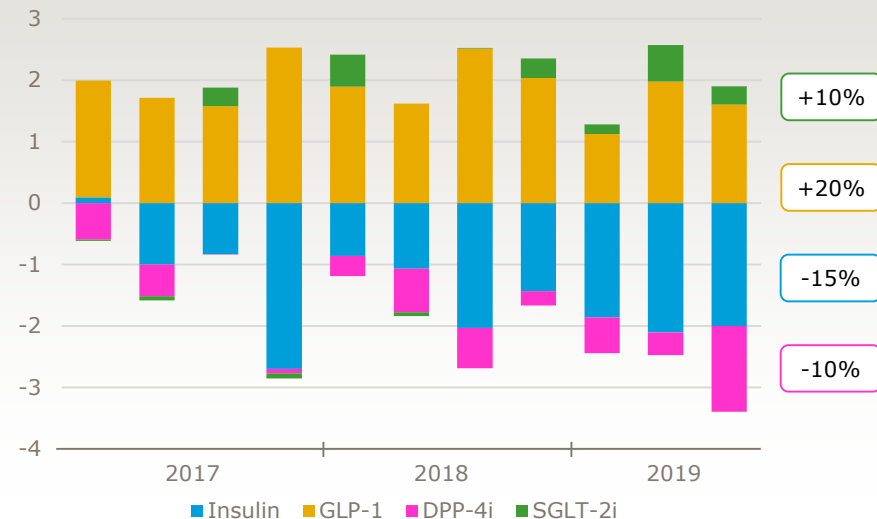
DKK 105 billion down by -1.6% vs 9M 2018



US added sales per product class

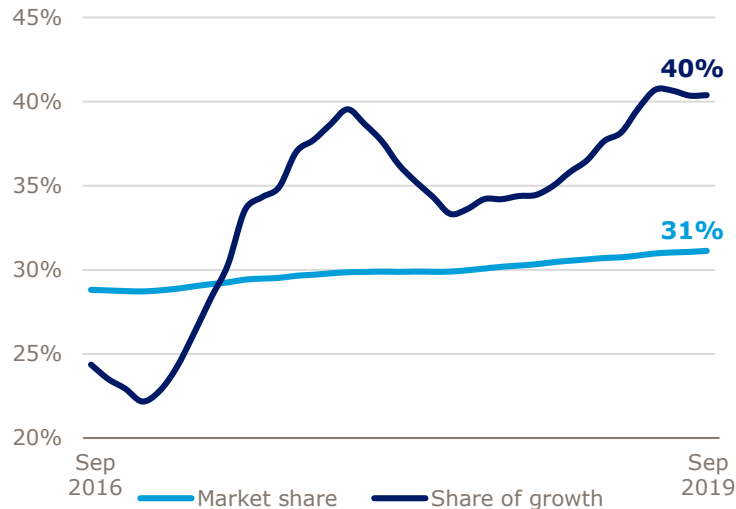
DKK billion

3-year CAGR

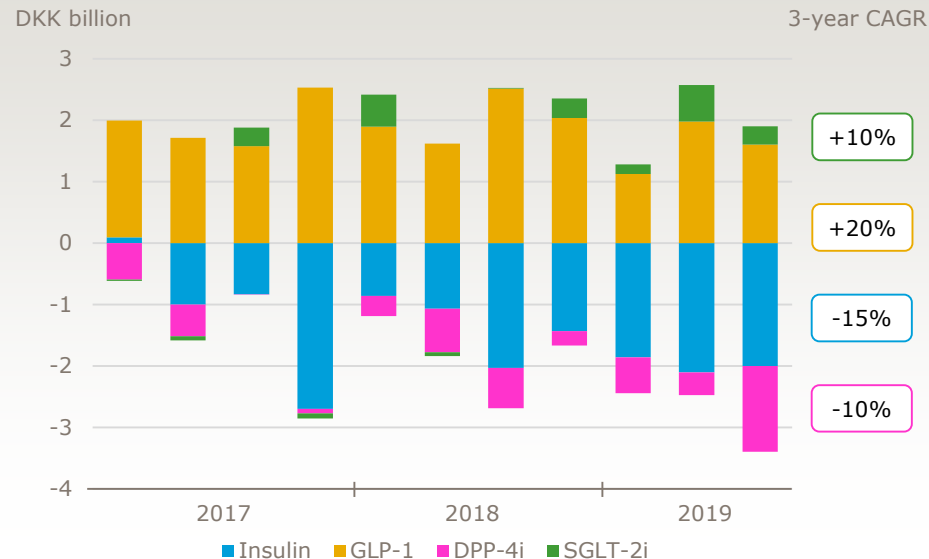


The value of the US diabetes market has plateaued but dynamics across product classes are very different

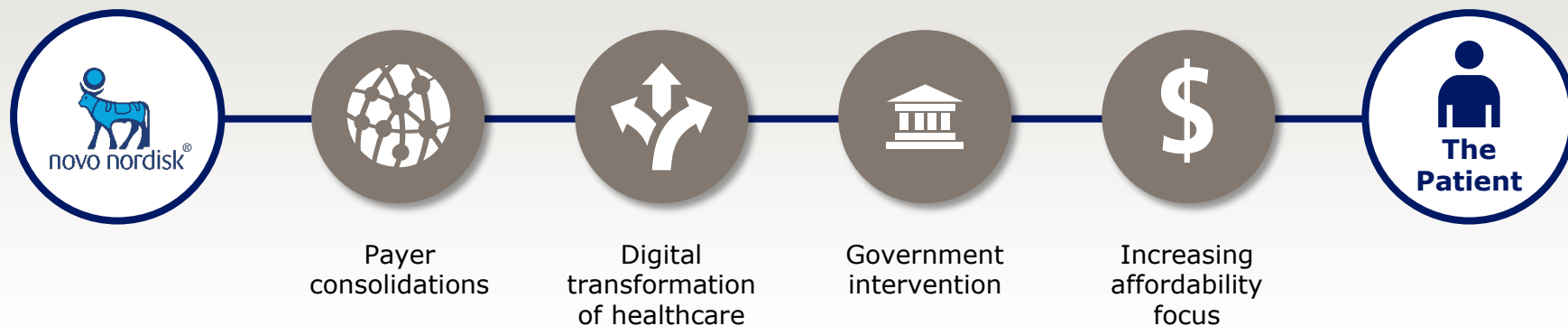
Novo Nordisk USA diabetes value market share and share of growth



US added sales per product class



Market dynamics continue to shift rapidly, impacting the US healthcare landscape



Novo Nordisk offers affordability programmes to increase support to patients inside and outside the system

Increase support for patients inside the insurance system



- Supporting Affordable Patient Access with access rebates and co-pay assistance programmes
- Partnering with CIGNA/ESI on benefit design related to IRS¹ Preventive Benefit Change
- Follow-on brand insulin²

Expand support for patients outside the system



- Patient Assistance Program providing free medicines to eligible people
- USD 99 insulin savings programme

Safety net for those patients inside and outside the system



- Affordable Human Insulin Option making human insulin available for USD 1-2/day at national pharmacies, including Walmart and CVS

Novo Nordisk has a clear strategy to successfully navigate through a crucial time in the USA

GROW

GLP-1



Grow
GLP-1 value

Obesity



Accelerate obesity
market growth

MANAGE FOUNDATION

Insulin



Drive Tresiba® growth and
defend against insulin
erosion

Biopharm



Ensure strong product
launches and manage
NovoSeven® pressure



**EVOLVE
OPERATING MODEL**



**ENHANCE
CAPABILITIES**

OUR PEOPLE AND CULTURE

Novo Nordisk has a clear strategy to successfully navigate through a crucial time in the USA

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GLP-1

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EVOLVE
OPERATING MODEL



ENHANCE
CAPABILITIES

OUR PEOPLE AND CULTURE

Novo Nordisk has an opportunity to further grow the GLP-1 diabetes segment with a best-in-class portfolio

Realise semaglutide portfolio positioning

RYBELSUS[®]

**Preferred
oral**

OZEMPIC[®]

**Preferred
injectable**

VICTOZA[®]

**Prepare for loss
of exclusivity**

Transform type 2 diabetes treatment beyond HbA_{1c} control

Establish semaglutide as the foundation

Novo Nordisk has an opportunity to further grow the GLP-1 diabetes segment with a best-in-class portfolio

Realise semaglutide portfolio positioning

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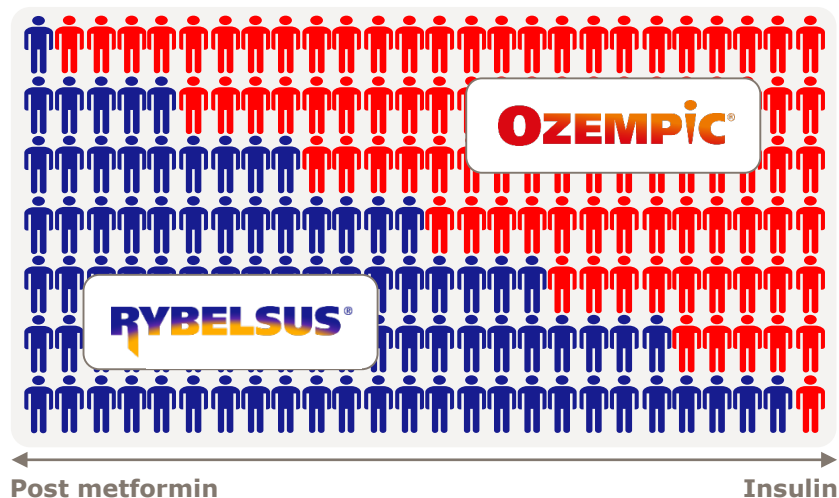
**Prepare for loss
of exclusivity**

Transform type 2 diabetes treatment beyond HbA_{1c} control

Establish semaglutide as the foundation

Rybelsus® and Ozempic® can co-exist with a clear execution strategy and clinical trials to support promotional efforts

A competitive oriented positioning to maximise portfolio impact



Key clinical trials to support a broad usage of GLP-1



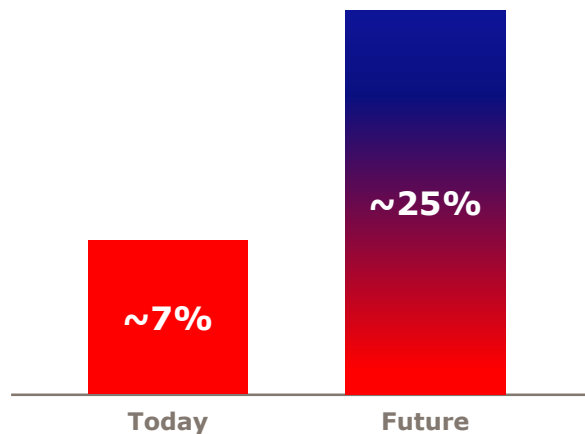
Research suggests that the GLP-1 class could triple with oral GLP-1 as a treatment opportunity but access is a key uptake variable



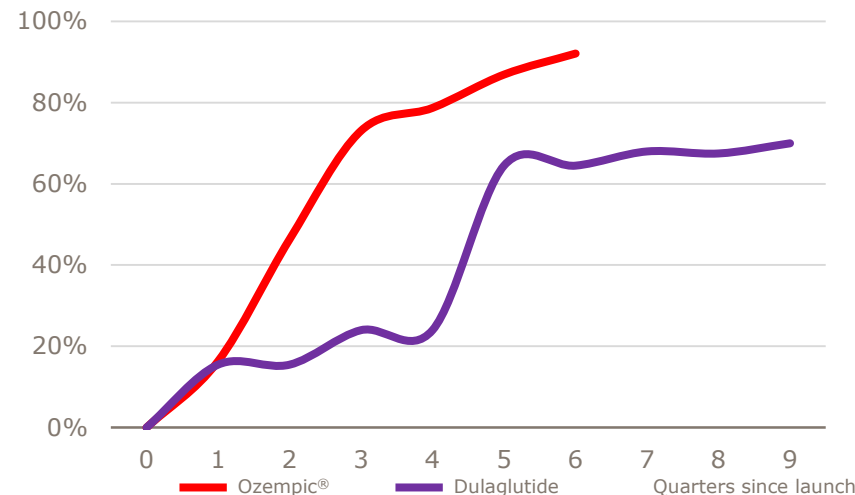
Patients on a GLP-1 based on a survey among healthcare professionals

■ Sc GLP-1

■ Sc + oral GLP-1



Access uptake since launch for selected once-weekly injectable GLP-1s in the USA



Closing remarks



Novo Nordisk USA is going through a **historic transition transforming ~70% of sales¹**

Despite a **challenging environment**, North America remains a **crucial market to Novo Nordisk** with notable opportunities particularly with **Ozempic®** and **Rybelsus®**

Novo Nordisk USA has a **clear strategy** to successfully navigate through a crucial time

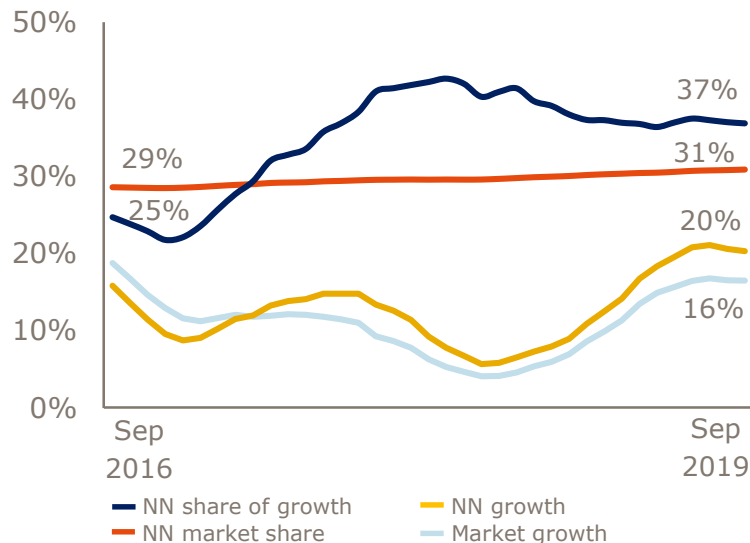
¹ 2015-2022

Sources, notes and abbreviations – North America Operations

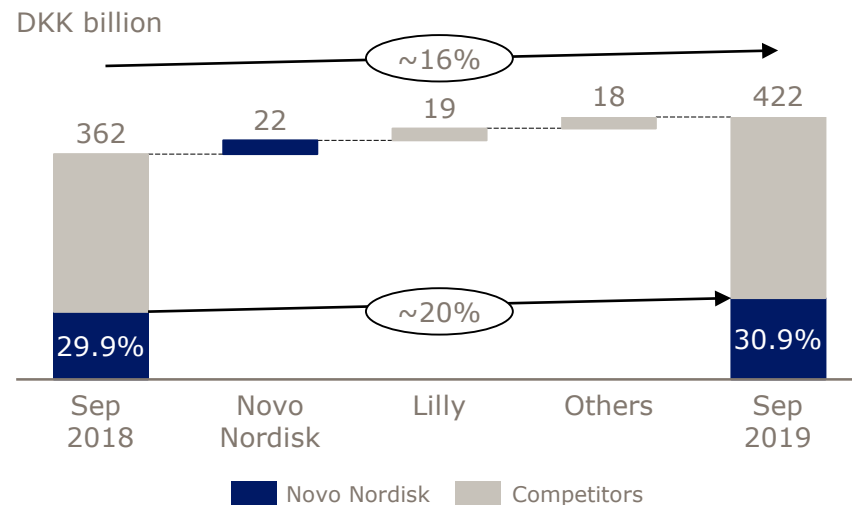
- **Slide 91:** Mature insulin: modern insulin and human insulin
- **Slide 92:** ¹ Modern insulin, human insulin, Prandin®, devices and needles; ² Ozempic® and Rybelsus®; ³ Tresiba®, Xultophy®, Fiasp® and follow-on brand insulin
- **Slide 93:** Note: added sales at constant exchange rate (CER); source: Company reported numbers
- **Slide 94:** Note: added sales at constant exchange rate (CER); source: Company reported numbers, IQVIA MAT mDKK, September 2019 latest observation
- **Slide 96:** ¹ Available from Novo Nordisk Pharma, Inc., a Novo Nordisk A/S company; IRS: Internal Revenue Service
- **Slide 101:** Glargine U100 in SUSTAIN 4 and SUSTAIN 5
- **Slide 102:** Source: 2017/2018 Oral Semaglutide Market Map HCP Research, n = 50 US based doctors evenly split among endocrinologists, PCPs high- and low prescribers, and non-writing PCPs; Source: Fingertip Formulary bridge (commercial and Part D combined)

North America Operations: Diabetes market share and market growth

Diabetes market growth and Novo Nordisk market share

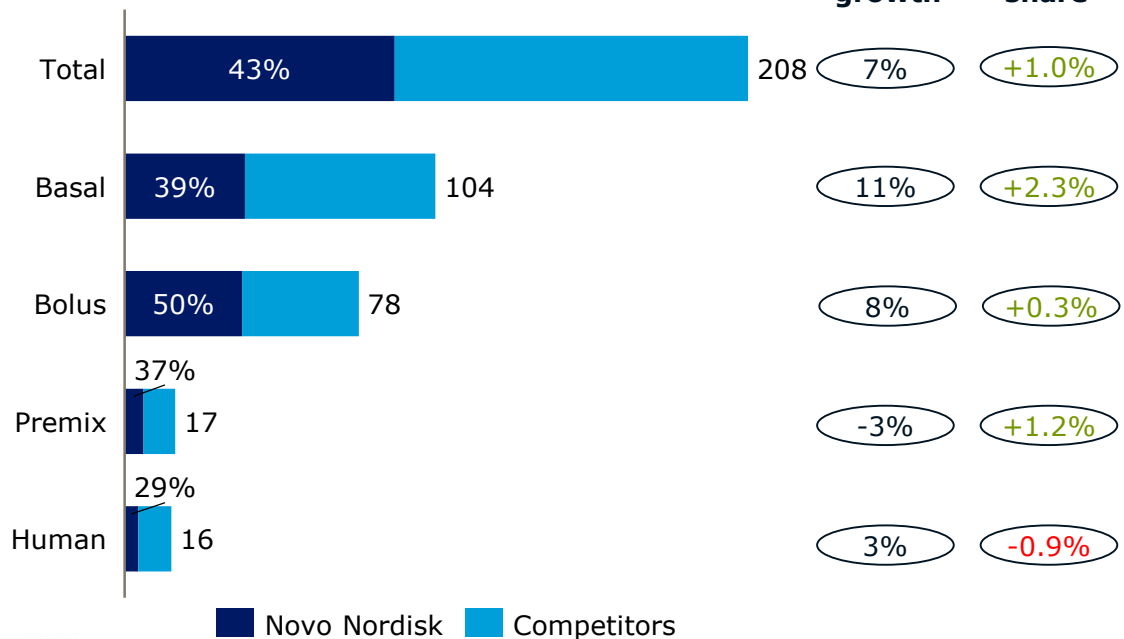


Diabetes market size and growth

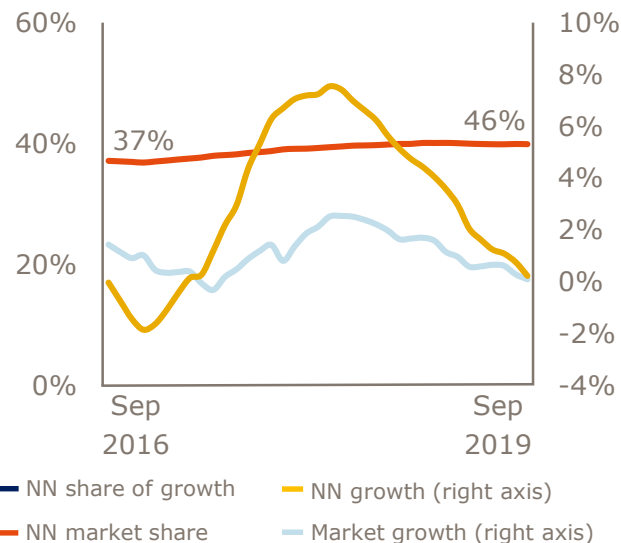


North America Operations: Insulin market size and volume share of growth and market share

Insulin market share and market size (DKK billion)

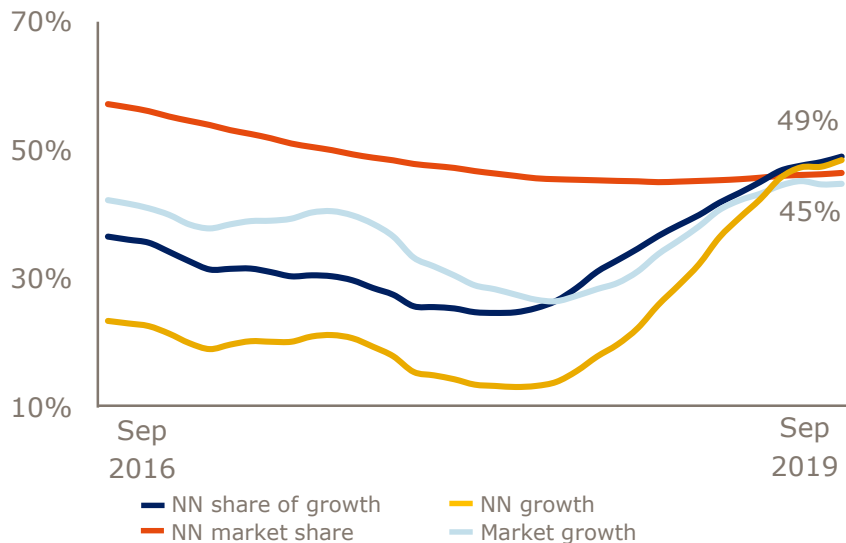


Insulin volume: Share of growth and market share

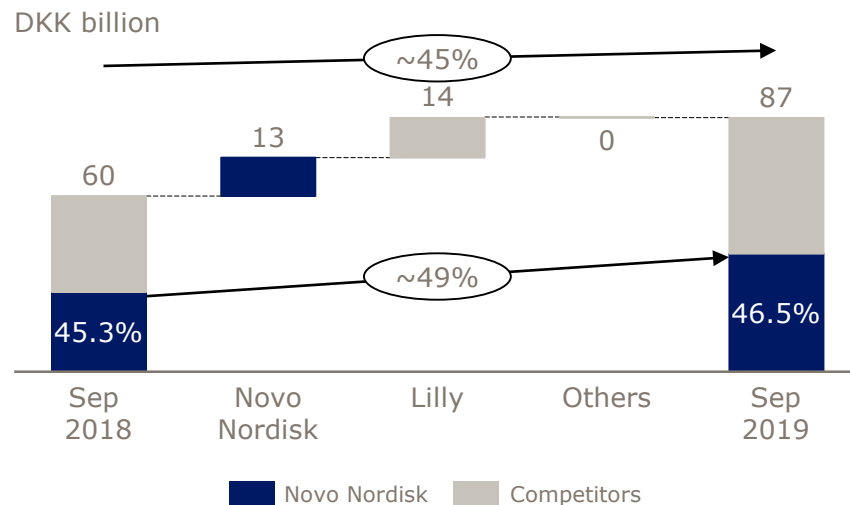


North America Operations: GLP-1 market share and market growth

GLP-1 market growth and Novo Nordisk market share

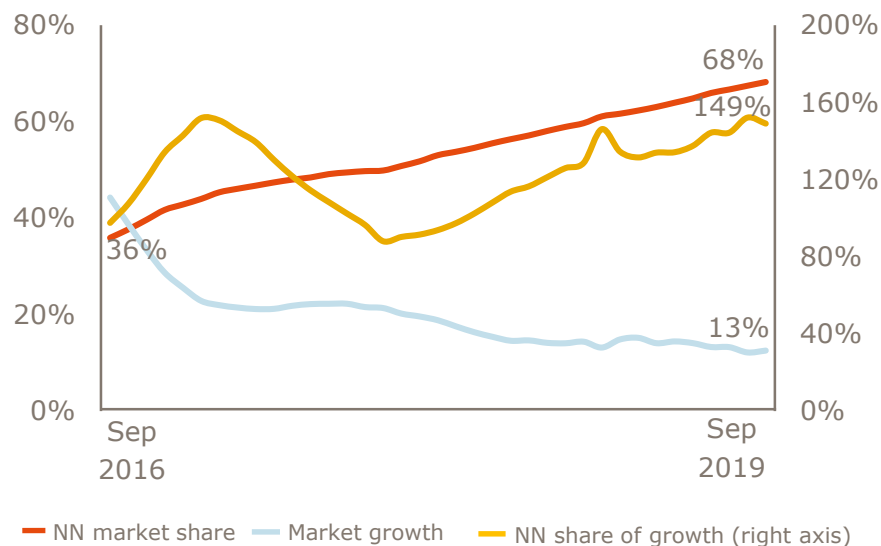


GLP-1 market size and growth

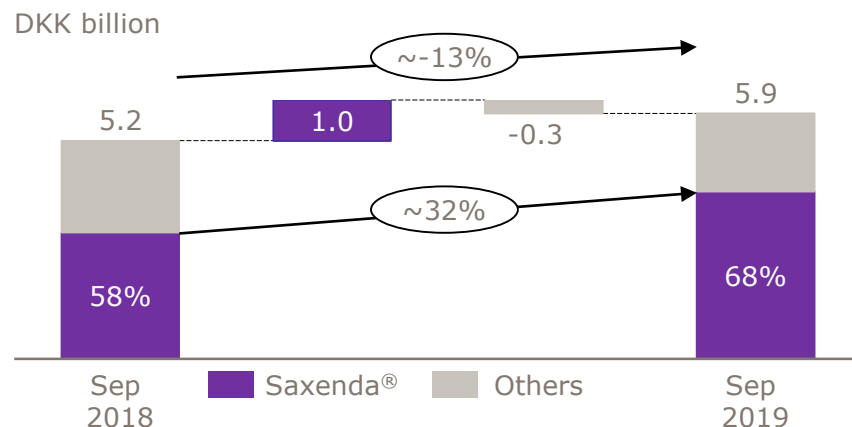


North America Operations: Obesity market share and market growth

Obesity market growth and Novo Nordisk market share



Obesity market size and growth





INTERNATIONAL OPERATIONS

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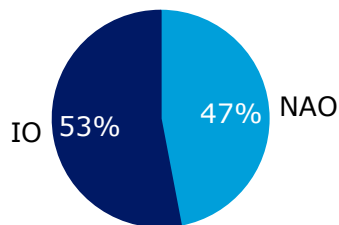
Note: All notes, sources and abbreviations for this presentation are found in the appendix.

Sales growth has historically been 4-6% but growth momentum has increased driven by demographics and the Market Fit approach

International Operations is diverse and covers 190 markets



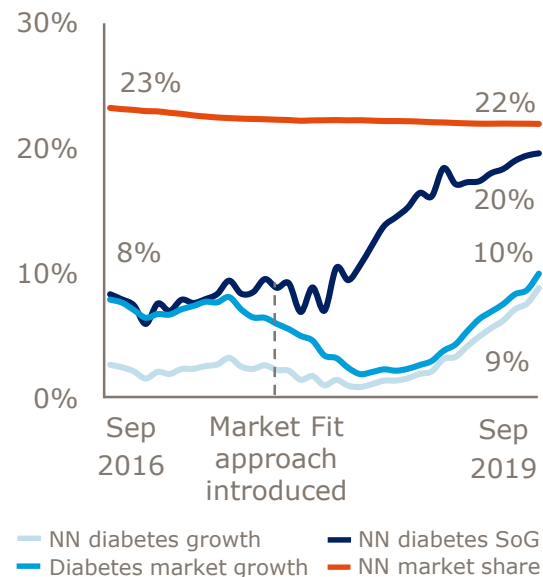
IO's share of revenue YTD 2019



Historic growth has been in the range of 4-6%



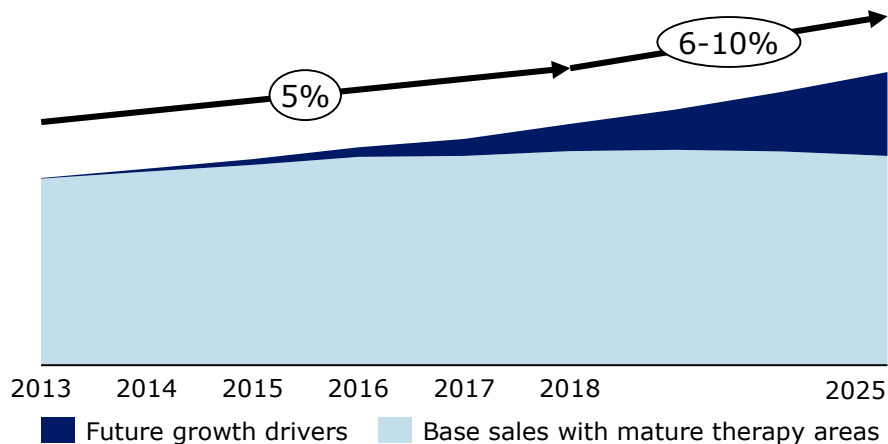
Growth momentum has benefitted from the Market Fit approach



The medium-term growth is expected to be 6-10% annually driven by securing the base and three future growth enablers

Sales have increased by 5% since 2013, while medium-term growth is expected to be 6-10%

ILLUSTRATIVE



Secure the sales base by leveraging biopharm and portfolio of short-acting and premix insulin of DKK 39 billion

Drive additional growth through three future growth enablers



Establish basal market leadership



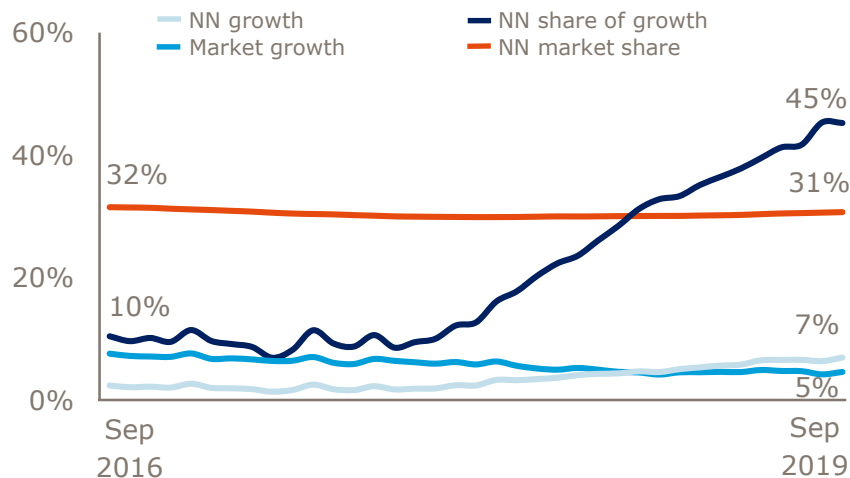
Drive GLP-1 market growth



Expand the obesity market

IO has the ambition to become market leader within basal insulin by leveraging Tresiba® and Xultophy® with the Market Fit approach

Novo Nordisk is driving the volume growth in the basal market and expects to gain leadership



Medium-term ambition is to become leader in the basal insulin segment

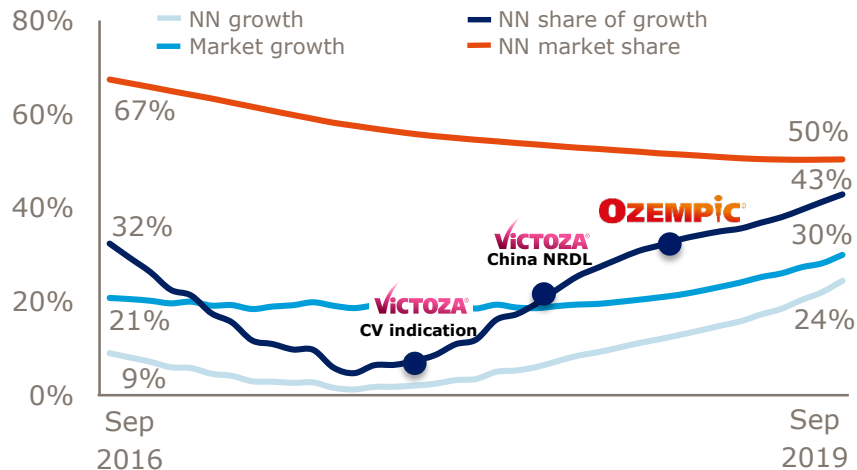
Secure the sales base of DKK 6 billion by offering a portfolio of basal human and modern insulin

Enable future growth by launches of new-generation basal insulin with the Market Fit approach



Novo Nordisk is expected to drive GLP-1 market growth through continuous rollout of Ozempic® and launch of Rybelsus®

Novo Nordisk remains value leader in the GLP-1 market and share of growth is increasing

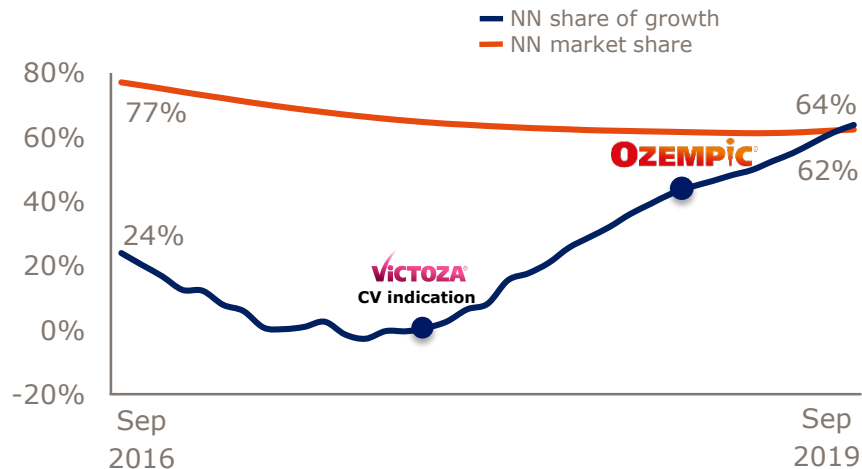


Medium-term ambition to increase the share of growth in the GLP-1 market to more than 50%

Secure the sales base of DKK 6 billion in Victoza® GLP-1 sales by leveraging the CV indication for Victoza® in the 80 markets without Ozempic®

Novo Nordisk is expected to drive GLP-1 market growth through continuous rollout of Ozempic® and launch of Rybelsus®

In markets where Ozempic® is launched the share of growth is higher than the market share



Medium-term ambition to increase the share of growth in the GLP-1 market to more than 50%

Secure the sales base of DKK 6 billion in Victoza® GLP-1 sales by leveraging the CV indication for Victoza® in the 80 markets without Ozempic®

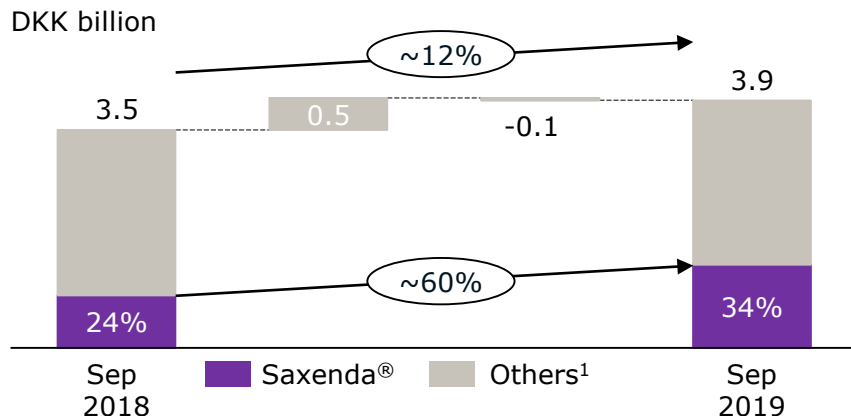
Continued rollout of best in class GLP-1s with Ozempic® and Rybelsus® utilising the Market Fit approach

OZEMPIC® Launched in 23 markets and >40 launches planned by 2022

RYBELSUS® Expected to be launched in more than 30 countries by 2022

Market development activities are progressing in IO and the obesity market is expanding driven by rollout of Saxenda®

Saxenda® is driving the value market growth in the International Operations obesity market



Continue rollout of Saxenda®

Saxenda® Today **43** Countries + Towards 2022 **15** Countries

Offer patient support programmes to improve current 2-5 months stay-time and support affordability

Prepare for launch of semaglutide obesity

Closing remarks



Increase growth compared to historic levels with a 6-10% growth outlook towards 2025

Securing the base and enable future growth drivers are important for success

Become market leader within
basal insulin

Drive GLP-1 market growth
and sales

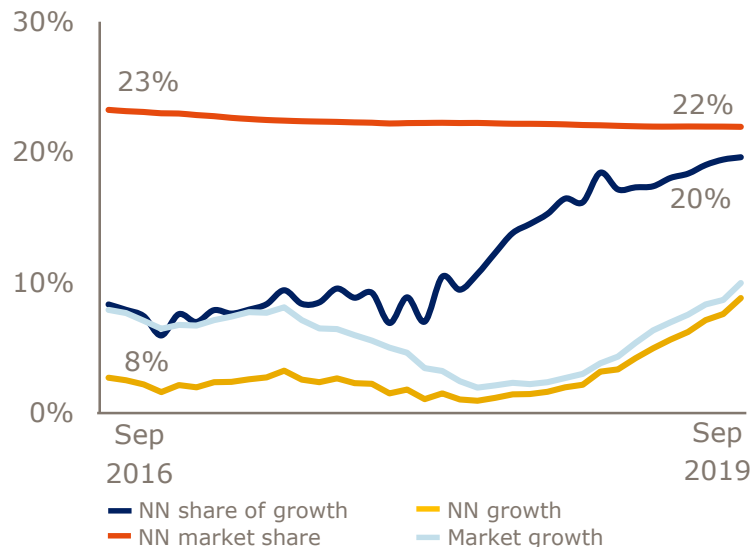
Expand the obesity market
with Saxenda®

Sources, notes and abbreviations – International Operations

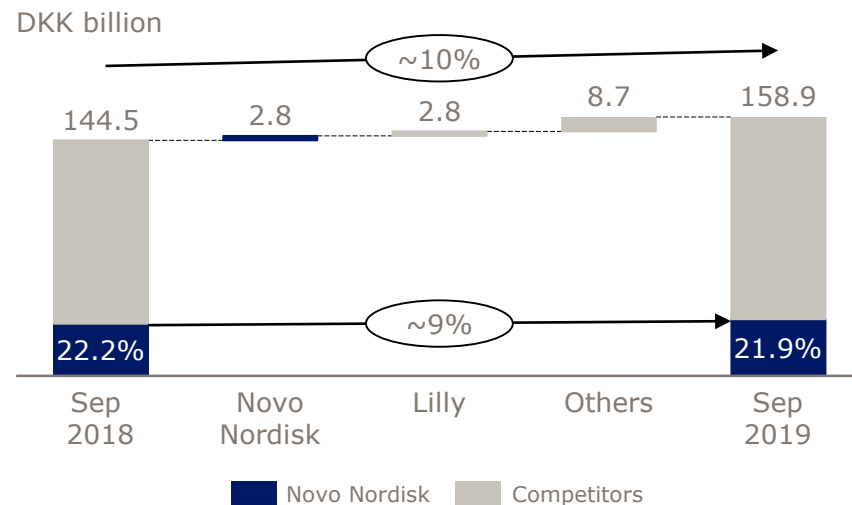
- **Slide 111:** Source: Reported sales and IQVIA, Sep 2019, Spot, MAT; WHO for obesity prevalence and IDF for diabetes prevalence
- **Slide 112:** Source: Realised 2013-2018 sales numbers and illustrative development towards 2025
- **Slide 113:** Source: IQVIA, Sep 2019, Volume, MAT; note: Tresiba® was launched first time in IO in Mar 2013 (DK, JP & UK)
- **Slide 114:** Source: IQVIA, Sep 2019, value, spot, MAT
- **Slide 115:** Source: IQVIA, Sep 2019, value, SPOT, in countries in International Operations with Ozempic® launched
- **Slide 116:** Source: IQVIA, Sep 2019, value, Spot, MAT; ¹ Others include: NC Pharma, Roche, Hypermarcas Ifa Celtics, Prati Donaduzzi, Inova Pharma and other smaller obesity companies

International Operations: Diabetes market share and market growth

Diabetes market growth and Novo Nordisk market share

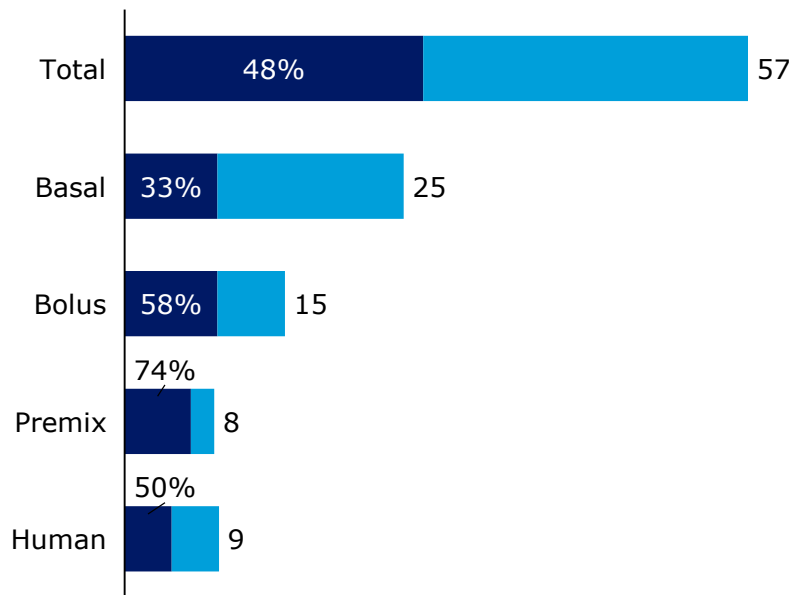


Diabetes market size and growth



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

Insulin market share and market size (DKK billion)



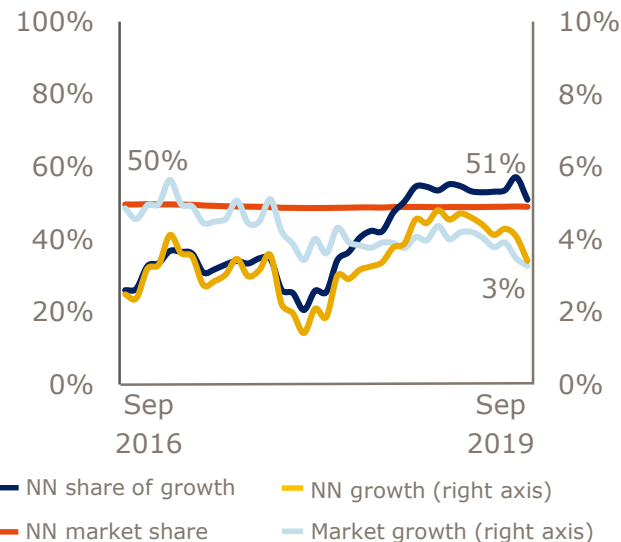
■ Novo Nordisk ■ Competitors

Market growth

Δ Market share¹

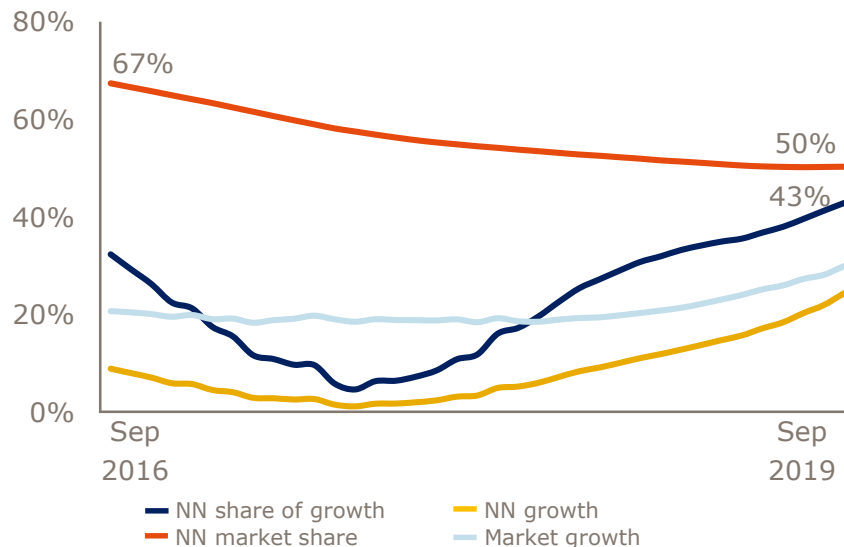


Insulin volume: Share of growth and market share

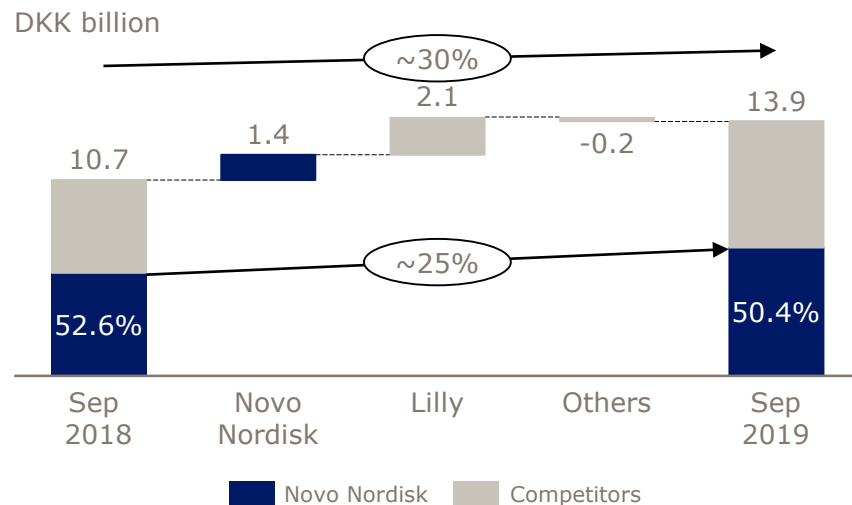


International Operations: GLP-1 market share and market growth

GLP-1 market growth and Novo Nordisk market share

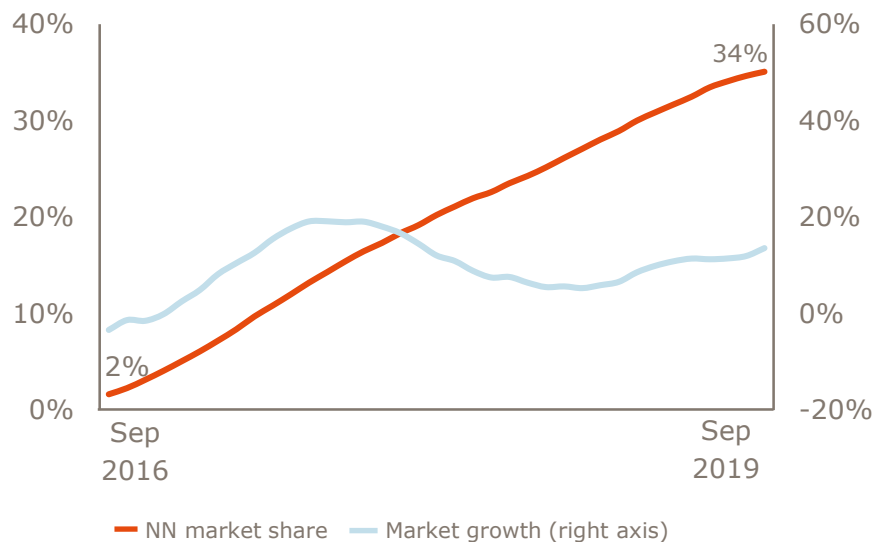


GLP-1 market size and growth

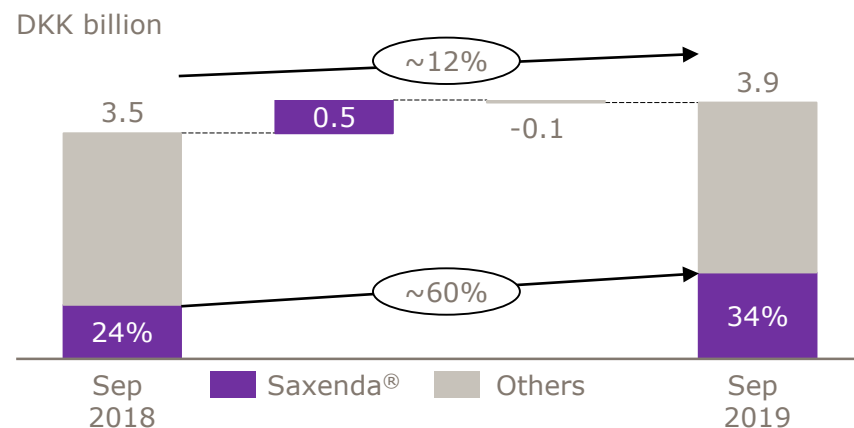


International Operations: Obesity market share and market growth

Obesity market growth and Novo Nordisk market share



Obesity market size and growth



TEAM NOVO NORDISK
Professional cycling team

REGION EUROPE AND REGION JAPAN & KOREA



Forward-looking statements

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- 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

REGION EUROPE

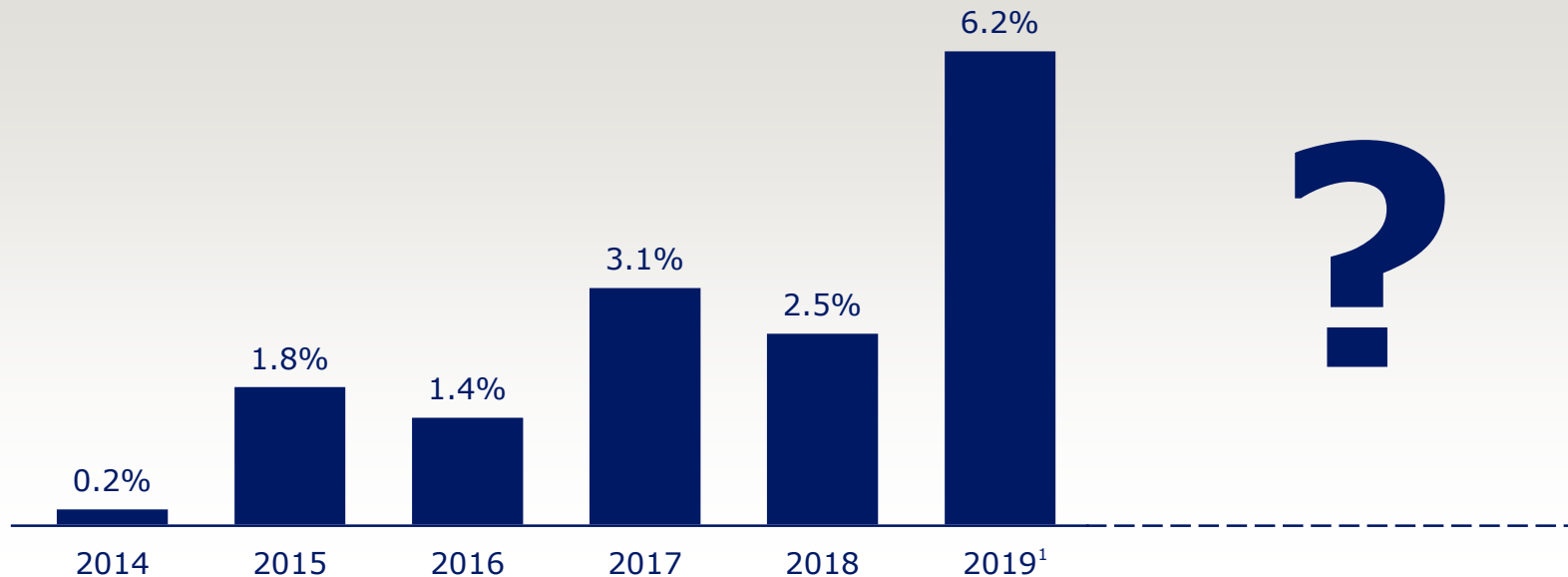
A photograph showing two people from behind, walking away on a wooden pier that extends into a calm body of water. The person on the left is wearing a green quilted jacket, blue jeans, and a colorful patterned scarf. The person on the right is wearing a black long-sleeved shirt and black and white patterned trousers. They are holding hands. The background features a dense forest of green trees on a hillside, with a white building visible in the distance. Tall reeds are in the foreground on both sides of the pier.

SIMONE LENSBOJL & LONE KONGESKOV PEDERSEN
Simone has type 2 diabetes
Denmark

Sales growth in Region Europe has accelerated driven by a clear strategy and sharpened focus on execution



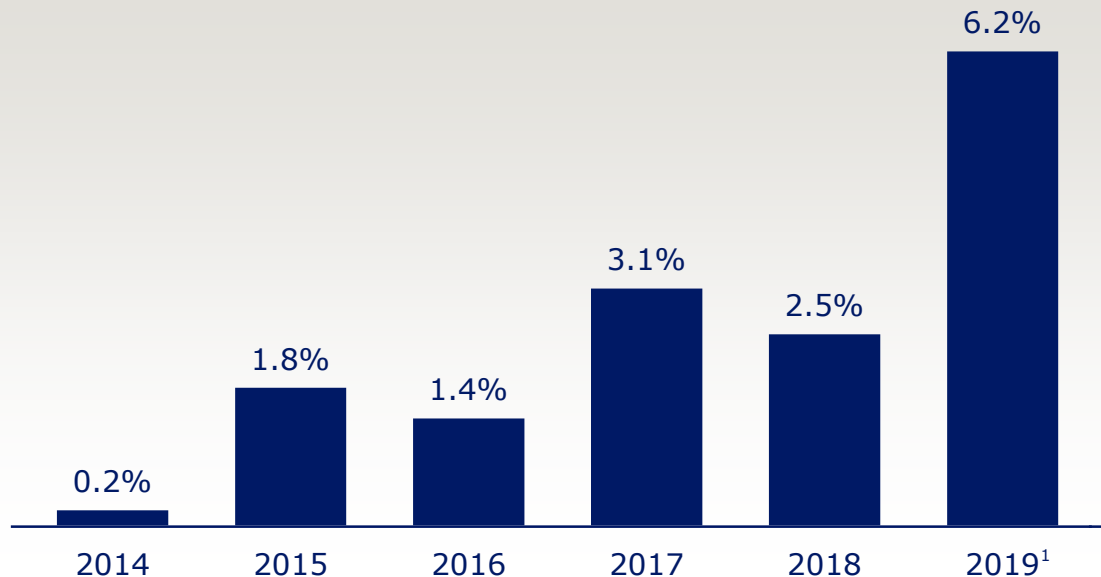
Region Europe annual sales growth at CER



Sales growth in Region Europe has accelerated driven by a clear strategy and sharpened focus on execution



Region Europe annual sales growth at CER



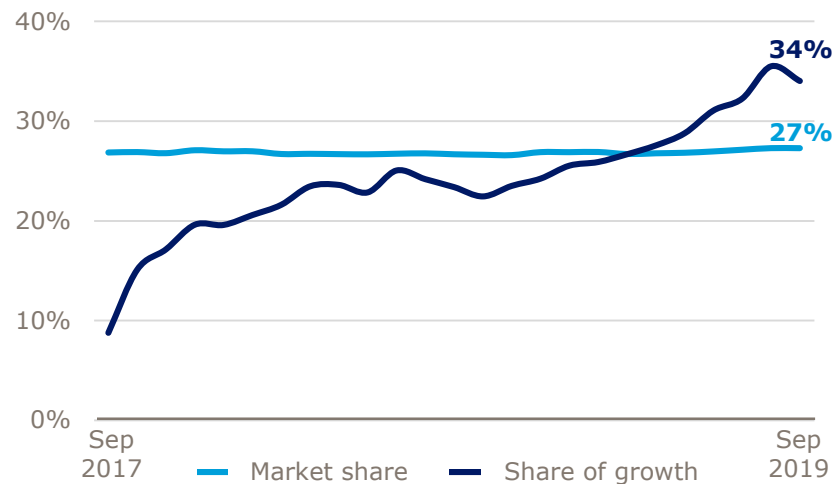
WinEurope2020 strategy



A clearly defined strategy sets the direction for growing market share and outperforming competition in Europe



Region Europe diabetes value market share and share of growth

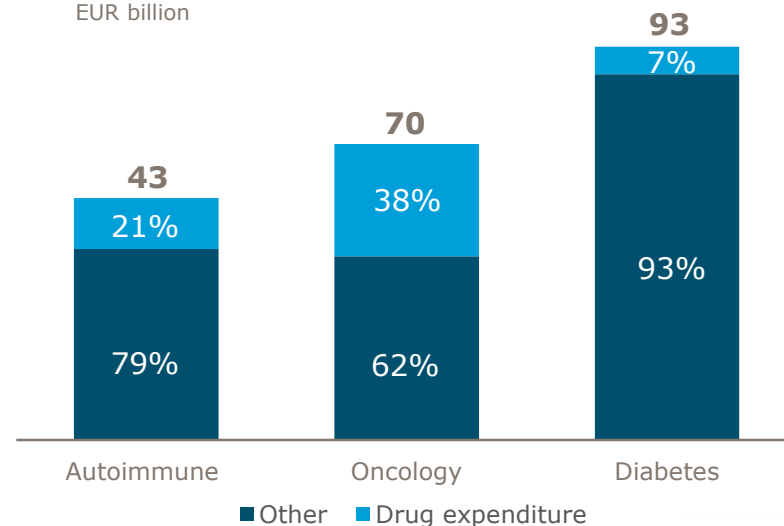


Novo Nordisk takes an active role in driving better understanding and improvements of healthcare



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

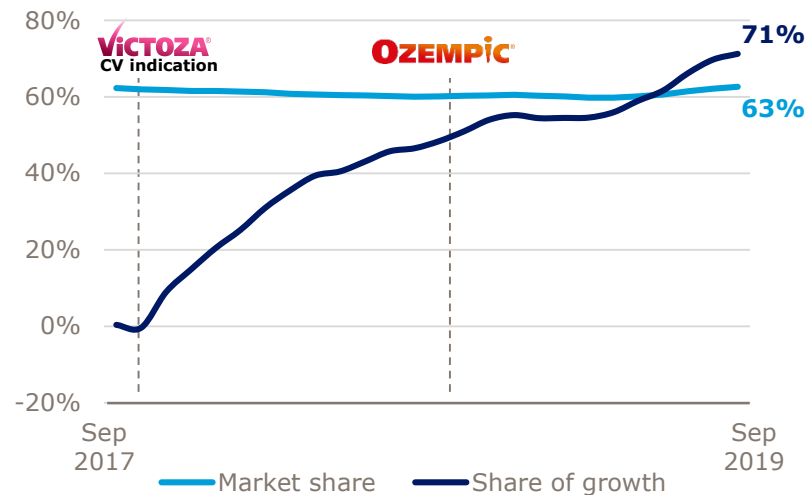
EUR billion



Delivering better care for patients is driving market share gains



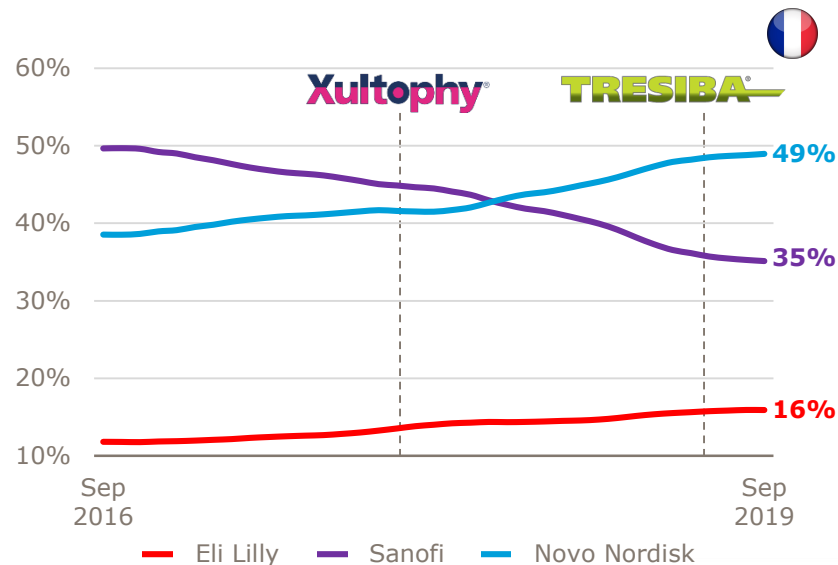
Novo Nordisk GLP-1 value market share and share of growth in European countries where Ozempic® is launched



Delivering better care for patients is driving market share gains



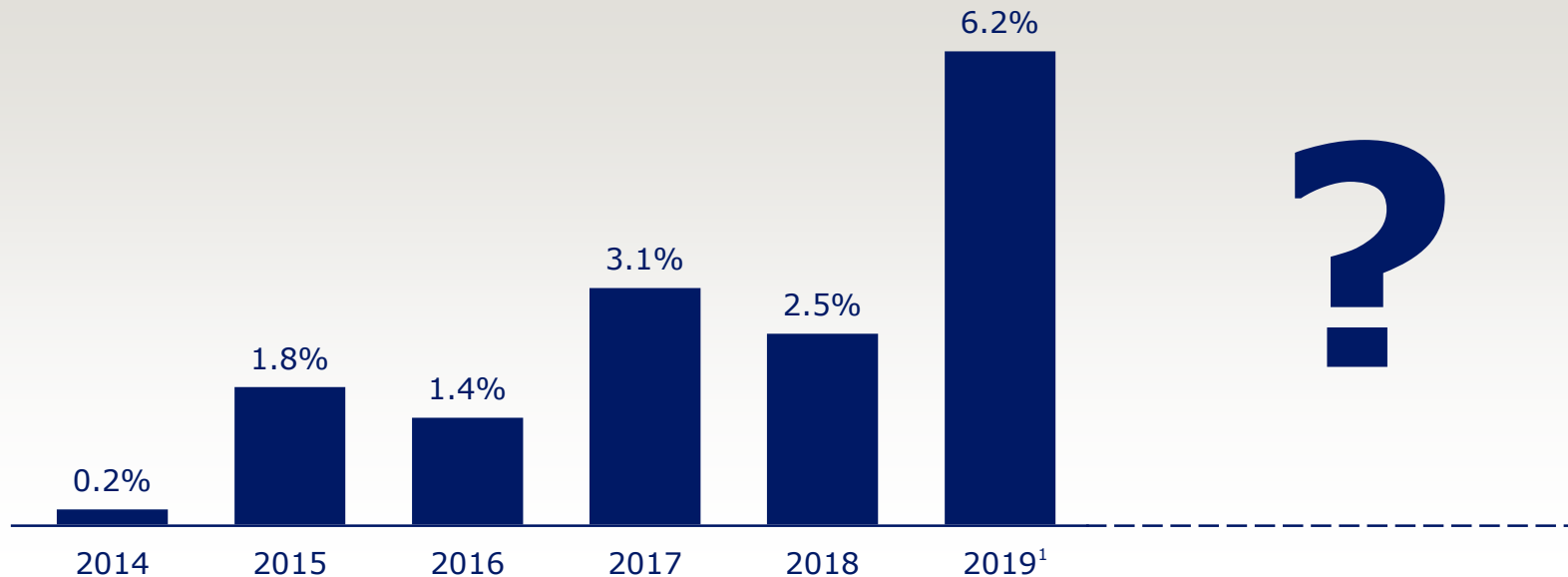
Insulin value market share development in France



Sales growth in Region Europe has accelerated driven by a clear strategy and sharpened focus on execution



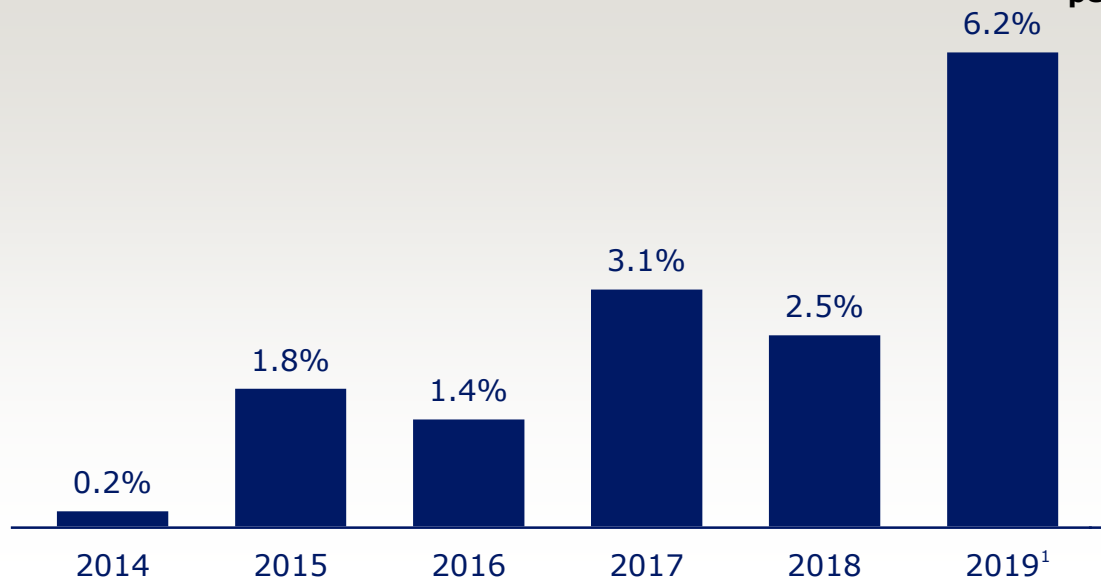
Region Europe annual sales growth at CER



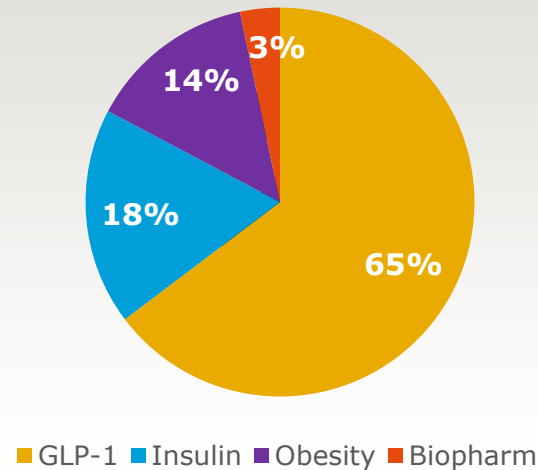
Sales growth in Region Europe has accelerated driven by a clear strategy and sharpened focus on execution



Region Europe annual sales growth at CER



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



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

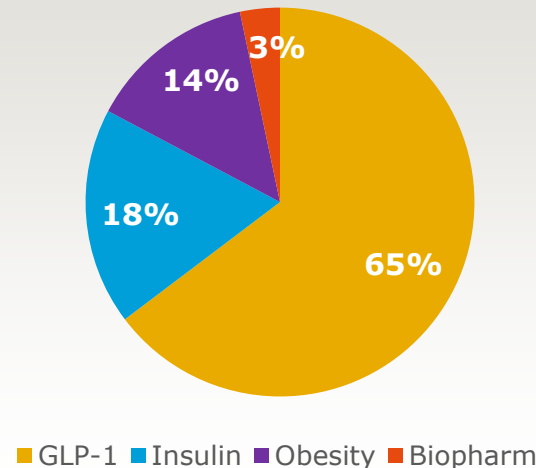
Obesity

- 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



REGION JAPAN & KOREA



MANATO OHARA
Manato has type 1 diabetes
Japan

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

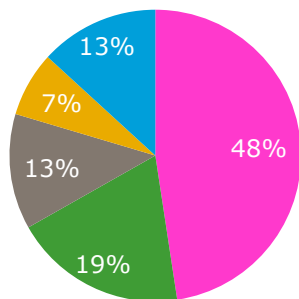
- Increase in brand share of voice by co-promotion
- Entry of new product classes
- Numerous upcoming launches

Novo Nordisk has great potential to improve its market footprint in Japan

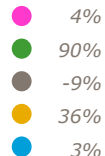


Diabetes value market per product class

5-year CAGR: 5.3%



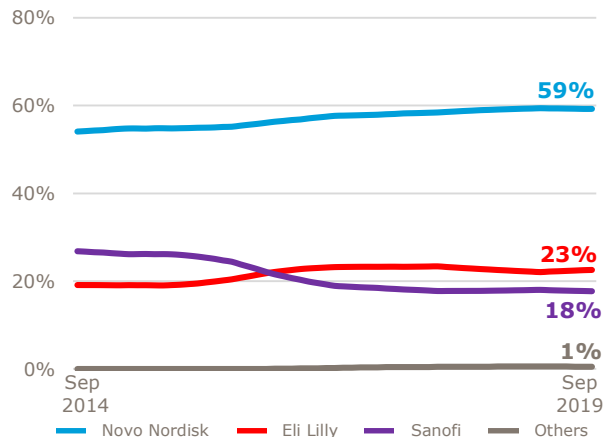
CAGR per class



■ DPP-4i ■ SGLT-2i ■ Other OADs ■ GLP-1 ■ Insulin

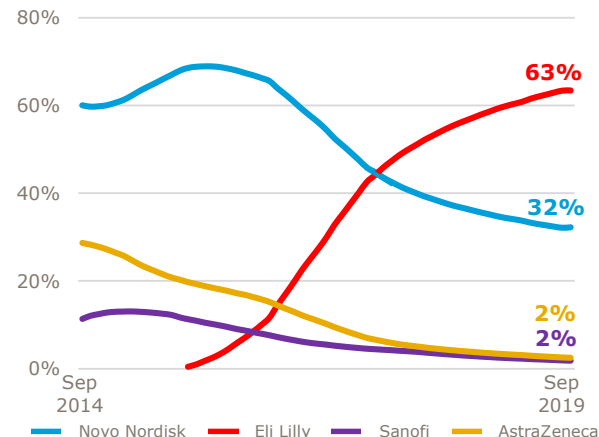
OAD segment is by far the most dominant in the Japanese diabetes market

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

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



ReBORN2021

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®

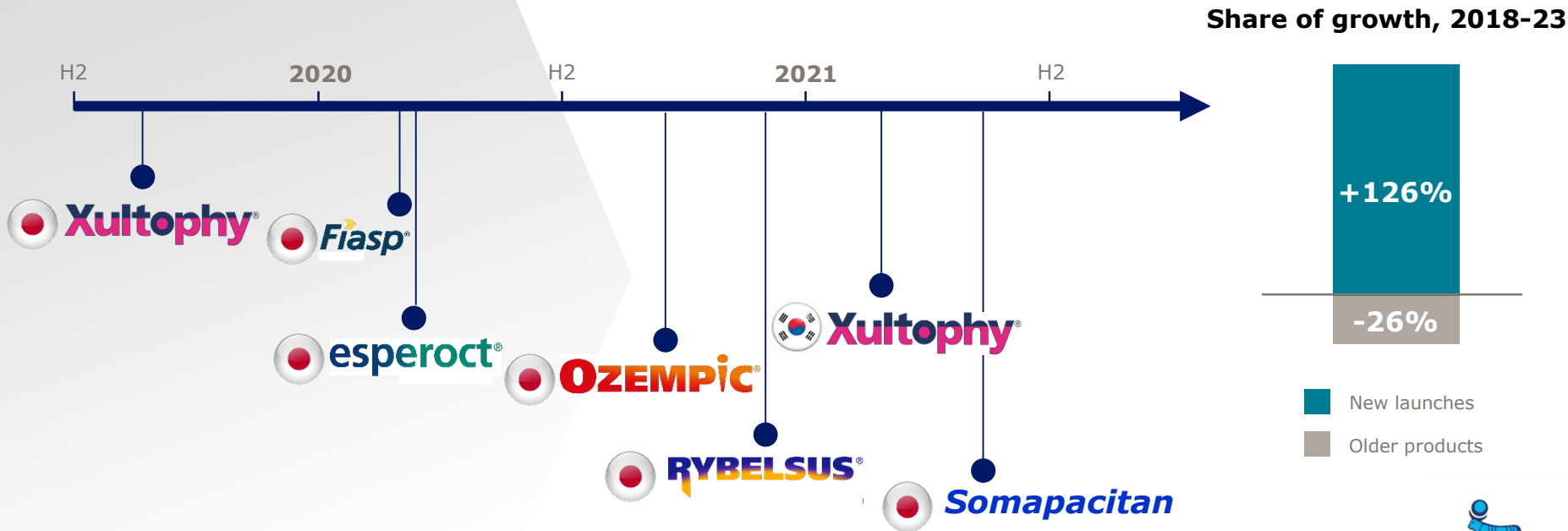
Obesity

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

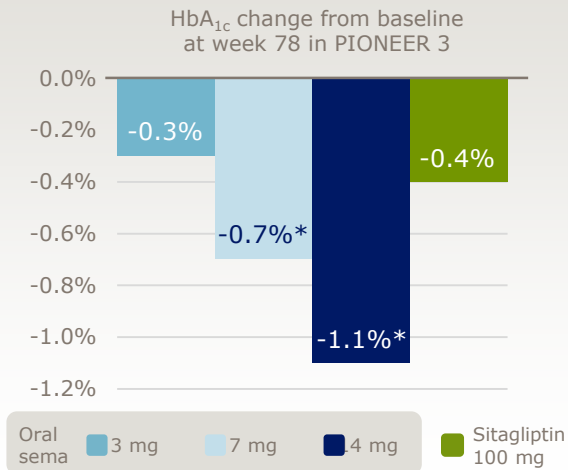


The Japanese diabetes market is dominated by OADs

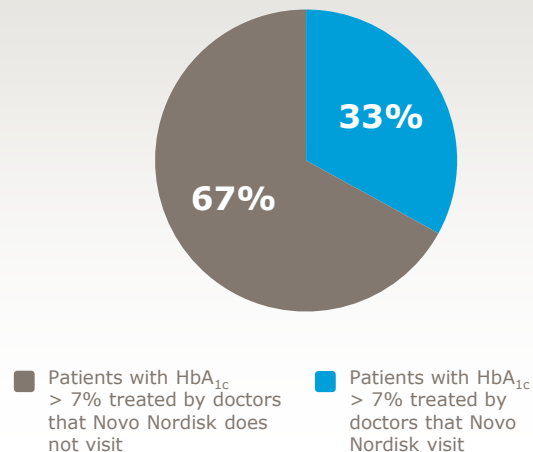
~80%

of people in Japan treated with diabetes medication are on OADs

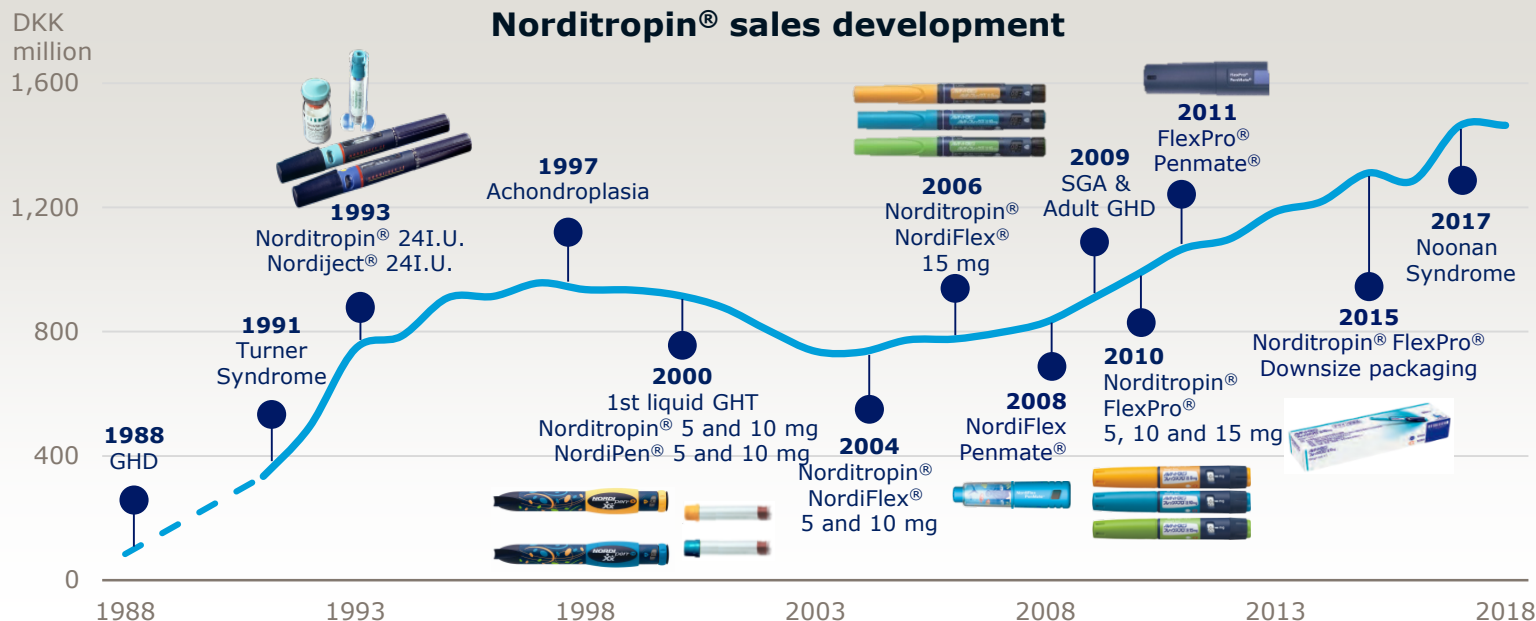
Strong results in the PIONEER trials including Japanese patients



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



Strong life-cycle management of Norditropin® has made it the single-largest Novo Nordisk sales brand in Japan



4.7%
5-year CAGR,
2014-19

47%
value market
share

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



ReBORN2021

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



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

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



Closing remarks

TEAM NOVO NORDISK
Professional cycling team

~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

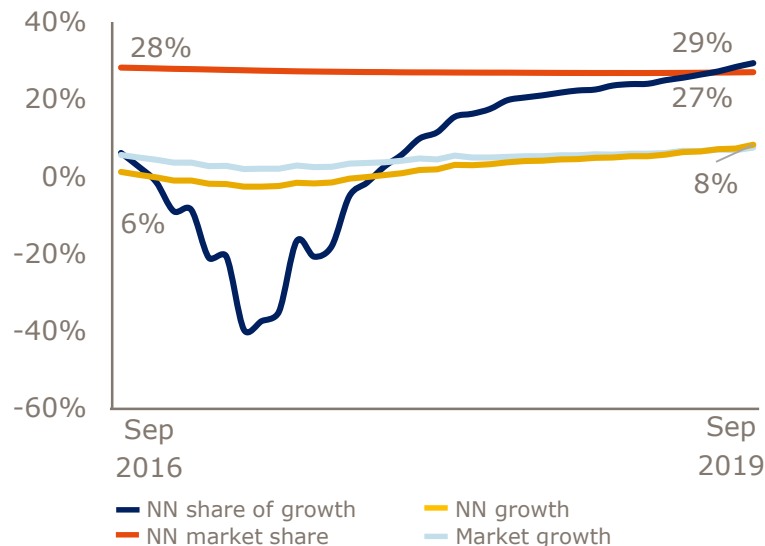
Sources, notes and abbreviations – Region Europe and Region Japan & Korea

- **Slide 127 and 128:** ¹ First nine months, CER: constant exchange rates
- **Slide 129:** Source: IQVIA million DKK MAT, September 2019
- **Slide 130:** Source: OECD, based on EU28, 2018
- **Slide 131:** Source: IQVIA million DKK 3-month rolling, September 2019
- **Slide 132:** Source: IQVIA million DKK 3-month rolling, September 2019
- **Slide 133 and 134:** ¹ First nine months, CER: constant exchange rates
- **Slide 138:** Source: IQVIA million DKK MAT, September 2019
- **Slide 140:** 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 141:** 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 142:** Internal sales reports at CER; IQVIA million DKK MAT, September 2019

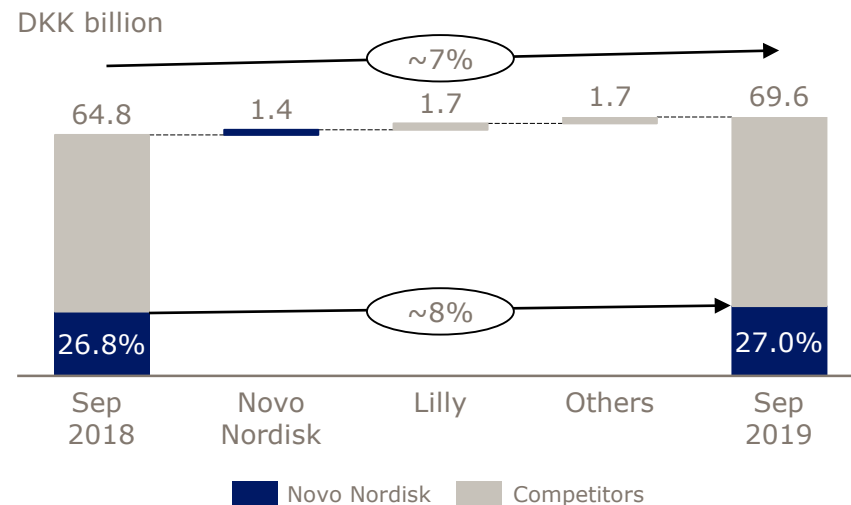
Region Europe: Diabetes market share and market growth



Diabetes market growth and Novo Nordisk market share



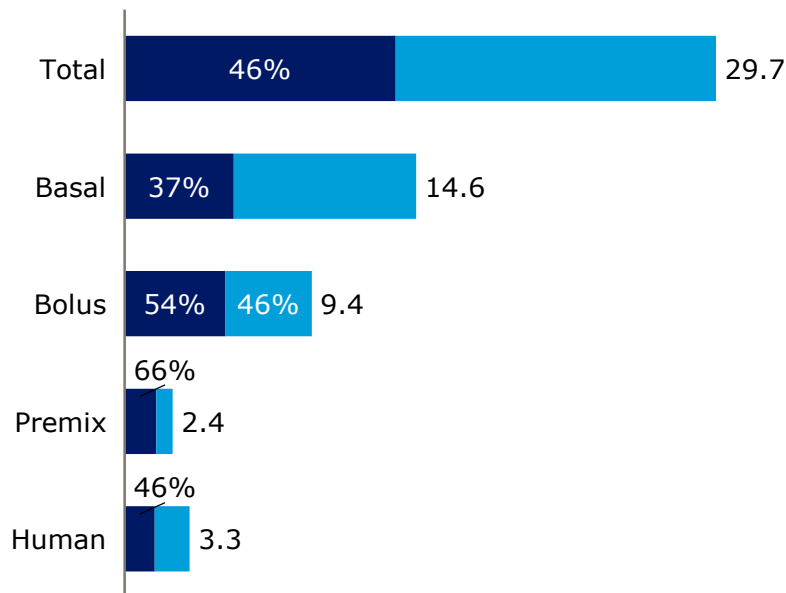
Diabetes market size and growth



Region Europe: Insulin market size and volume share of growth and market share



Insulin market share and market size (DKK billion)



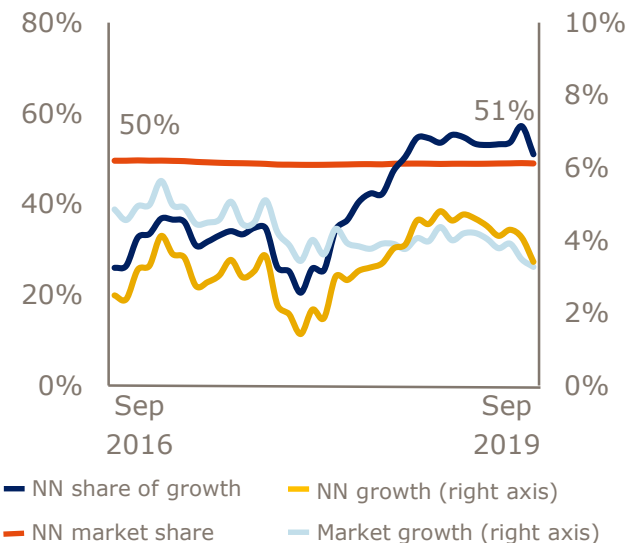
■ Novo Nordisk ■ Competitors

Market growth

Δ Market share¹



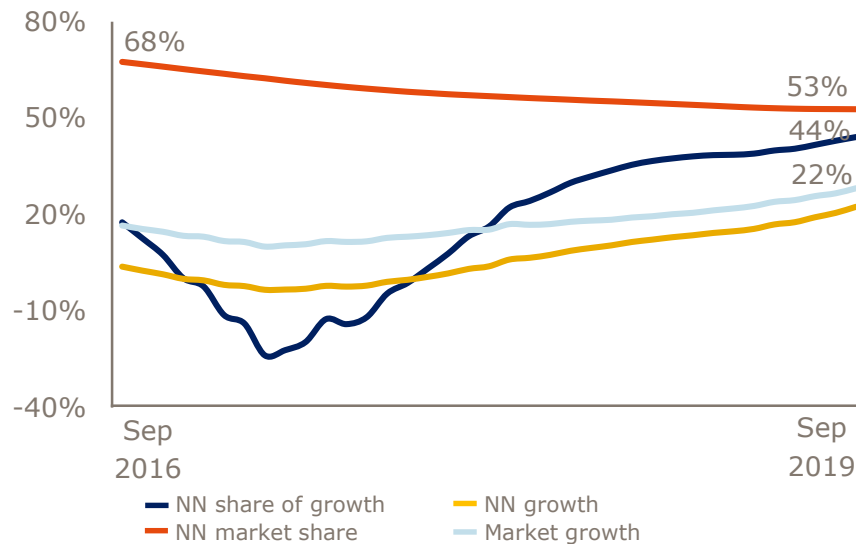
Insulin volume: Share of growth and market share



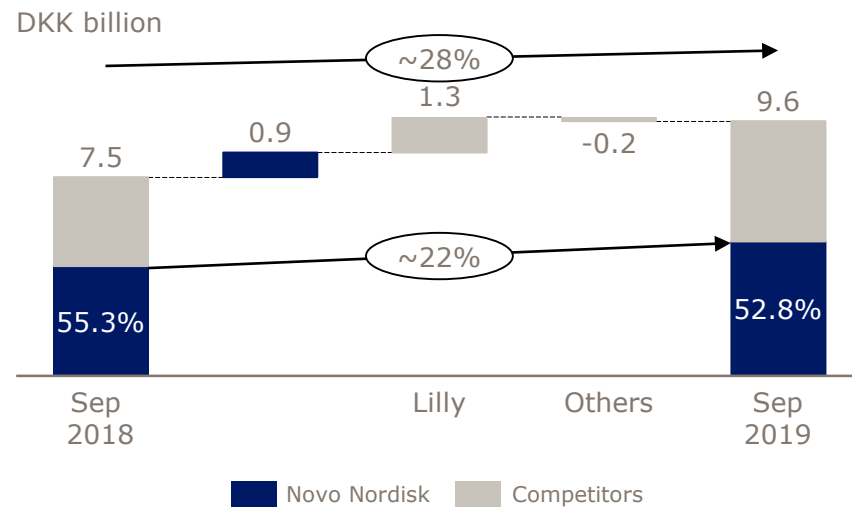
Region Europe: GLP-1 market share and market growth



GLP-1 market growth and Novo Nordisk market share



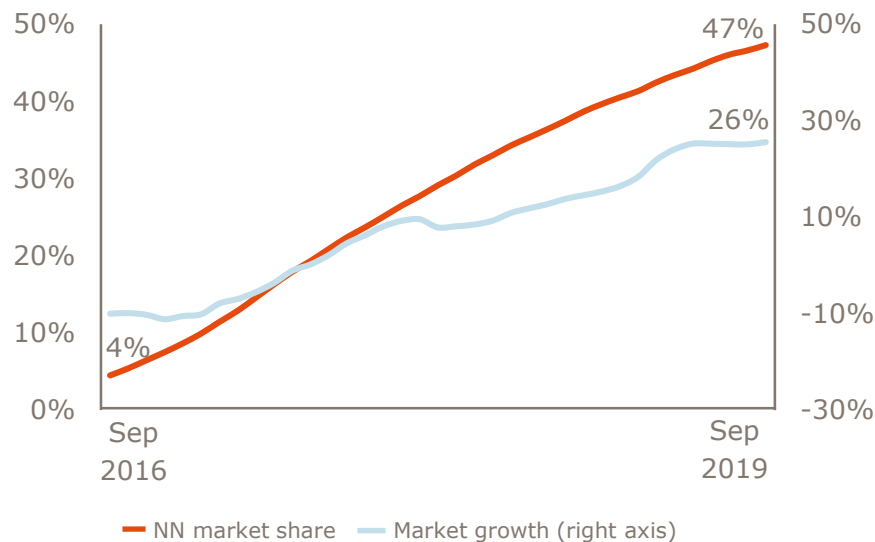
GLP-1 market size and growth



Region Europe: Obesity market share and market growth



Obesity market growth and Novo Nordisk market share



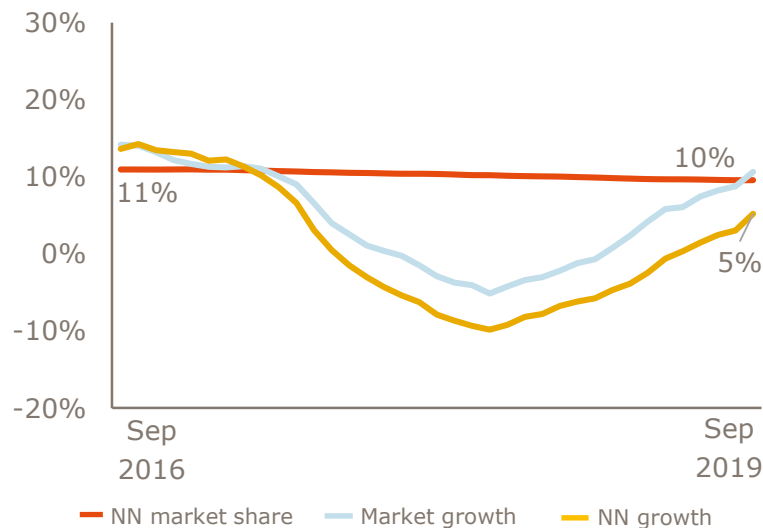
Obesity market size and growth



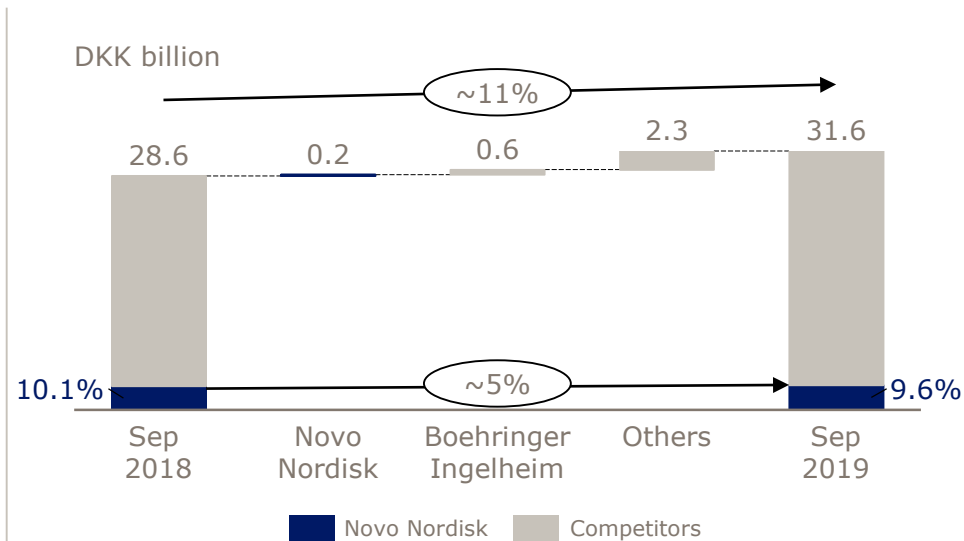
Region Japan & Korea: Diabetes market share and market growth



Diabetes market growth and Novo Nordisk market share



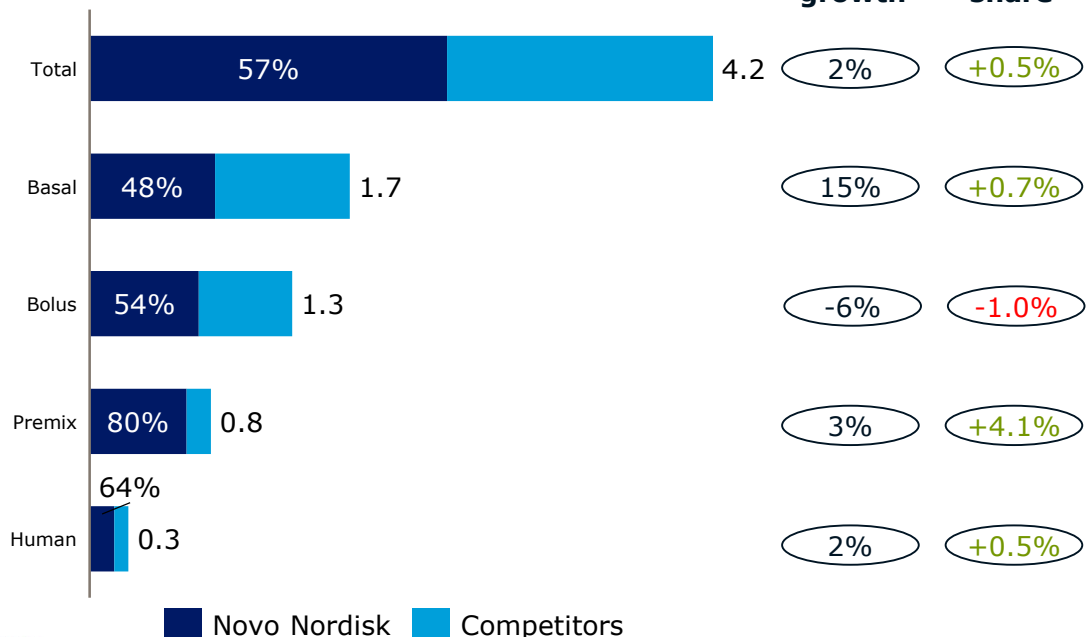
Diabetes market size and growth



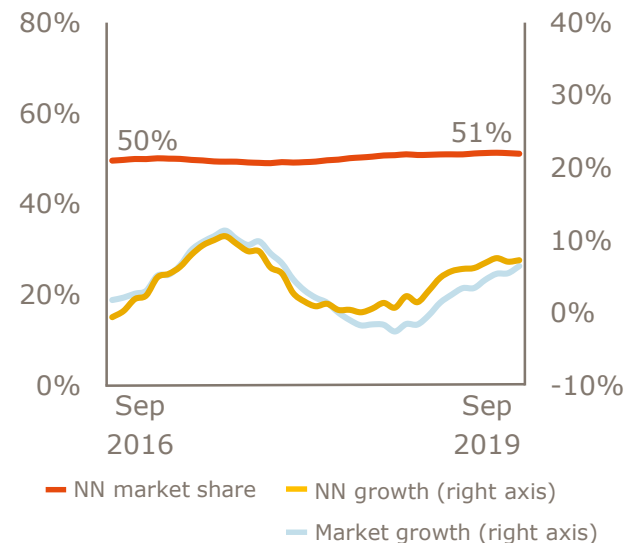
Region Japan & Korea: Insulin market size and volume share of growth and market share



Insulin market share and market size (DKK billion)



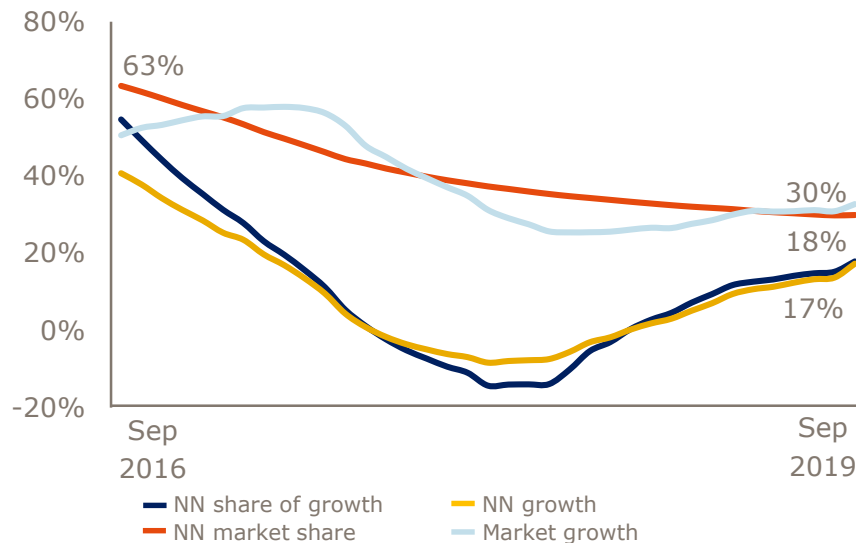
Insulin volume: Share of growth and market share



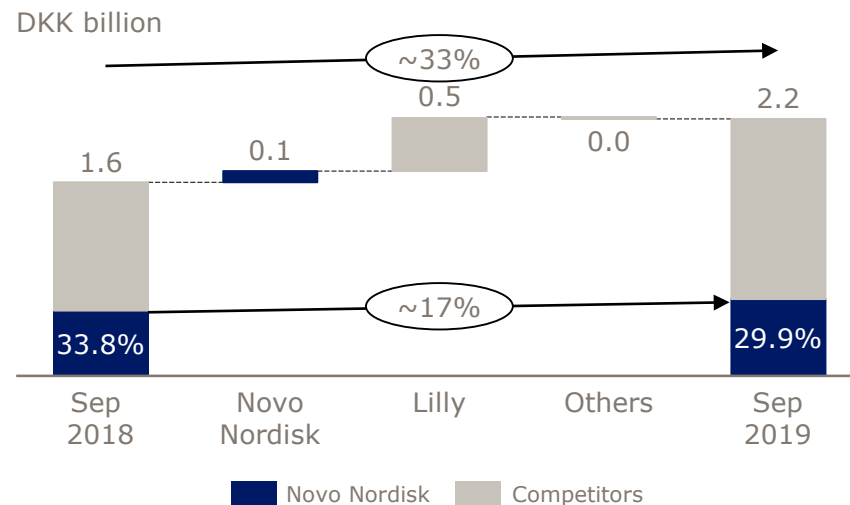
Region Japan & Korea: GLP-1 market share and market growth



GLP-1 market growth and Novo Nordisk market share



GLP-1 market size and growth



REGION CHINA



HAN GUISHAN
Han has type 2 diabetes
China

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- Statements regarding the assumptions underlying or relating to such statements.

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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.

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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

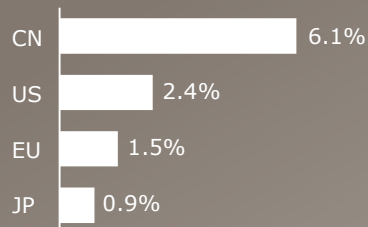
Note: All notes, sources and abbreviations for this presentation are found in the appendix.

China is the second biggest pharma market globally, with high unmet needs

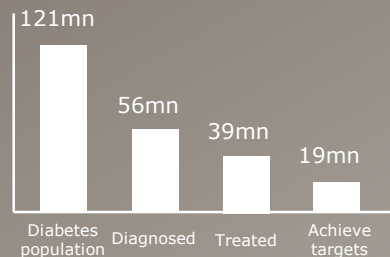


2nd

Largest pharmaceutical market globally



Sustained solid GDP growth and increasing disposable income



Large unmet needs in diabetes

Beijing USD 21,000 GDP per capital
4.6 doctors per patient

Xinjiang USD 7,400 GDP per capital
2.6 doctors per patient

Significant diversity and complexity across provinces

Health is at the centre of government policy, creating a positive environment for sustainable growth

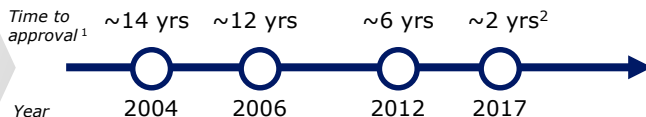


Capitalising on opportunities provided by positive changes in policy and regulatory environment

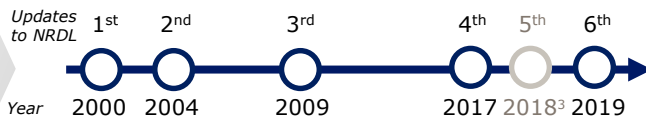
Healthy China
Action
2019-2030

- Diabetes prevention and control among 15 projects, with specific goals:
- Diabetes awareness rate (from baseline 36% to 50% in 2022)
 - Diabetes standard management rate (from baseline 50% to 60% in 2022)

Accelerated
approvals



Reimbursement



Responding to challenges by mitigating risks and managing issues as they become certain

Cost
containment



- Volume-based purchasing
- Price erosion (bidding)

Competition



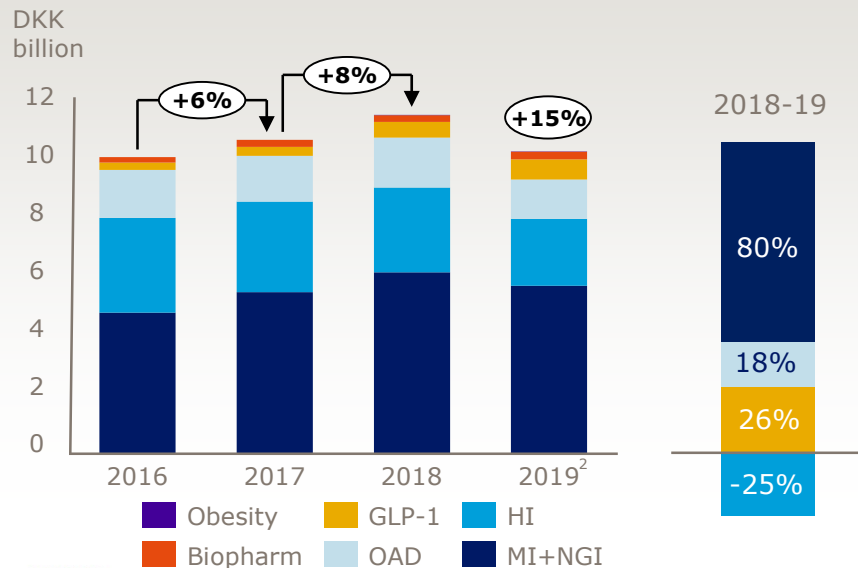
- **15 local insulin manufacturers comprising 33% of the market**
- **20+ local biosimilars launches by 2023**

Novo Nordisk has a strong presence and a clear strategy to continue growth and leadership in Region China



Celebrating 25 years of success in Region China ~7 million patients treated in 2019¹

Novo Nordisk Annual sales and share of growth per product group



WIN+2025 strategy to become the trusted partner in diabetes, enabling 60 million patients treated by 2025¹



Maximise portfolio



Drive commercial excellence



Shape market

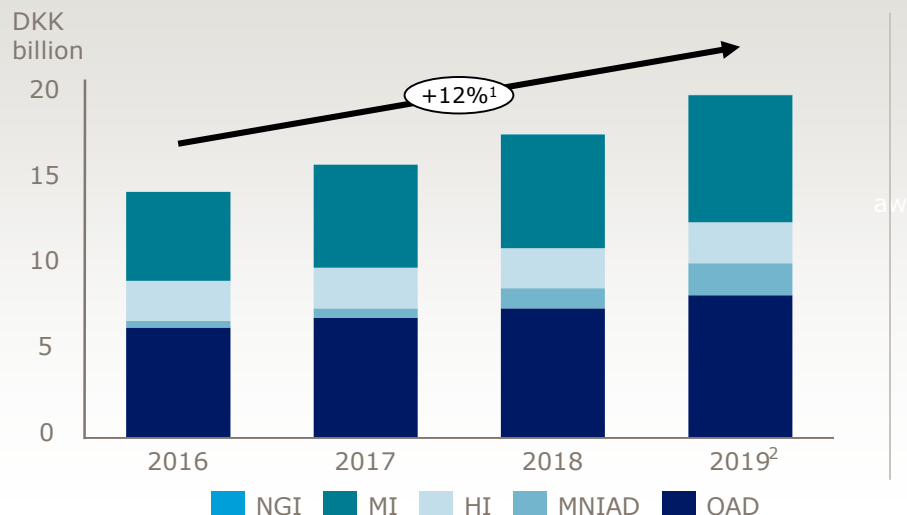


Accelerate innovation

The diabetes market continues its dynamic growth with insulin remaining as the core segment



Region China diabetes market by product class



Product class dynamics highlight opportunities

Insulin

- Modern-insulin and new-generation insulin continue to grow
- Human insulin challenged by conversion to modern insulin

Modern non-insulin anti-diabetic

- Emerging segment, driven by reimbursement and new entrants

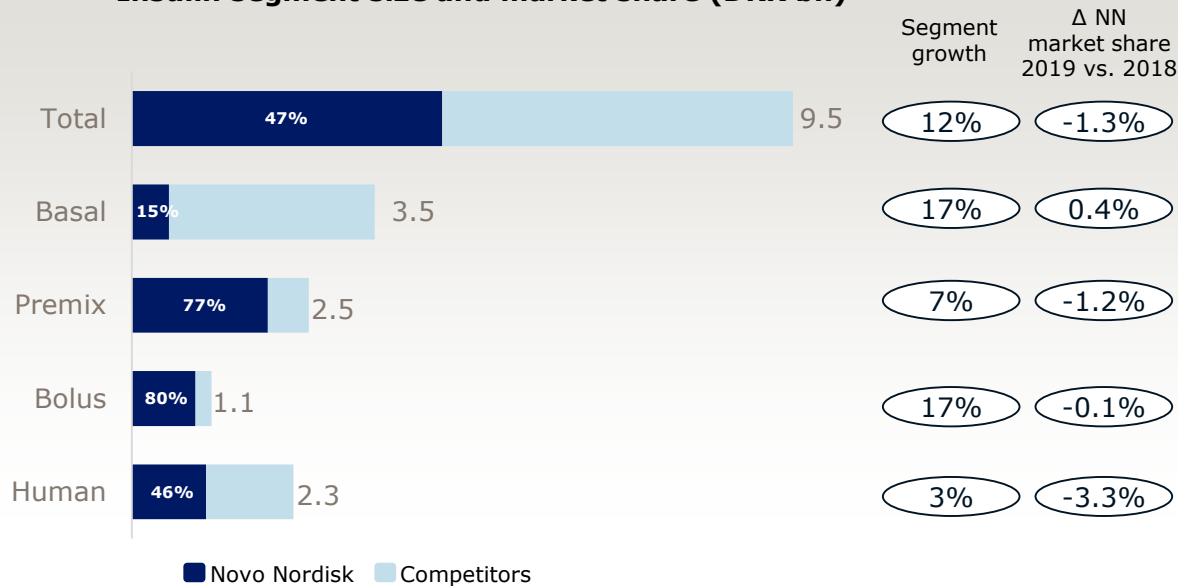
Oral anti-diabetic

- Price pressures with exposure to volume-based purchasing

Sustaining leadership in insulin is achieved by winning in all three modern and new-generation insulin segments



Insulin segment size and market share (DKK bn)



Win in all three insulin segments through commercial excellence

Gain basal insulin market share with dedicated sales force

TRESIBA®

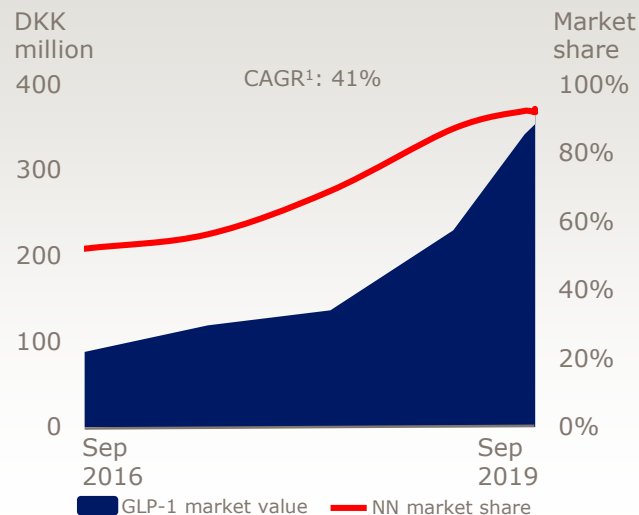
Strengthen premix

RYZODEG®

Acceleration of the GLP-1 franchise is driven by Victoza® and is expected to expand with semaglutide



Strong market share and growth with Victoza®



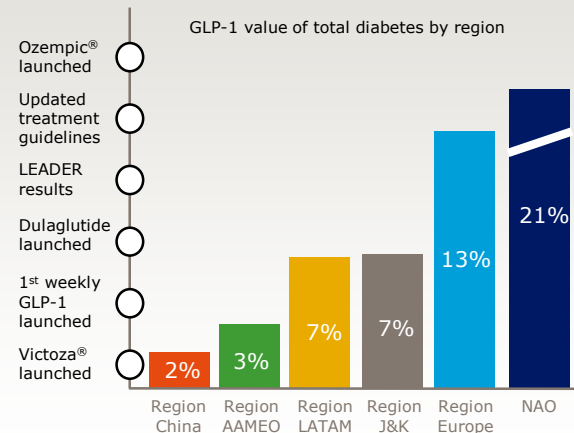
Increasing competition but strong upcoming portfolio and tactics in place

- Increasing GLP-1 competition from new entrants into NRDL
- Dedicated sales organisation to focus on GLP-1

ONCE-WEEKLY
OZEMPIC® *in 2-4 years*

RYBELSUS® *in 4-6 years*

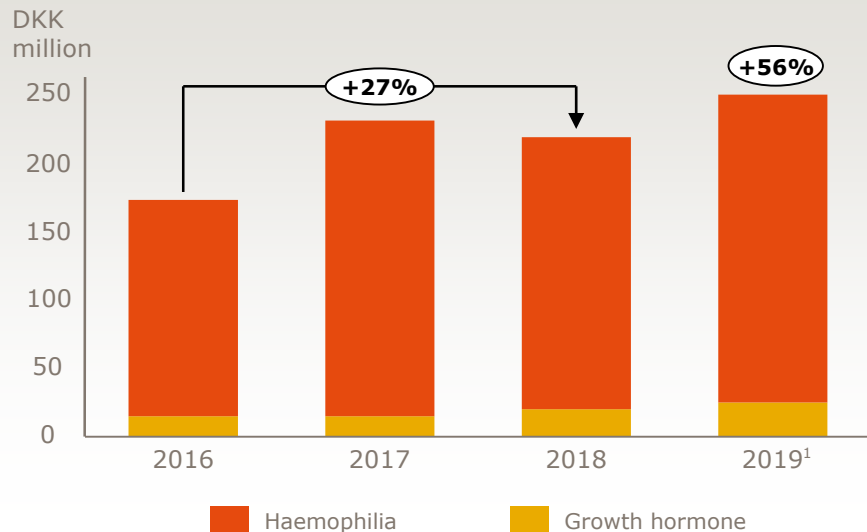
GLP-1 penetration levels across Novo Nordisk regions



Strengthening Biopharm's footprint and building the obesity market is expected to diversify future business



**While only representing ~2% of China sales,
Biopharm holds strong growth potential**



**Obesity is a growing problem in China
but market development is needed**

~ **124mn**
people with obesity²

Government advocates individuals pay attention to their weight in Healthy China 2030 Action Plan

Novo Nordisk supports building the ecosystem to enable early diagnosis, proper treatment, and better control



Drive early diagnosis

BlueCare

Through screening

2016-current



640,000
patients



280,000
high-risk

Build infrastructure

BlueCounty

Build endocrinology depts in country hospitals

2017-current



947
hospitals



897
counties

Build capability

BlueGP

Build GP capabilities through training

2017-current



45 cities



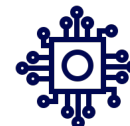
2,200 GPs

Improve adherence

BlueConnect

App-based platform to connect HCPs and patients

2018-current



18,700 patients



The future promises to deliver a more innovative and more diversified portfolio



Novo Nordisk Portfolio

2019 Product Portfolio

Actraphane[®]
 Actrapid[®]
 GlucaGen[®]
 Insulatard[®]
 Mixtard[®]
 NovoLin[®]
 NovoMix[®]
 NovoNorm[®]
 NovoRapid[®]
 Fiasp[®]
 VICTOZA[®]
 CV Indication
 RYBELSUS[®]
 LAI287
 Levemir[®]
 RYZODEG[®]
 TRESIBA[®]
 VICTOZA[®]
 norditropin[®]
 NovoSeven[®]
 KULTOPHY[®]
 OZEMPIC[®]
 novoeight[®]
 SemaObesity

Actraphane[®]
 Actrapid[®]
 GlucaGen[®]
 Insulatard[®]
 Mixtard[®]
 NovoLin[®]
 NovoMix[®]
 NovoNorm[®]
 NovoRapid[®]
 Levemir[®]
 RYZODEG[®]
 TRESIBA[®]
 VICTOZA[®]
 norditropin[®]
 NovoSeven[®]

Less
innovative¹



Less
diversified¹



The future promises to deliver a more innovative and more diversified portfolio



Novo Nordisk Portfolio

Actraphane[®]
 Actrapid[®]
 GlucaGen[®]
 Insulatard[®]
 Mixtard[®]
 NovoLin[®]
 NovoMix[®]
 NovoNorm[®]
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Levemir[®]
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 TRESIBA[®]
 VICTOZA[®]
 norditropin[®]
 NovoSeven[®]
 Xultophy[®]
 OZEMPIC[®]
 novoeight[®]
 SemaObesity

Future Product Portfolio

Actraphane[®]
 Actrapid[®]
 GlucaGen[®]
 Insulatard[®]
 Mixtard[®]
 NovoLin[®]

NovoMix[®]
 NovoNorm[®]
 NovoRapid[®]
 Levemir[®]
 RYZODEG[®]
 TRESIBA[®]

VICTOZA[®]
 norditropin[®]
 NovoSeven[®]
 Fiasp[®]
 VICTOZA[®]
 CV Indication
 RYBELSUS[®]

OZEMPIC[®]
 novoeight[®]
 SemaObesity
 LAI287

More innovative¹



More diversified¹



Closing Remarks

The pharma market in Region China continues to grow and Novo Nordisk is well-positioned to capitalise

Novo Nordisk has a holistic strategy to drive sustainable growth in Region China in the long-term

Novo Nordisk focuses on maximising the portfolio and driving growth in all major segments beyond insulins and beyond diabetes

Novo Nordisk remains a trusted partner, working with stakeholders to change diabetes and other serious chronic diseases

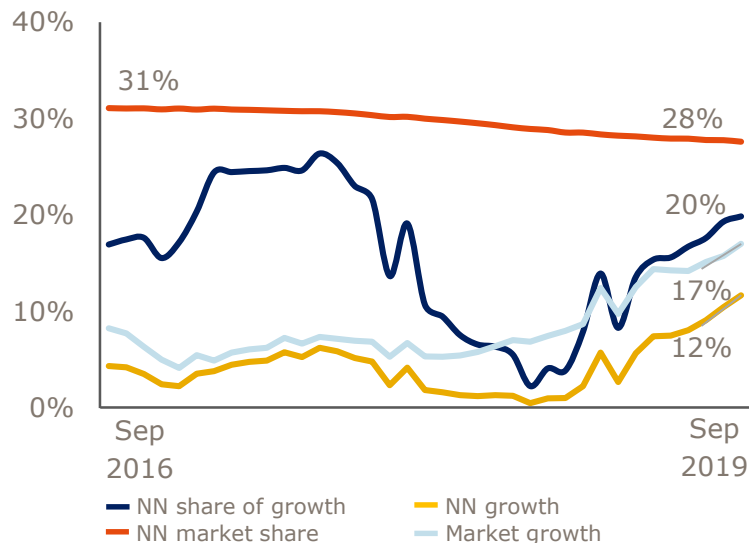
Sources, Notes and Abbreviations – Region China

- **Slide 156:** Sources: GDP growth, IMF table for 2019 real GDP projection, https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD/CHN/DNK; 2018 GDP per capita in USD, National Bureau of Statistics of China. April 1, 2019; the average exchange rate in 2018 is CNY 6.6174 per USD; Doctor per 1000, Regional macro economy data, <http://calendar.hexun.com/area/>, country summary table (18-99 years). 2017
- **Slide 157:** ¹Time from CTA submission to approval; source: DXY insight database; ²Currently only 1 data point for biologic import product; ³Opened for oncology products only
- **Slide 158:** ¹Number for mainland China only; ²First nine months, 2019; source: Company reported numbers; OAD: Oral anti-diabetic; MI: Modern insulin; NGI: New-generation insulin
- **Slide 159:** ¹3-year CAGR; ²Year-to-date; Note: Modern non-insulin anti-diabetic (MNIAD) includes GLP-1, DPP-IV, and SGLT-2; source: IQVIA, MAT, Sep 2019, IQVIA covers around 50% of the total Chinese market (hospital data); OAD: Oral anti-diabetic; MNIAD: Modern non-insulin anti-diabetic; HI: Human insulin; MI: Modern insulin; NGI: New-generation insulin
- **Slide 160:** Source: IQVIA, MAT, Sep 2019; IQVIA covers around 50% of the total Chinese market (hospital data)
- **Slide 161:** ¹3-year CAGR; Source: IQVIA, MAT, Sep 2019; IQVIA covers around 50% of the total Chinese market (hospital data)
- **Slide 162:** ¹First 9 months, 2019; ²Obesity as defined by Chinese standard = BMI>28; number is for adults only; source: Nutrition and Chronic Diseases of Chinese Resident in 2012 (published in 2015), see also Healthy China Action (2019-2030)
- **Slide 164:** ¹Innovative products: Product with a compound or formulation patent; Diversified means products other than insulin
- **Slide 165:** ¹Innovative products: Product with a compound or formulation patent; Diversified means products other than insulin

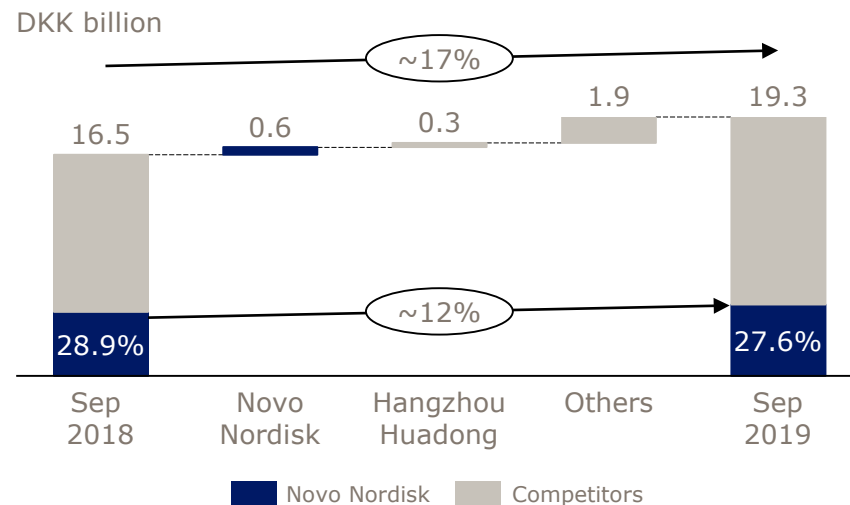
Region China: Diabetes market share and market growth



Diabetes market growth and Novo Nordisk market share



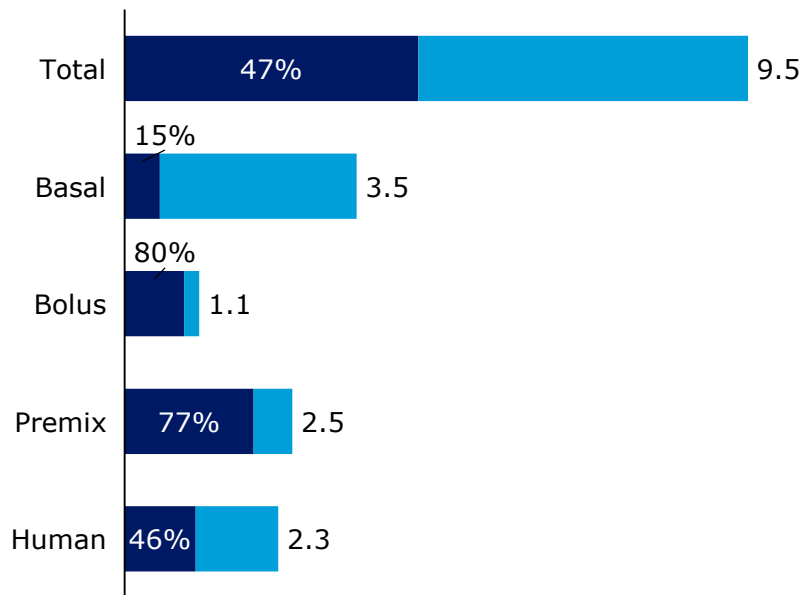
Diabetes market size and growth



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



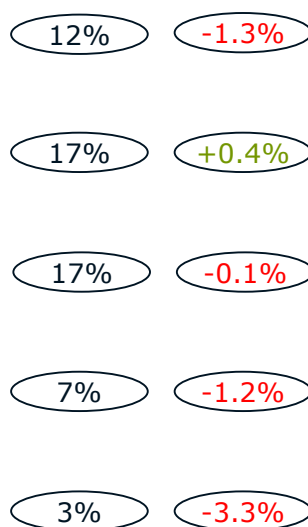
Insulin market share and market size (DKK billion)



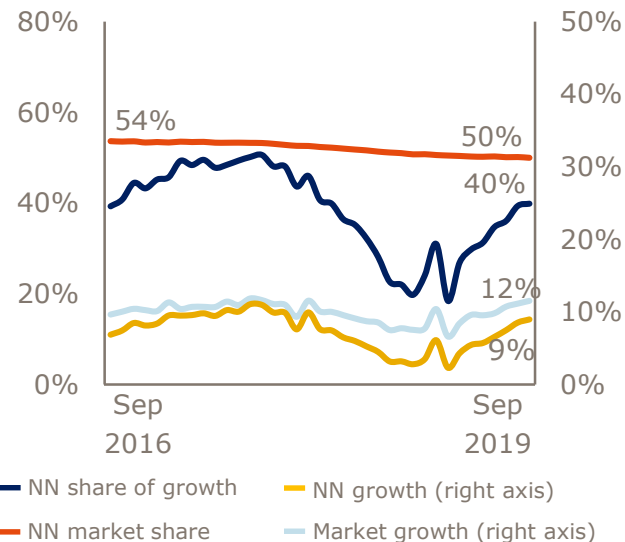
■ Novo Nordisk ■ Competitors

Market growth

Δ Market share¹



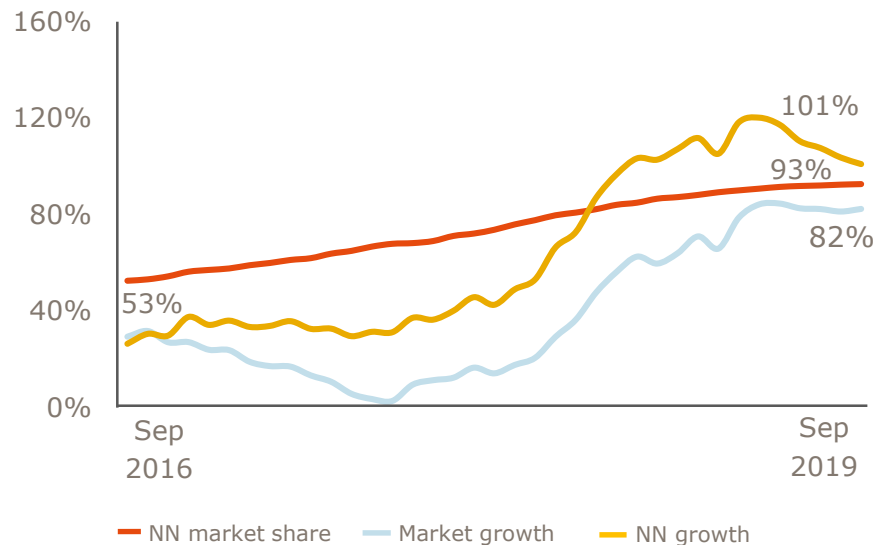
Insulin volume: Share of growth and market share



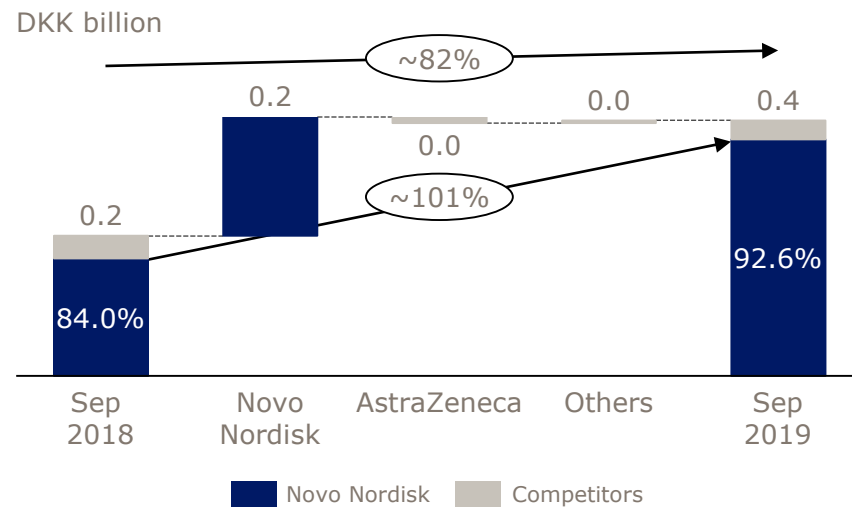
Region China: GLP-1 market share and market growth



GLP-1 market growth and Novo Nordisk market share



GLP-1 market size and growth



OTAVIO DOMINGOS DA COSTA
Otavio has type 2 diabetes
Brazil

REGION AAMEO AND REGION LATIN AMERICA



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.

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Note: All notes, sources and abbreviations for this presentation are found on the last page.

In Region AAMEO and Region Latin America, the unmet need is large and therefore multiple business opportunities exist

Covers most countries in the world



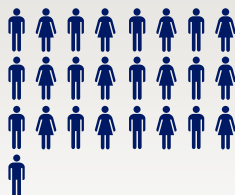
110 countries in AAMEO and 33 in Latin America

73% of all countries in the world

Covers most people with diabetes



Each person represents 10 million people

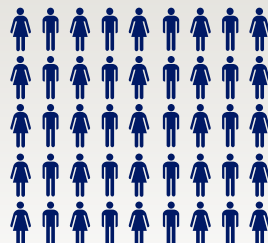


250 million people living with diabetes

53% of the total diabetic population

110 million are undiagnosed

Covers most people with obesity



450 million people living with obesity

69% of the total obese population

Only 1-2% receive medical treatment

Economic outlook



4.1%¹ GDP growth expected in 2019

+0.9%-p higher GDP growth in 2019 than global economy

High volatility and uncertainties



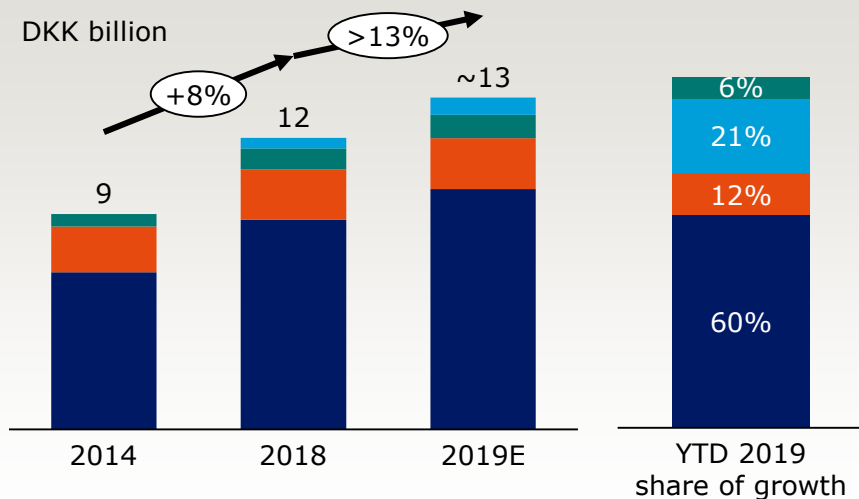
High political uncertainty in many countries

High volatility currencies

Sales growth has accelerated by restructuring the organisation, the Market Fit approach and innovation



Sales growth acceleration in region AAMEO is driven by insulin and obesity



GLP-1 Obesity Biopharm Insulin

○ Annual growth rate

The GROW AAMEO strategy focuses on three areas, which should support in sustaining a higher growth momentum



Expand the patient base

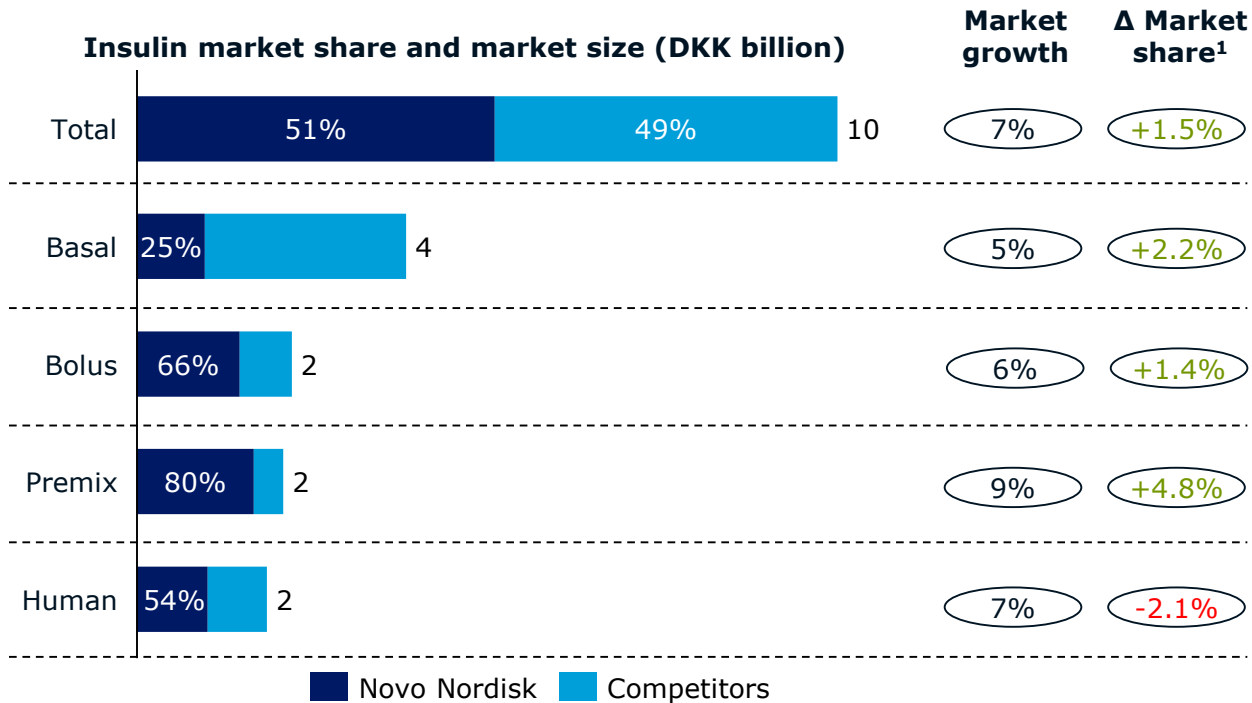
Continue biopharm growth

Expand insulin leadership

Re-invent GLP-1

Build the obesity market

Insulin market expansion driven by an unmet need, commercial execution and innovation

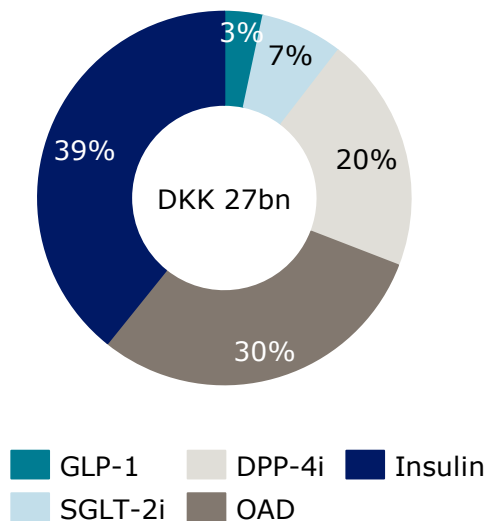


Commercial focus

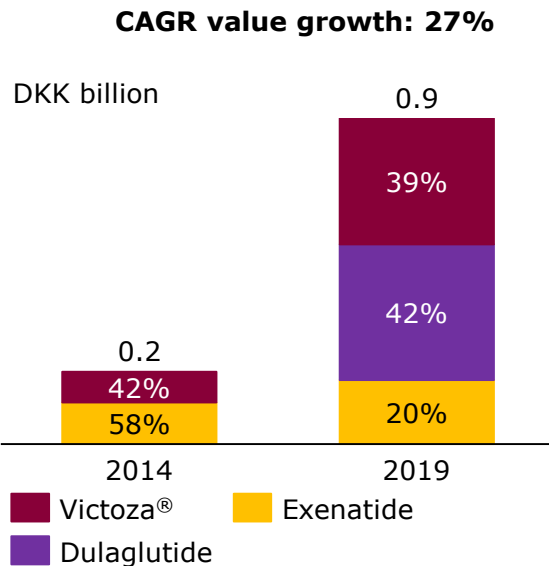
- Continue to expand the insulin market and ensure device penetration
- Gain market share in basal insulin with Tresiba® and Xultophy®
- Continue to drive innovation with 30 launches of new-generation insulin planned in the next two years

GLP-1 remains underutilised but Ozempic® is expected to drive growth

The GLP-1 market is 3% of the total diabetes market



GLP-1 market has grown by 27% yearly from a small baseline



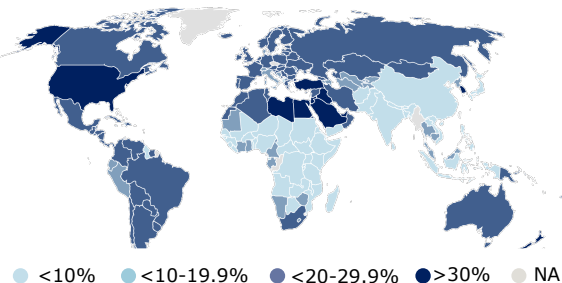
GLP-1 opportunities

- GLP-1 organisation has been strengthened across Region AAMEO with dedicated GLP-1 teams and sales force
- Ozempic® to drive GLP-1 market expansion with around 20 launches planned the next two years
- The GLP-1 aspiration in Region AAMEO is to double sales in the next three years

The obesity market is expanding driven by high prevalence and penetration of Saxenda®

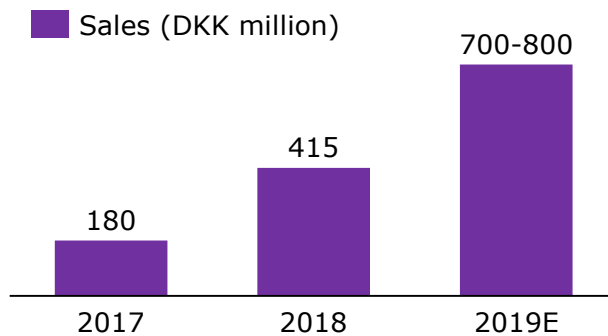
Obesity prevalence is high in Region AAMEO

Percent with BMI >30



- 350 million people living with obesity in Region AAMEO
- 53% of the total obese population resides in Region AAMEO

Sales and number of launch countries have increased



- 17% market growth and currently 44% market share¹
- Saxenda® has been launched in 18 markets covering the majority of the obesity market in Region AAMEO



Strong Saxenda® growth is expected to continue

- Obesity investments have doubled both financially and in terms of employees
- Market building activities focus on medical education supporting expansion of prescriber base and public dialogue advocacy
- The obesity sales are expected to more than double over the next three years driven by market expansion and new launches

Patients' access to treatment is an integral part of doing business in emerging markets



14

countries with Changing Diabetes® in Children projects

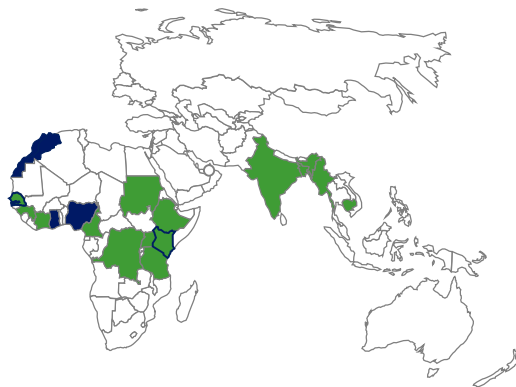
20,000 type 1 diabetes children actively enrolled

Donation of human insulin to patients up to 21 years old

Training of healthcare professionals to improve treatment of type 1 diabetes

The **Changing Diabetes® in Children** programme ensures care and life-saving medicine for children with type 1 diabetes in low- and middle-income countries

The **Base of the Pyramid** project aims to form public-private partnerships to improve access to diabetes care in low- and middle-income countries



5

countries with Base of Pyramid projects

40,000 patients receive care via Base of Pyramid facilities

Affordable quality diabetes care made accessible

Partner with Ministries of Health

Supported by Affordable Insulin Commitment efforts



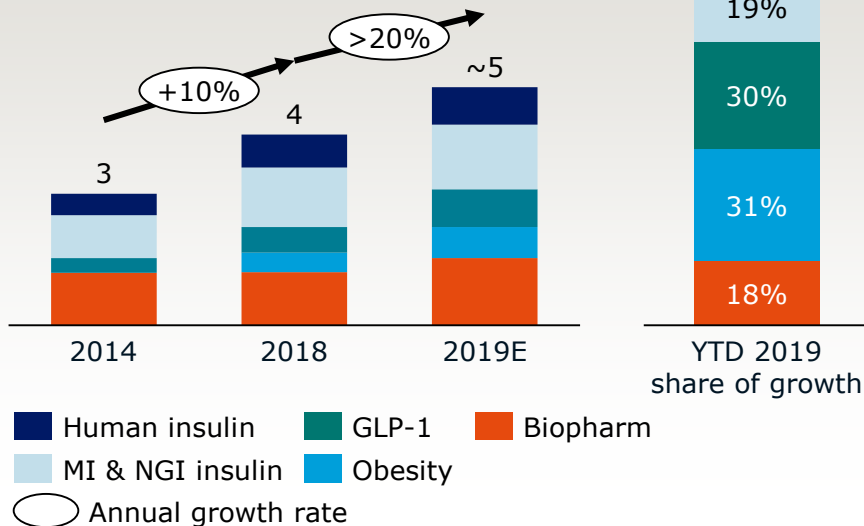
Region Latin America

Acceleration of sales growth in Region Latin America is driven by innovation and the Market Fit approach

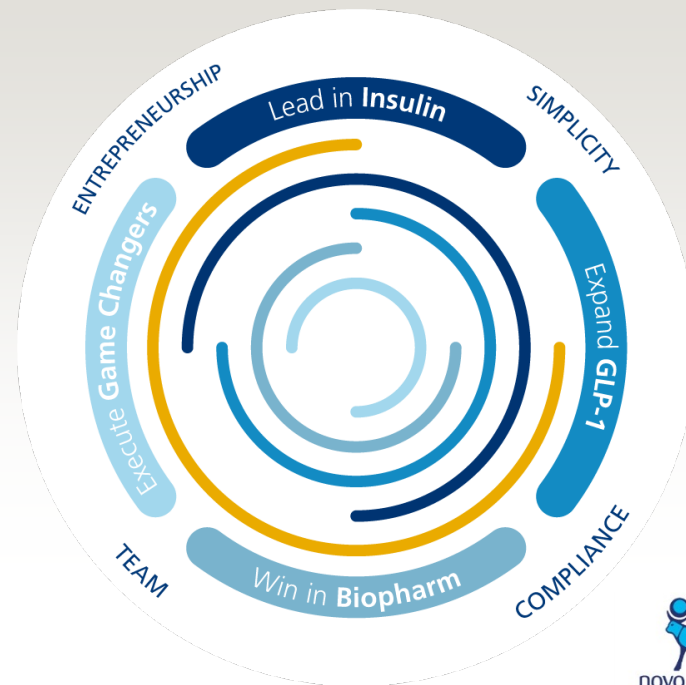


Sales acceleration in Region Latin America is driven by GLP-1 in diabetes and obesity as well as insulin

DKK billion



The strategy in Region Latin America focuses on creating a sustainable strong growth platform



Novo Nordisk continues to engage stakeholders to support a sustainable business and improve quality of care

Maintain employee engagement: Best place to work



- #1 pharma employer in Brazil, Mexico and Argentina

Engage stakeholders: Strategic public partnerships



- Four cities enrolled in Cities Changing Diabetes¹
- Engaging public health organisations to promote and increase disease awareness for obesity and diabetes

UNICEF partnership to prevent childhood overweight and obesity



in support of



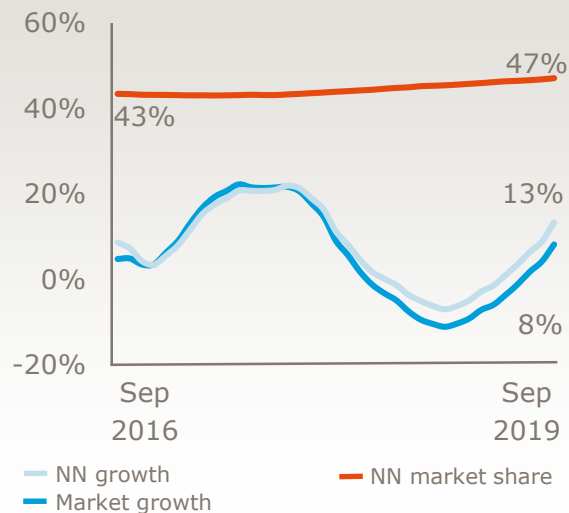
UNICEF does not endorse any company, product, brand or service

- Working together to prevent childhood overweight and obesity
- In-country interventions in Mexico and Colombia

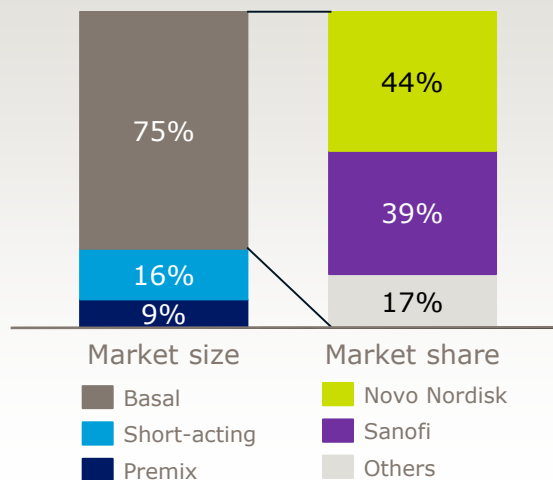
Novo Nordisk remains well-positioned in a growing insulin market with basal insulin leadership



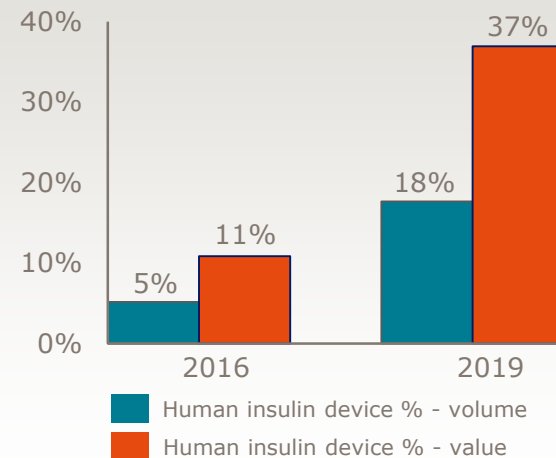
Value growth within insulin remains high and NN expands leadership



Basal insulin is the largest segment and Novo Nordisk is the market leader



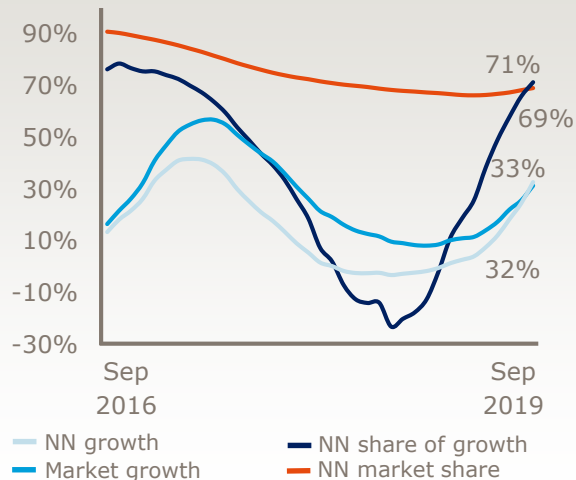
Driving differentiation to outperform competition for human insulin



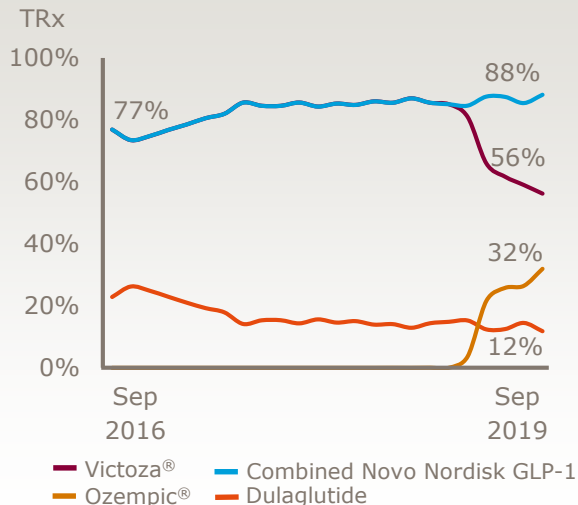
Novo Nordisk focuses on increasing GLP-1 leadership by expanding offerings with superior clinical benefits



The GLP-1 market grows more than 30%



The launch of Ozempic® in Brazil has already surpassed dulaglutide

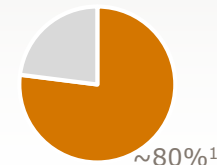


Launch sequence of Ozempic® and preparation for launch of Rybelsus®

OZEMPIC®

■ Launched
■ Pipeline

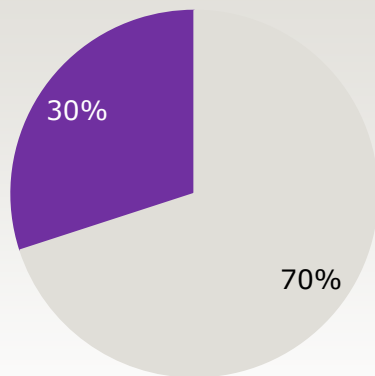
Expected coverage for Ozempic®



The Saxenda® adoption in Latin America is supported by commitment to ensure awareness of obesity

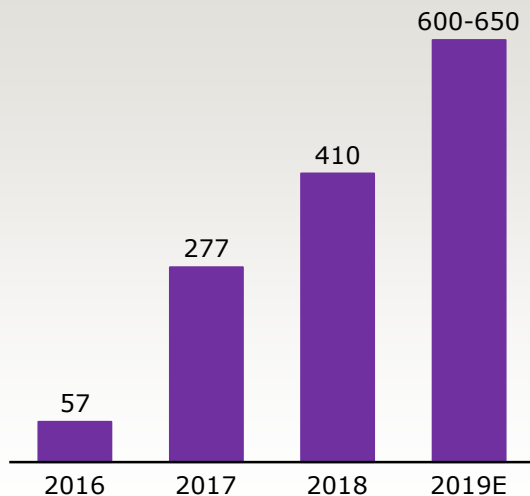


~100 million with obesity and ~30% of Saxenda® patients live in Latin America



■ Region Latin America ■ Rest of world

Sales supported by market building activities



■ Sales (DKK million)

Continue launch sequence of Saxenda® across Latin America

■ Launched
■ Pipeline 2020

Saxenda®



OTAVIO DOMINGOS DA COSTA
Otavio has type 2 diabetes
Brazil

Closing remarks

Very large unmet need in both regions

Insulin leadership expected to be sustained and insulin remains a key growth driver driven by demographics, strong commercial execution and innovation

GLP-1 is a key growth driver in Region Latin America and is a key opportunity in Region AAMEO. Ozempic® and Rybelsus® are expected to drive an GLP-1 market expansion

Obesity sales growth remains strong and market development activities are progressing

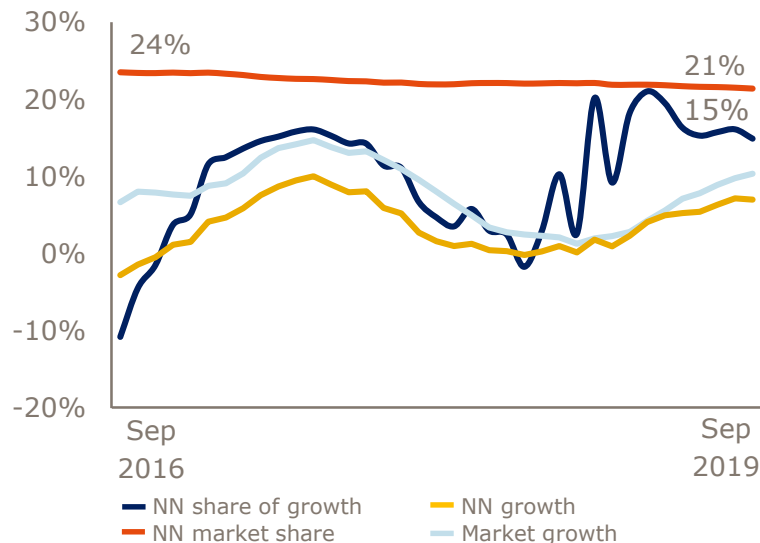
Sources, notes and abbreviations – Region AAMEO and Region Latin America

- **Slide 173:** ¹ Source GDP growth: International Monetary fund world economic outlook, Jul 2019, outlook for emerging markets & developing economies
- **Slide 174:** Source: Reported sales figures in constant exchange rates. 2019 based on expected sales growth for the FY2019, Note: Share of growth does not add up top 100% due to rounding's
- **Slide 175:** Source: IQVIA MAT, SPOT, Sep 2019, IQVIA only covers 10 countries in AAMEO covering around 60% of the total market. ¹ market share vs. MAT Sep 2018
- **Slide 176:** Source: IQVIA MAT, SPOT, Sep 2019, IQVIA only covers 10 countries in AAMEO covering around 60% of the total market.
- **Slide 177:** ¹ IQVIA MAT, SPOT, Sep 2019, IQVIA only covers AUS, RUS, KSA, TUR and UAE
- **Slide 180:** Source: Reported sales figures in constant exchange rates. 2019 based on expected sales growth for the FY2019, Note: Share of growth does not add up top 100% due to rounding's
- **Slide 181:** ¹ Cities changing diabetes covers: Bogota, Buenos Aires, Mexico City and Mérida
- **Slide 182:** Source: IQVIA covers the following 4 markets in Latin America (retail data): Argentina, Brazil, Colombia and Mexico, MAT, SPOT rate, Sep 2019
- **Slide 183:** Source: IQVIA covers the following 4 markets in Latin America (retail data): Argentina, Brazil, Colombia and Mexico, MAT, SPOT rate, Sep 2019. ¹ Future expected coverage of Ozempic® expected in 2-3 years relative to number of people with Diabetes in Region Latin America (based on the IDF diabetes atlas, 2017)
- **Slide 184:** Source: Novo Nordisk ex-factory – patients assumptions: 3 mg/day, 360 days per year. ¹ Coverage of Saxenda® relative to number of people with obesity in Region Latin America

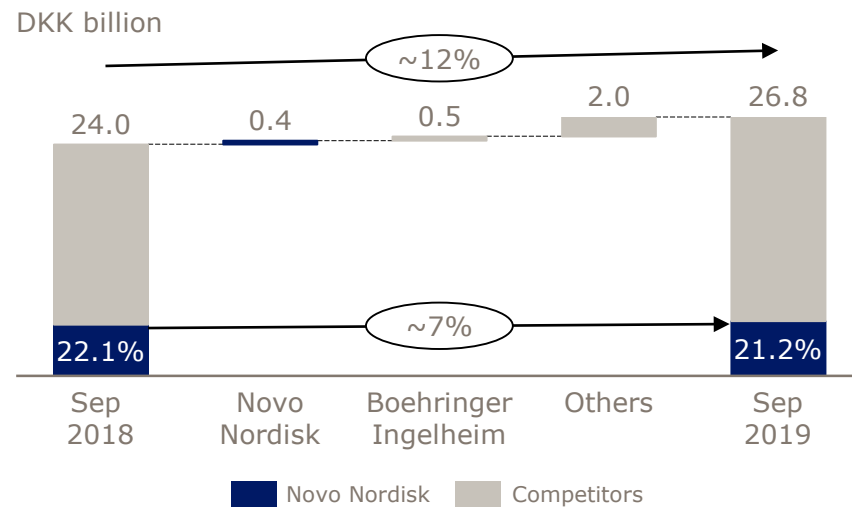
Region AAMEO: Diabetes market share and market growth



Diabetes market growth and Novo Nordisk market share



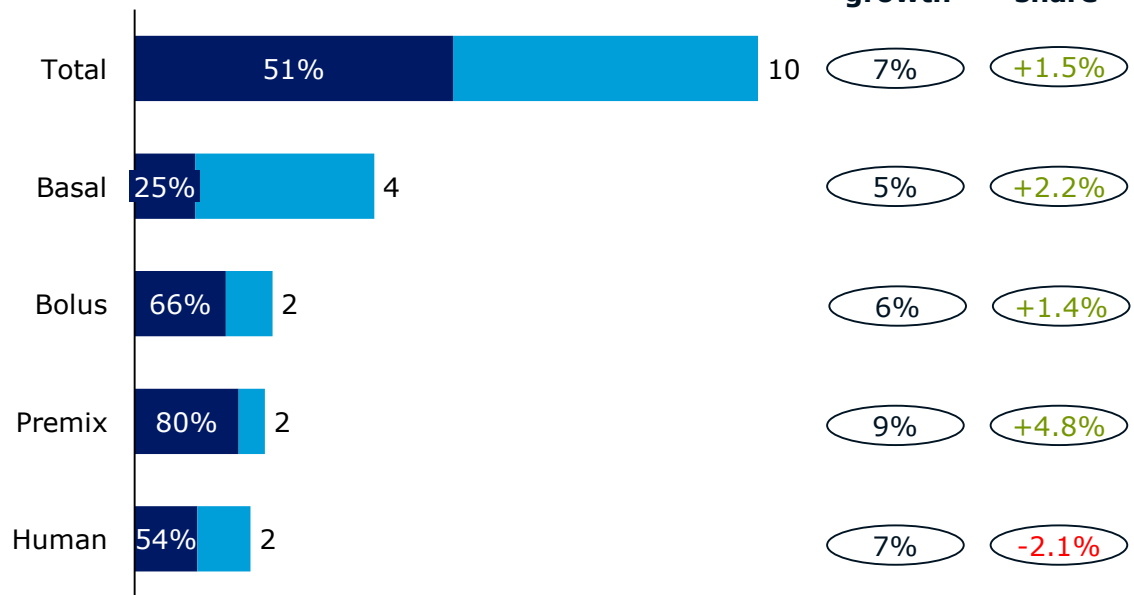
Diabetes market size and growth



Region AAMEO: Insulin market size and volume share of growth and market share

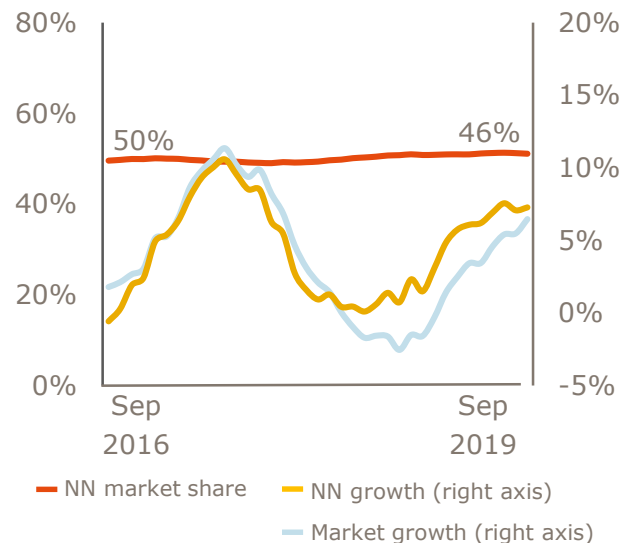


Insulin market share and market size (DKK billion)



■ Novo Nordisk ■ Competitors

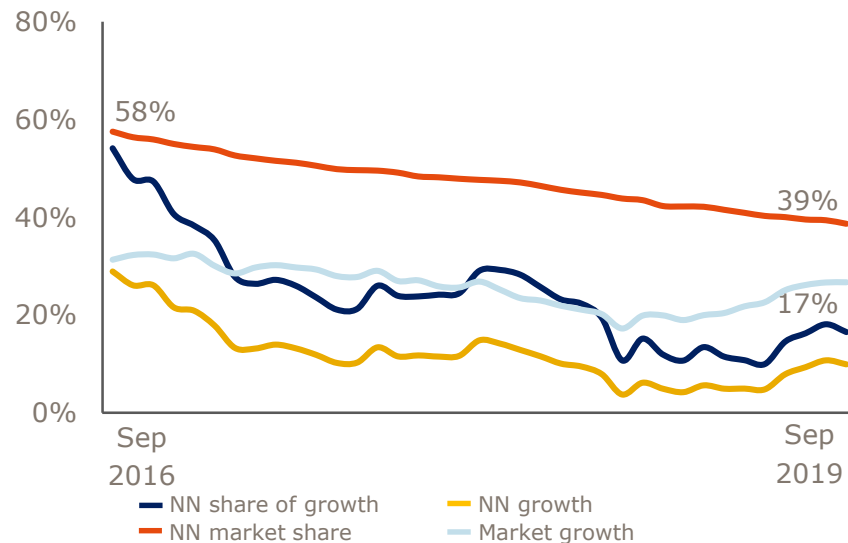
Insulin volume: Share of growth and market share



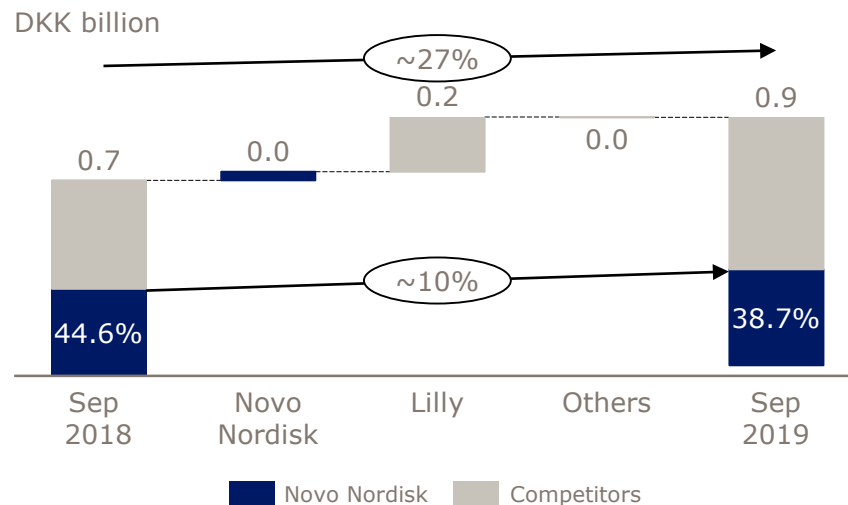
Region AAMEO: GLP-1 market share and market growth



GLP-1 market growth and Novo Nordisk market share



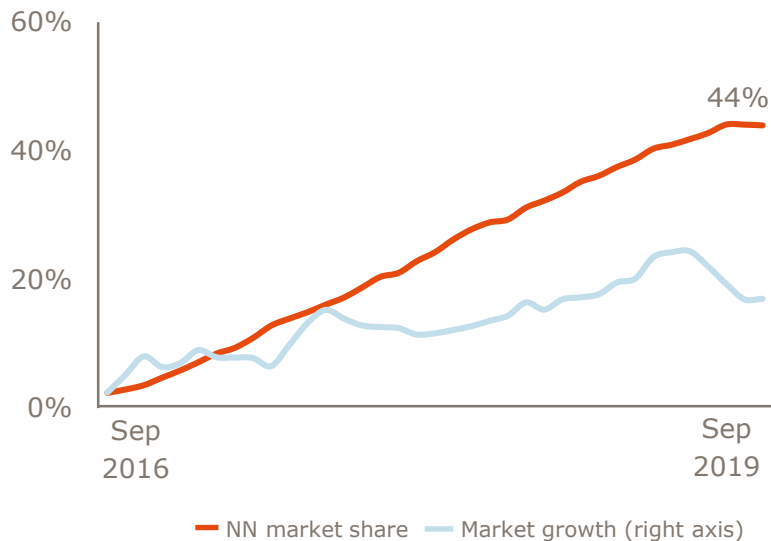
GLP-1 market size and growth



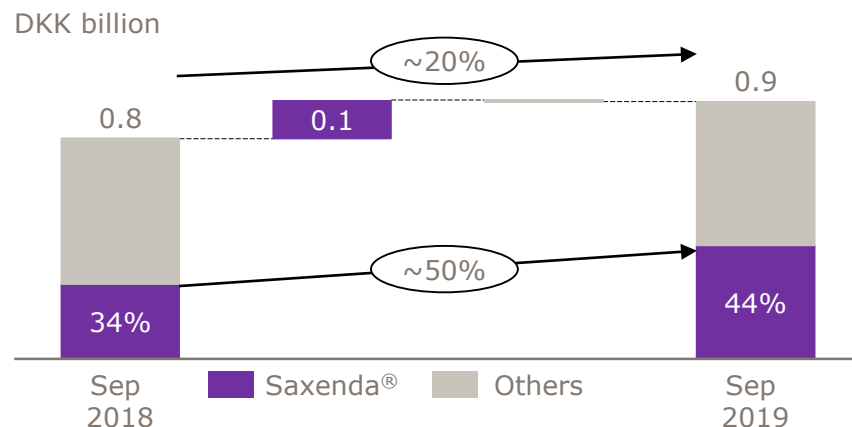
Region AAMEO: Obesity market share and market growth



Obesity market growth and Novo Nordisk market share



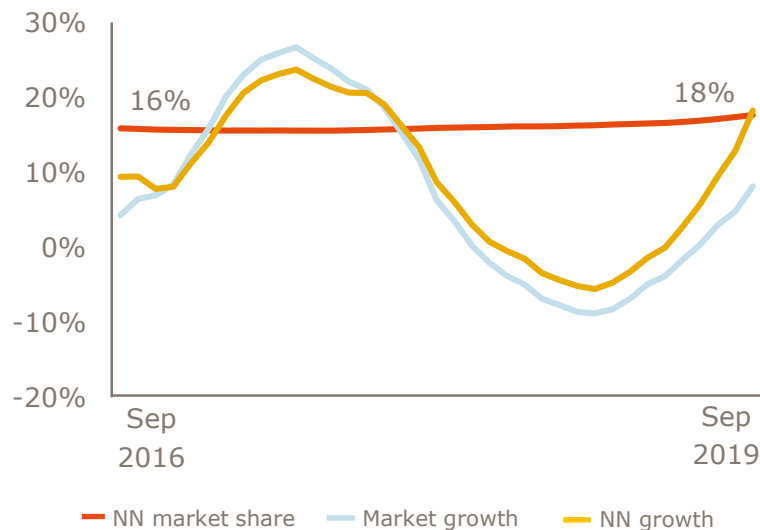
Obesity market size and growth



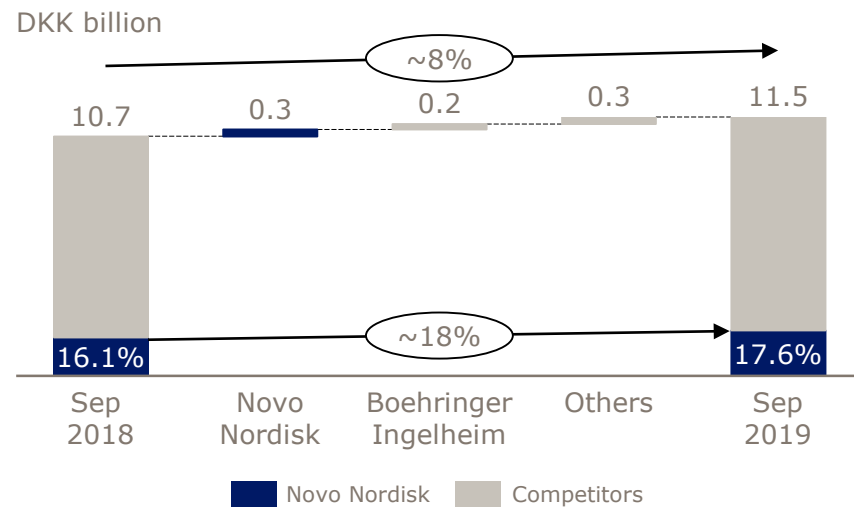
Region Latin America: Diabetes market share and market growth



Diabetes market growth and Novo Nordisk market share



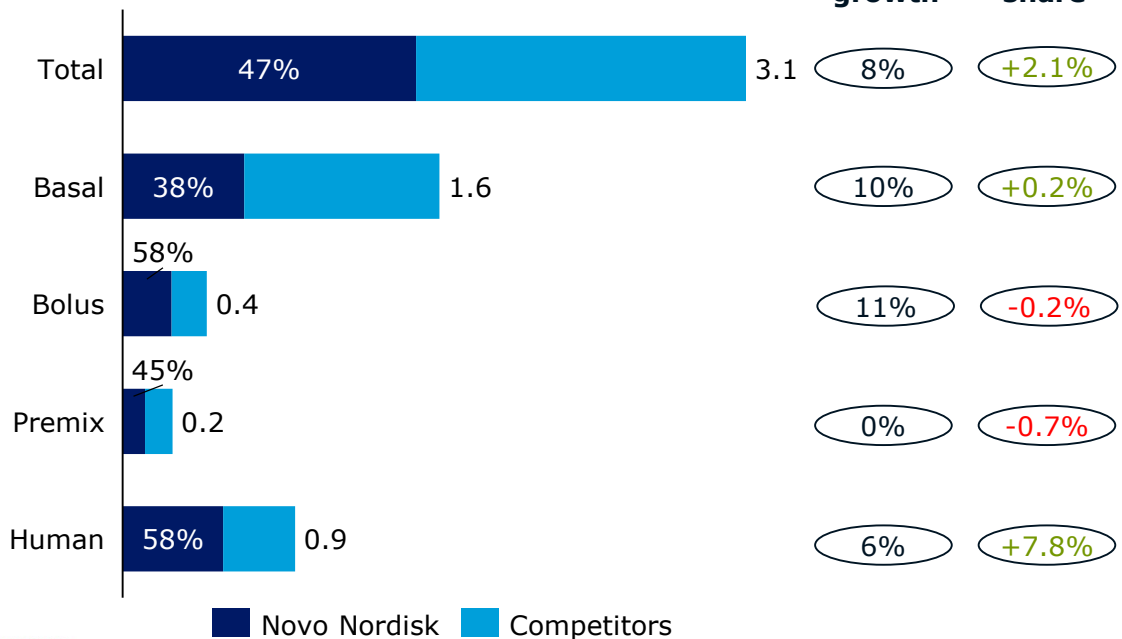
Diabetes market size and growth



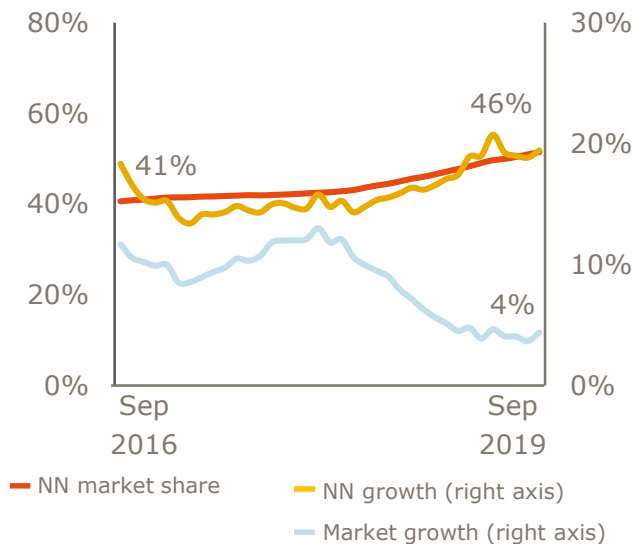
Region Latin America: Insulin market size and volume share of growth and market share



Insulin market share and market size (DKK billion)



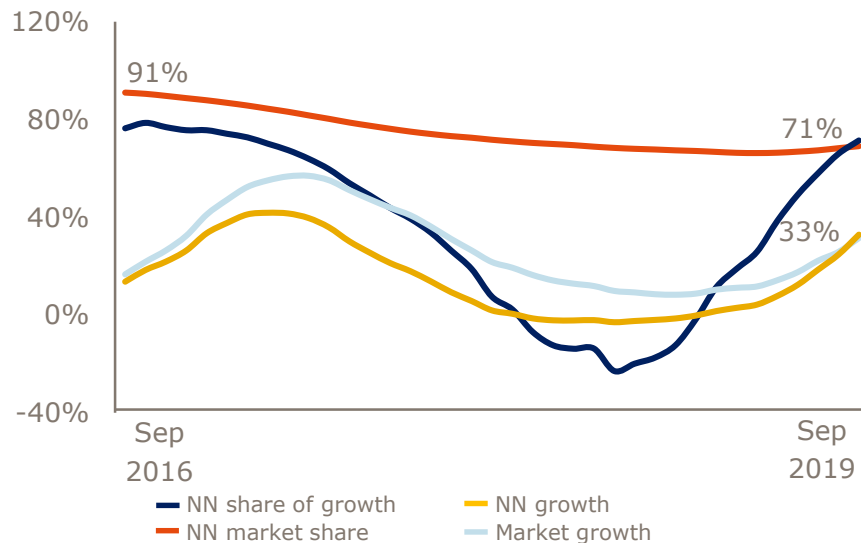
Insulin volume: Share of growth and market share



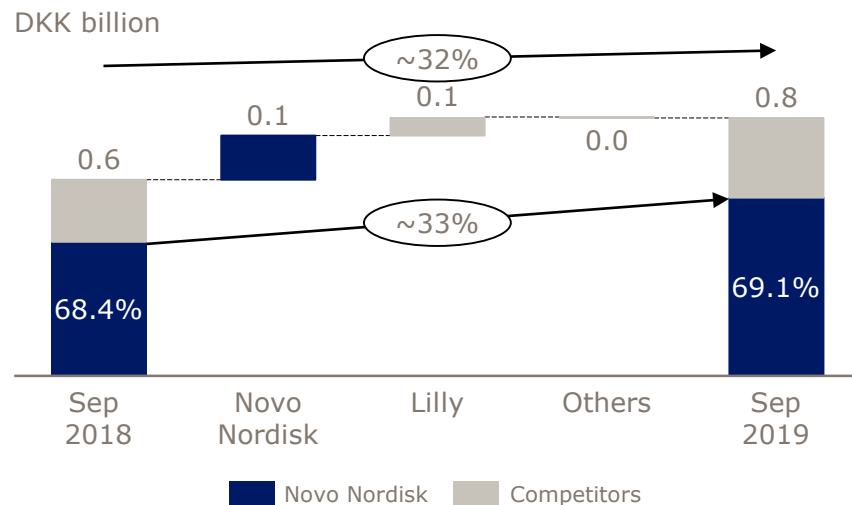
Region Latin America: GLP-1 market share and market growth



GLP-1 market growth and Novo Nordisk market share



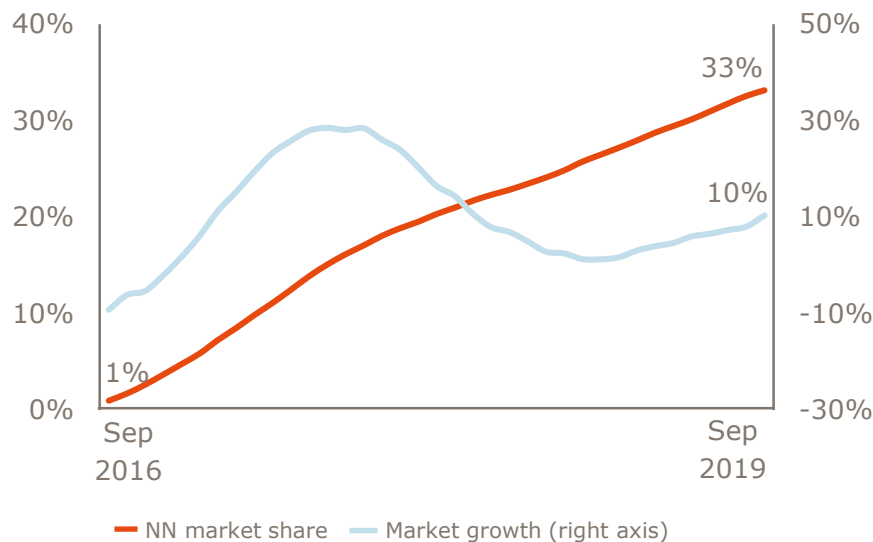
GLP-1 market size and growth



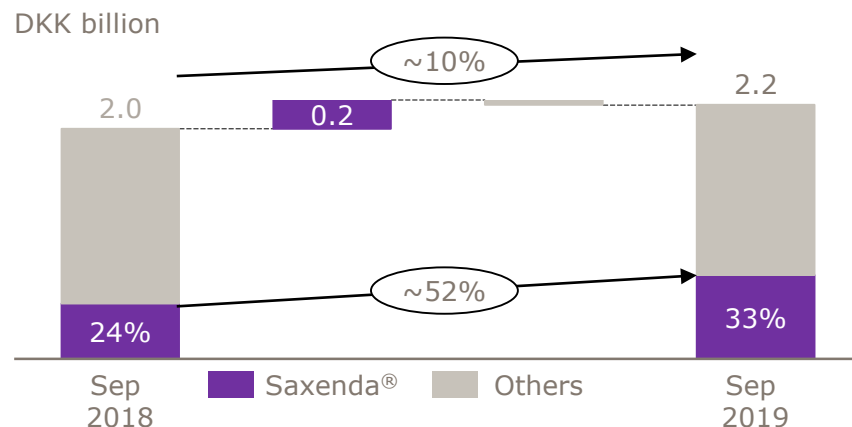
Region Latin America: Obesity market share and market growth



Obesity market growth and Novo Nordisk market share



Obesity market size and growth



EMERGING THERAPIES

A woman with dark hair, wearing a vibrant orange and yellow floral patterned jacket over a black top, is leaning her arm on a dark stone ledge. She is looking back over her shoulder towards the camera. The background features a red brick wall on the left with a white lattice trellis and yellow flowers. To the right, there are out-of-focus green trees and a street scene with a red car.

NADIA SADI
Nadia lives with NASH
Denmark

Forward-looking statements

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- 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,
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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.

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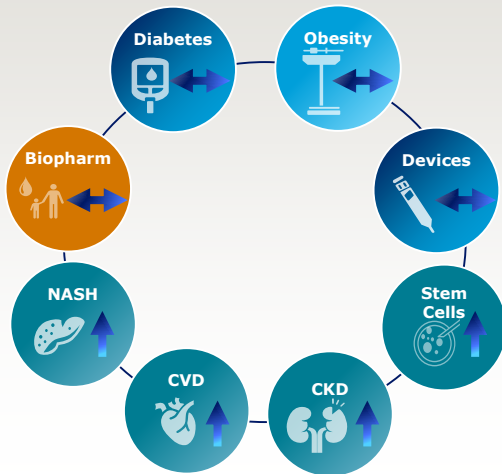
Important drug information

- 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

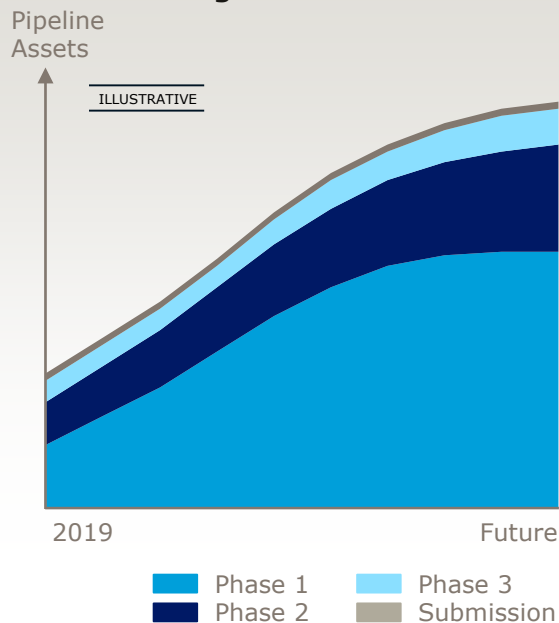
Note: All notes, sources and abbreviations for this presentation are found in the appendix.

The future of R&D is to focus on increasing the number of clinical assets while maintaining industry-leading late-stage success

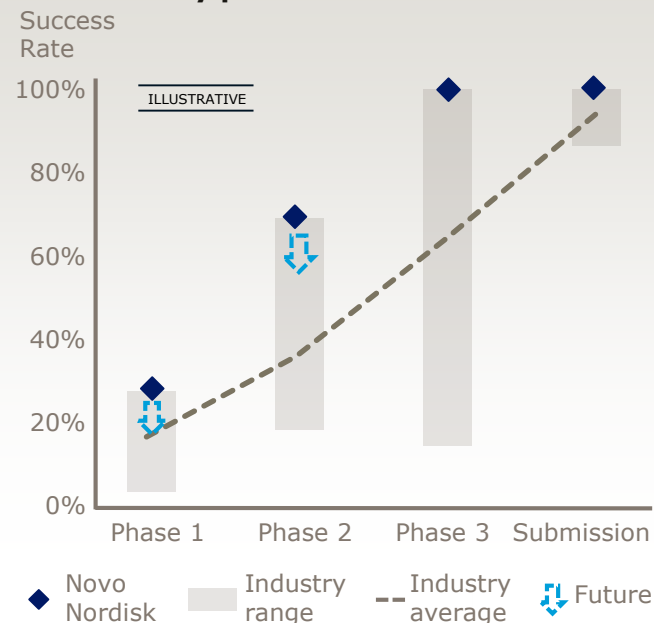
R&D investments will expand beyond historic focus



Increased clinical assets driving R&D investment

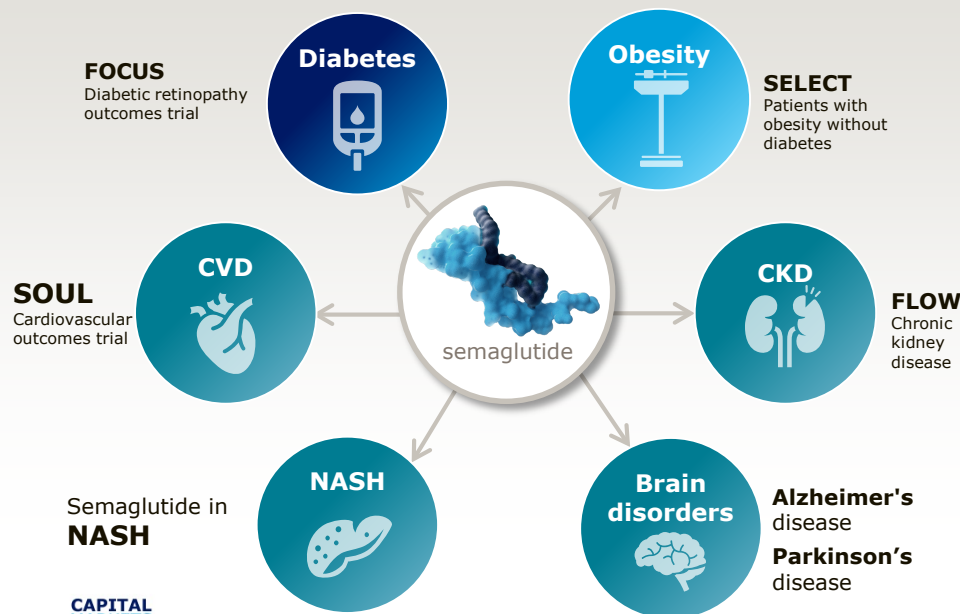


Industry-leading success rate¹ from any phase to market

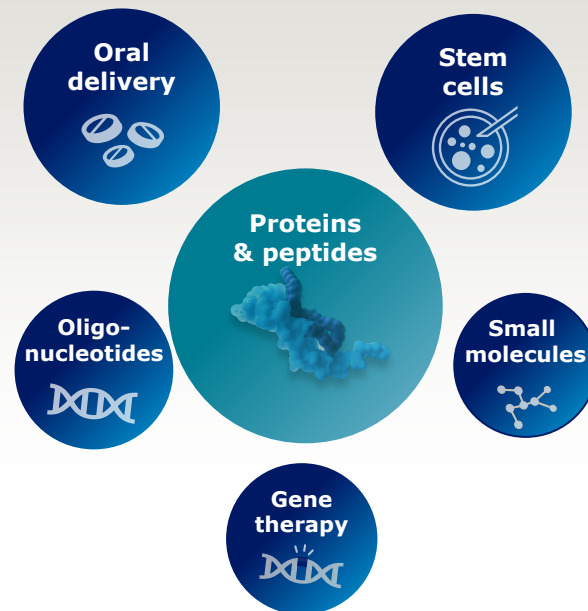


The increase in pipeline assets is driven by semaglutide as well as internal and external innovation

Semaglutide is the entry into adjacent therapies



Leveraging internal capabilities and partnerships to explore new platforms



Collaboration with partners facilitates accelerated breakthrough science

Novel treatments for metabolic disease



Oral Devices for protein and peptide drug delivery



Gene editing treatment for haemophilia



Small-molecule drug discovery and development



siRNA treatments



Combination treatments for NASH



Improving Beta Cell health



Glucose responsive insulin



Novel treatments for CVD



Sickle Cell Disease



Selected partnerships over the past 2 years

Gut-Brain-Axis target discovery for metabolic disease



Small molecule for treatment of NASH



Stem cell lines



Parkinson's disease



Collaboration with partners facilitates accelerated breakthrough science

siRNA treatments

Dicerna™

Combination treatments
for NASH

 GILEAD

Novel treatments for
CVD

STATEN
BIOTECHNOLOGY

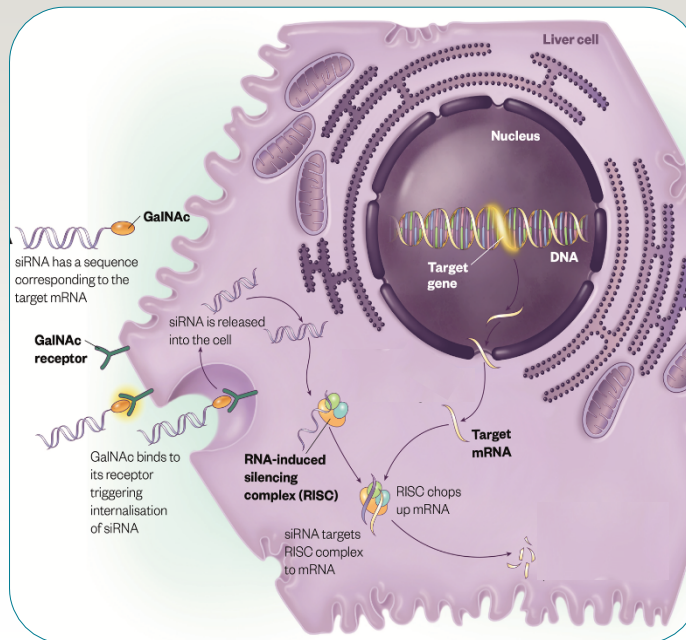
Stem cell lines

UCSF
University of California
San Francisco

Novo Nordisk and Dicerna partner in the small interfering RNA drug modality space

Maintain competitive edge through new drug modality

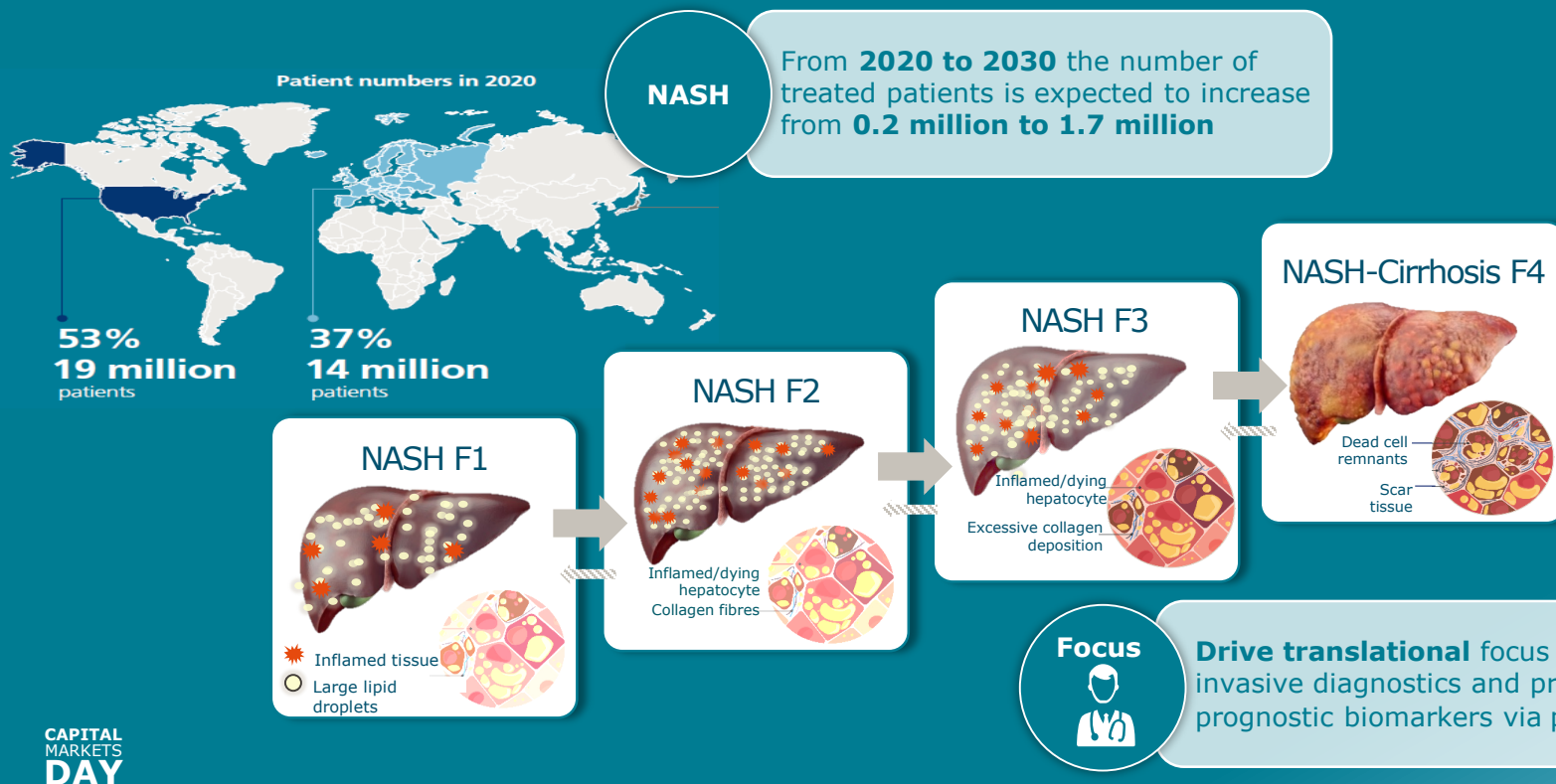
- **Current Novo Nordisk drug platform** focus on proteins and peptides with targets on the **surface of cells**
- **~90%** of molecular targets in T2D are intracellular
- **siRNA** allows for efficient and specific **gene silencing**
- **Previously inaccessible** drug targets, undruggable by small molecules, proteins and peptides



Dicerna's GalXC™ RNAi technology platform

- Proprietary, **patented** RNAi technology
- **Hepatocyte-selective** targeting
- **Subcutaneous** route of delivery
- Well tolerated and long duration of action
- High **target specificity** predictable activity
- High therapeutic index **broad applicability**

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



The collaboration with Gilead aims to bring therapies to people living with NASH

Gilead possess complementary skillsets



Leader in hepatology and combination therapy



Deep understanding of liver disease treatment



Has established key opinion leader relationships in hepatology

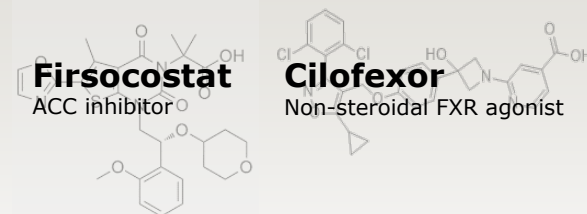
Semaglutide in NASH



Clinical programme – 3 trials

- Primary endpoints include:
 - NASH resolution without worsening of fibrosis
 - Mean change in liver stiffness measured by MRE
- ~450 patients enrolled
- Phase 2 results expected in H1 2020

Novo Nordisk and Gilead clinical collaboration



Clinical programme

- Gilead's two oral small molecule assets in loose combination with semaglutide
- Phase 2 results expected in 2020

Cardiovascular disease is associated with increased mortality



CVD

~**18 million** people die each year from cardiovascular disease, an estimated 31% of all deaths globally

Key facts

- CVD is the number one cause of death globally
- Of these CVD deaths, 85% are due to heart attacks and strokes



HEART FAILURE

40% of patients who are hospitalised for heart failure have diabetes

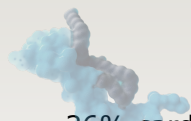


ATHEROSCLEROSIS

70% of diabetes patients die from atherosclerotic CVD

Novo Nordisk is addressing the significant unmet need in CVD via internal and external innovation

Semaglutide paves the way for entering CVD



SUSTAIN 6

Semaglutide

26% cardiovascular risk reduction

PIONEER 6

Oral semaglutide

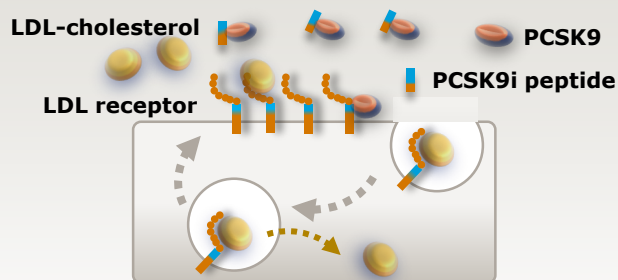
21% cardiovascular risk reduction¹

SOUL

Oral semaglutide

9,642 people with type 2 diabetes

Unique PCSK9i mimetic peptide approach

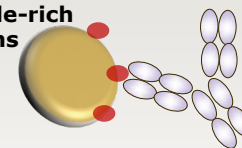


Increasing LDL receptor levels and efficiently decreasing LDL-cholesterol

Phase 1 results expected H1 2020
Includes lipid lowering measurements

Novo Nordisk and Staten exclusive option agreement

Triglyceride-rich lipoproteins



Anti-ApoC-III antibody

Novel anti-ApoC-III antibody for dyslipidaemia management

Phase 1 initiation expected H1 2020

The stem cell platform is expected to solve unmet needs for people with serious chronic diseases

Parkinson's disease

Collaboration with Lund University
and partnership with Biolamina



Type 1 diabetes

Encapsulation device in collaboration
with universities

Chronic kidney disease

Partnership with Mayo Clinic



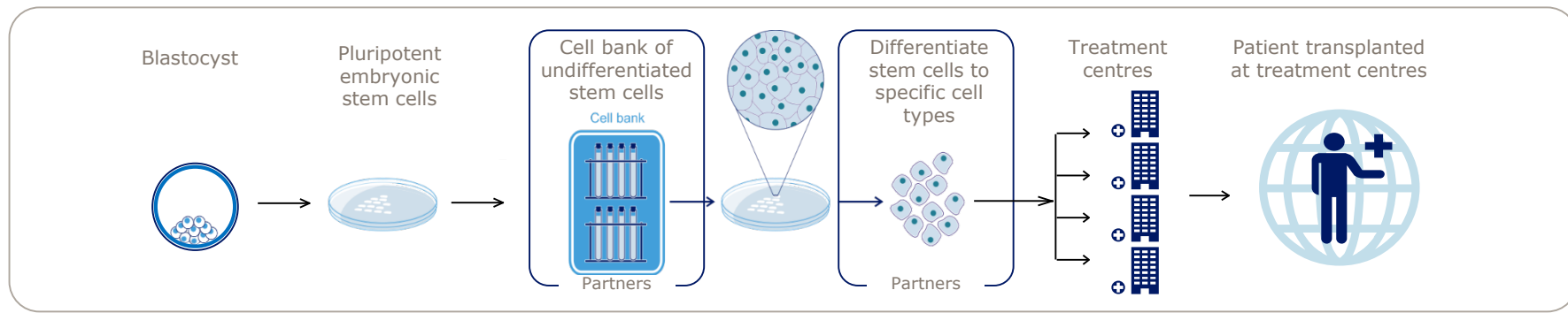
Dry age-related
macular degeneration
Partnership with Biolamina

Stem cell technology platform



Chronic heart failure
Partnership with Biolamina

20+ years of stem cell research experience facilitates entry into regenerative medicine



Realised with Novo Nordisk's comprehensive stem cell capabilities



GMP-grade production capability in US facility utilising Novo Nordisk's core CMC capabilities



IP positions on differentiation protocols



Ethical stem cell practices



Academic collaborations with stem cell technology experts



Multiple programs and growing pipeline

Clinical milestones¹Regulatory milestones¹

Q4 2019

H1 2020

H2 2020

H1 2021

H2 2021

Diabetes

Xultophy®

LAI287

LAISema

Insulin965

Ozempic®

Rybelsus®

Sema+OW GIP

Semaglutide

AM833

AM833-Sema 2.4

Obesity

PYY1562/1875

Tri-agonist 1706

GG-co-agonist

LA-GDF15

Esperoct®

Concizumab

Biopharm

Mim8

EPI01

Somapacitan
AGHDSomapacitan
GHDOther
Serious
Chronic
Diseases

SemaNASH

Gilead NASH

FGF21 NASH

PCSK9i

Stem Cells

China submission

Phase 2 results

Phase 1 results

Phase 1 results

US CV label
updateChina
submission

Sema FORTE - Phase 3 results

US CV label
updateEU/JP
decision

Phase 1 initiation

Phase 1 results

Phase 3 results

US/EU submission

Phase 2 results

Phase 1 results

Phase 1 results

Phase 1 results

Phase 1 results

Phase 1 results

China submission

Phase 3 results

Phase 1/2 initiation

Phase 1/2 results

Phase 1 results

JP submission

US/EU decision

Phase 3 results

Phase 2 results

Phase 2 results

Phase 2 initiation

Phase 1 results

Diabetes - first human dose

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

Closing Remarks



Further raise the innovation bar for diabetes treatment

Develop a leading portfolio of superior treatment solutions for obesity

Strengthen and progress the Biopharm pipeline

Establish presence in other serious chronic disease focusing on NASH, CVD and CKD

Sources, Notes and Abbreviations – Emerging Therapies

- **Slide 197:** ¹Probabilities of success to market were calculated using substances entering phase between 2008 and 2014 and year of assessment 2017, source: CMR International, 2017; NASH: Non-alcoholic steatohepatitis; CVD: Cardiovascular disease; CKD: Chronic kidney disease
- **Slide 201:** siRNA: silencing RNA; RNA: Ribonucleic acid
- **Slide 202:** NASH prevalence numbers are based on internal literature review
- **Slide 203:** ACC: Acetyl-CoA carboxylase; FXR: Farnesoid X receptor; GLP-1: Glucagon-like peptide-1
- **Slide 204:** Source: WHO, 2016; World heart foundation.
- **Slide 205:** ¹Not statistically significant; LDL: Low density lipoprotein, PCSK9i: Proprotein convertase subtilisin/kexin type 9 inhibitor
- **Slide 207:** GMP: Good manufacturing practice; IP: Intellectual property
- **Slide 208:** ¹ Expected to be published in the given quarter or in the subsequent quarterly company announcement; HBwI: Haemophilia B with inhibitors; GHD: Growth hormone deficiency; AGHD: Adult growth hormone deficiency; CV: Cardiovascular; PoC: Proof of Concept; NASH: Non-alcoholic steatohepatitis

Pipeline supports significant growth opportunities across all four strategic focus areas

PHASE 1

NN1535 – LAIsema
 NN1965 – FSI965
 NN9747 – PYY 1562 analogue
 NN9775 – PYY 1875 analogue
 NN9423 – Tri-agonist 1706
 NN9277 – GG-co-agonist
 NN9215 – LA-GDF15
 NN9838 – AM833 and Sema
 NN7533 – Eclipse
 NN9500 – FGF-21 NASH
 NN6434 – PCSK9i
 NN6177 – GG-co-agonist⁴

PHASE 2

NN1436 – LAI287
 NN9828 – Anti-IL-21 and lira
 NN9838 – Amylin AM833
 EX20020 – Macrilen, GHD
 NN9931 – Semaglutide NASH

PHASE 3

Semaglutide obesity
 Somapacitan – QW GHD²
 NN7417 – Concizumab

SUBMITTED

Somapacitan – QW AGHD¹

APPROVED

Tresiba®
 Xultophy®
 Levemir®
 Ryzodeg®
 NovoMix®
 Fiasp®
 NovoRapid®
 Victoza®
 Ozempic®
 Rybelsus®³
 Saxenda®
 NovoSeven®
 NovoEight®
 NovoThirteen®
 Refixia®
 Esperoct® (N8-GP)
 Norditropin®

■ Diabetes
 ■ Obesity
 ■ Haemophilia
 ■ Growth disorders
 ■ Other serious chronic diseases

¹ Study conducted in adult growth hormone disorder; ² Study conducted in growth hormone disorders; ³ Approved in the USA; submitted in the EU, Japan, and Canada; ⁴ Study conducted in NASH
 LAIsema: Long-acting insulin combined with semaglutide; FSI965: A once daily insulin; PYY: Peptide YY; QW: Once-weekly; GG: Glucagon GLP-1; GDF15: Growth differentiation factor 15; QD: Once-daily;
 Sema: Semaglutide; PoC: Proof of Concept; FGF-21: Fibroblast growth factor 21; LAI: Long-acting insulin; AGHD: Adult growth hormone disease; GHD: Growth hormone disorder; lira: Liraglutide

PRODUCT SUPPLY AND FINANCIALS



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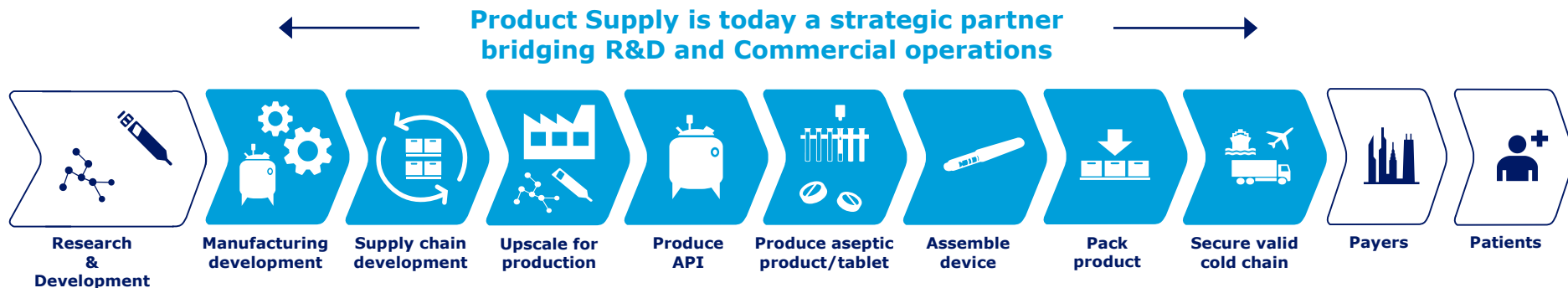
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Important drug information

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- 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.

The mission for Product Supply is to be a strategic partner from R&D to commercial



Product Supply is delivering increased agility and expanding possibilities within Novo Nordisk

Global manufacturing setup strengthened with significant investments in the US and Denmark for diabetes and biopharm



Rybelsus® supply chain for the US and rest of world in place

Kalundborg, Denmark



- Production of API
- Already in operation

Måløv, Denmark



- Tableting and packaging
- Already in operation

Clayton, North Carolina, USA



- Production of API
- Expected start operation in 2021

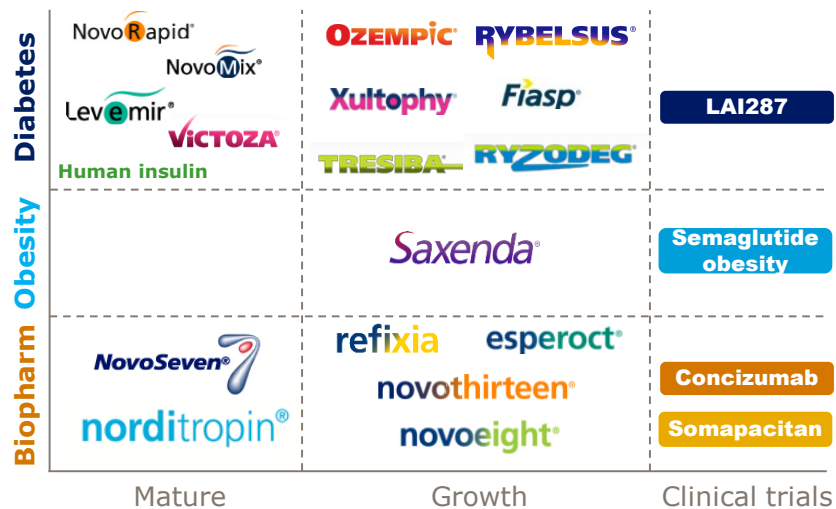
Durham, North Carolina, USA



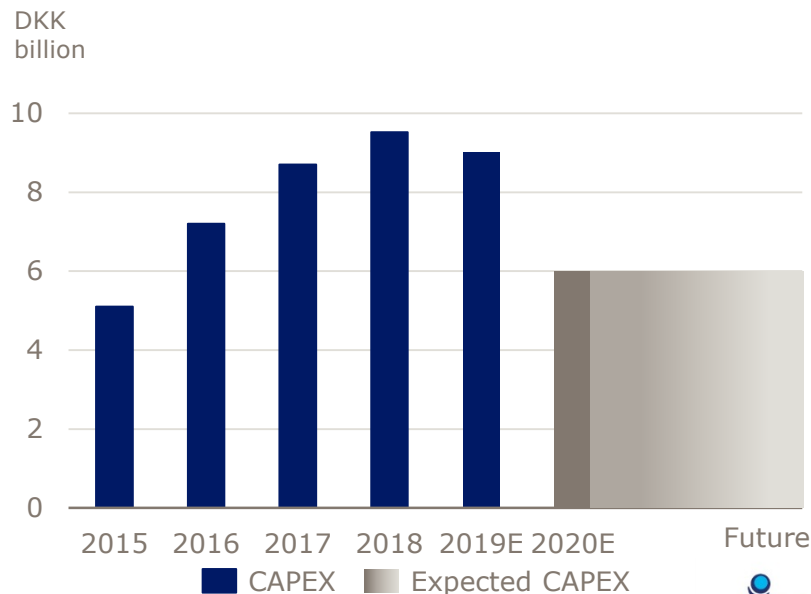
- Tableting and packaging
- Acquired in August 2019

Product Supply is ready to match business aspirations

Ready to deliver on future more complex demands and late-stage clinical trials

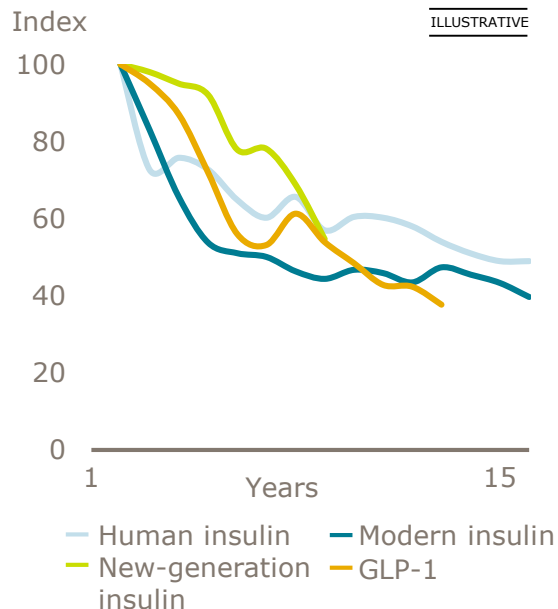


CAPEX investments have peaked in 2018/2019

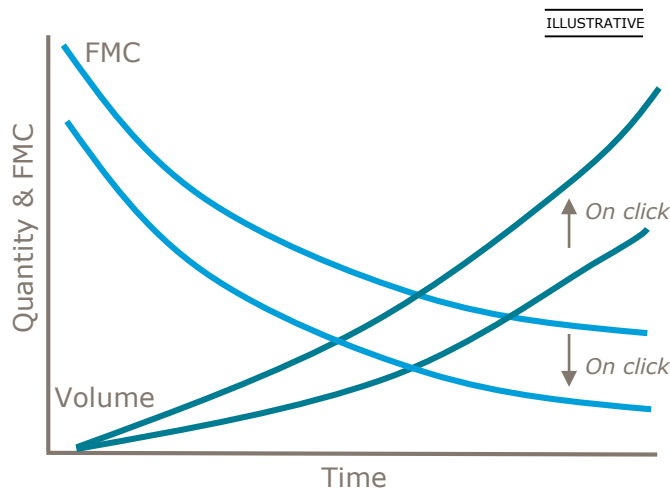


Product Supply is ready to deliver on increasingly complex demands

Continuously lowered unit costs



Next up is optimisation of Rybelsus®



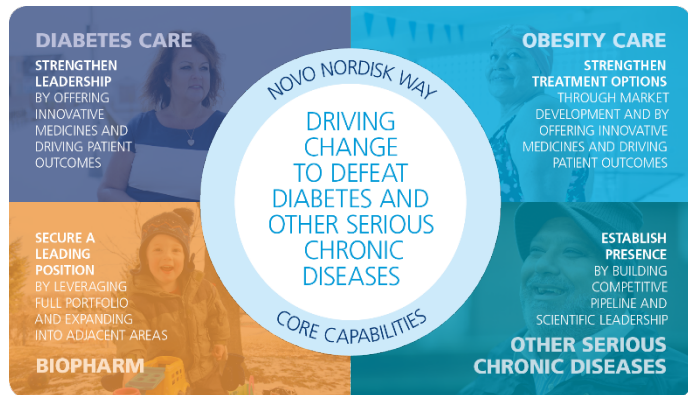
Well-positioned today and in the future

- High manufacturing capacity
- Agile manufacturing setup in a more complex environment
- Reduced manufacturing risk and improved safety
- Drive efficiency gains and lower unit costs



The corporate strategy is the guiding principle for Novo Nordisk's approach to resource allocation

Corporate strategy is focusing on four therapeutic areas



R_x

Focus on driving sustained **sales growth**



Production focused on **improving unit costs**



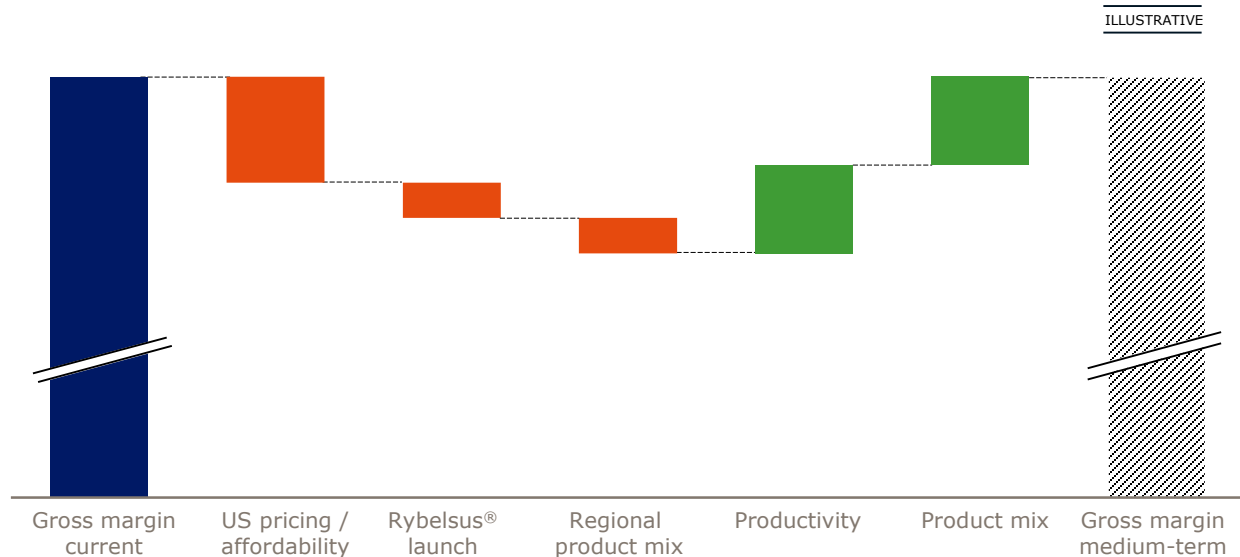
R&D investments in future growth assets



Commercial investments in growth markets and products

Gross margin to be broadly stable driven by continuously driving productivity improvements

Gross margin remains competitive

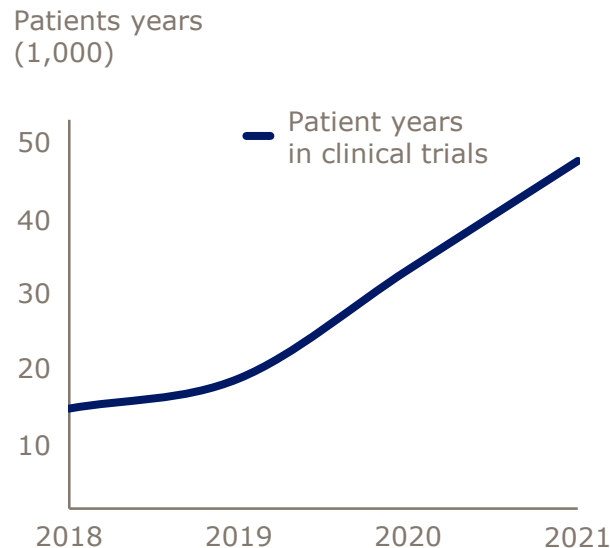
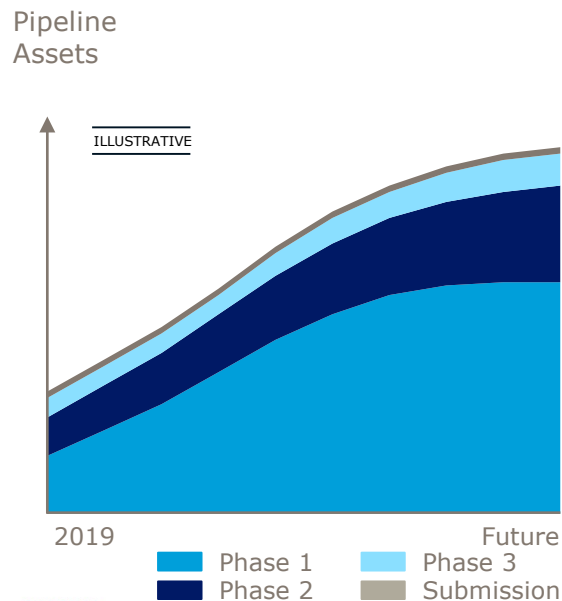


Gross margin development

- Negatively impacted by US pricing and affordability initiatives
- Rybelsus® unit costs initially impacting gross margin negatively
- Positively impacted by productivity and higher GLP-1 sales and new-generation insulin

Over time, Research & Development cost ratio is expected to gradually increase

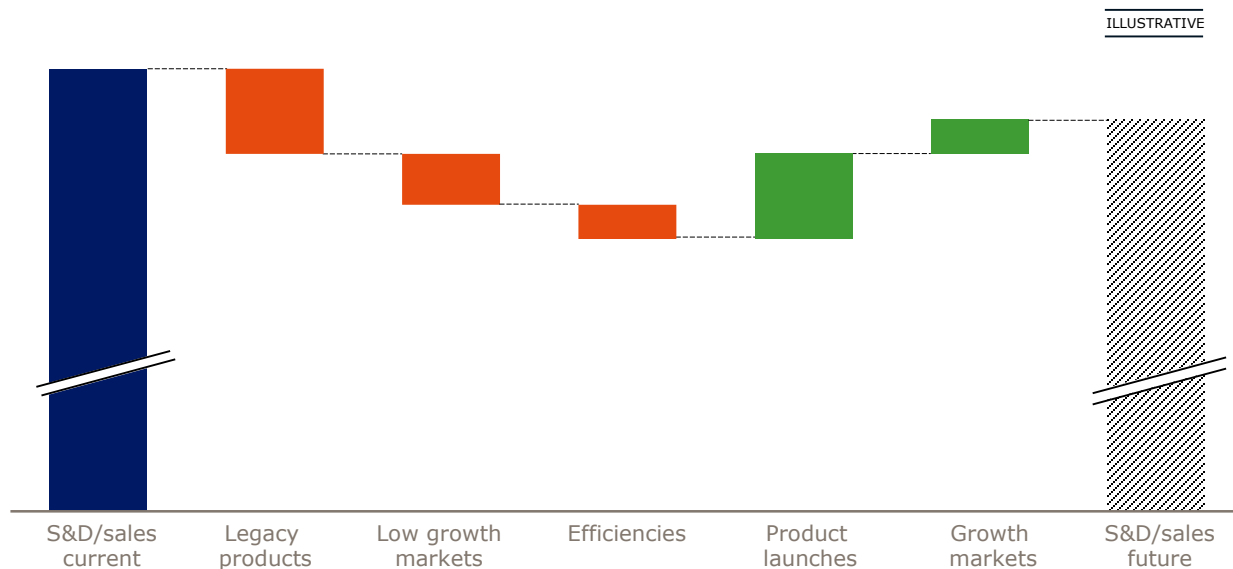
The activity level in R&D is expected to increase driven by an increase in number of pipeline assets and patients enrolled



R&D costs development

- Over time, gradual increase in R&D cost ratio driven by innovation opportunities and early-stage research
- Solid balance sheet allows investments in external R&D assets
- Efficiency focus reduces cost per patient

Over time, Sales & Distribution cost ratio is expected to gradually decline

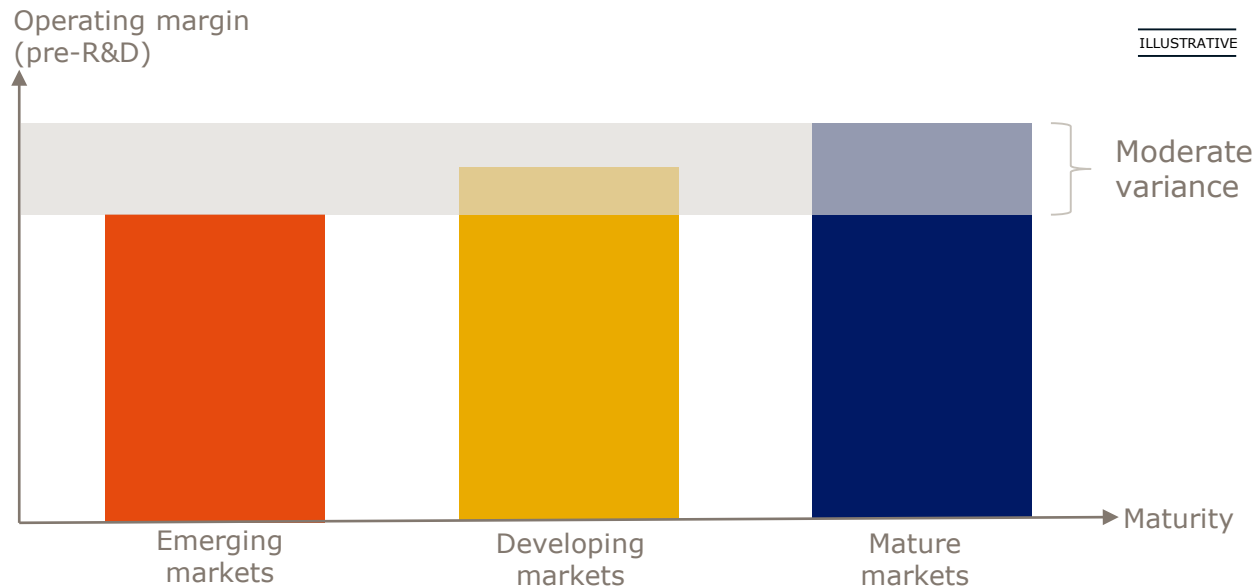


Sales & Distribution costs development

- Resource allocation shifting away from low growth products and markets to growth products and markets
- Short-term investments to launch Ozempic® and Rybelsus® successfully
- Efficiency focus to drive operational leverage

Regional operating margins reflect moderate variance

Operating margins reflecting maturity and investments



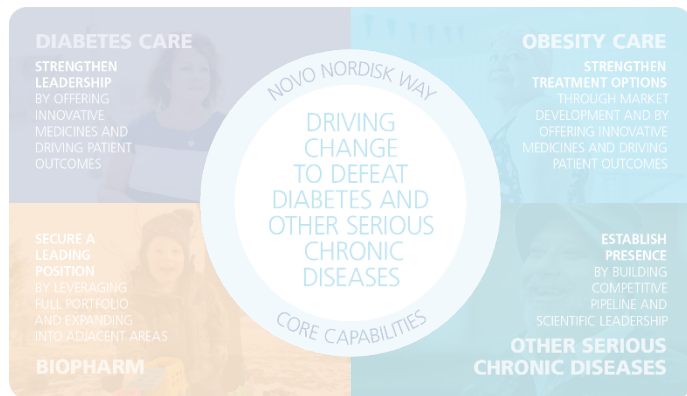
Moderate margin differences across regions

Differences driven by:

- Pricing
- Product mix
- Cost of operations
- Economies of scale
- Growth potential

Focus on driving solid sales growth and investing to build future growth assets

Corporate strategy focusing on four therapeutic areas



R_x

Focus on driving solid sales growth



Gross margin to remain broadly stable



Over time, Research & Development cost ratio to gradually increase



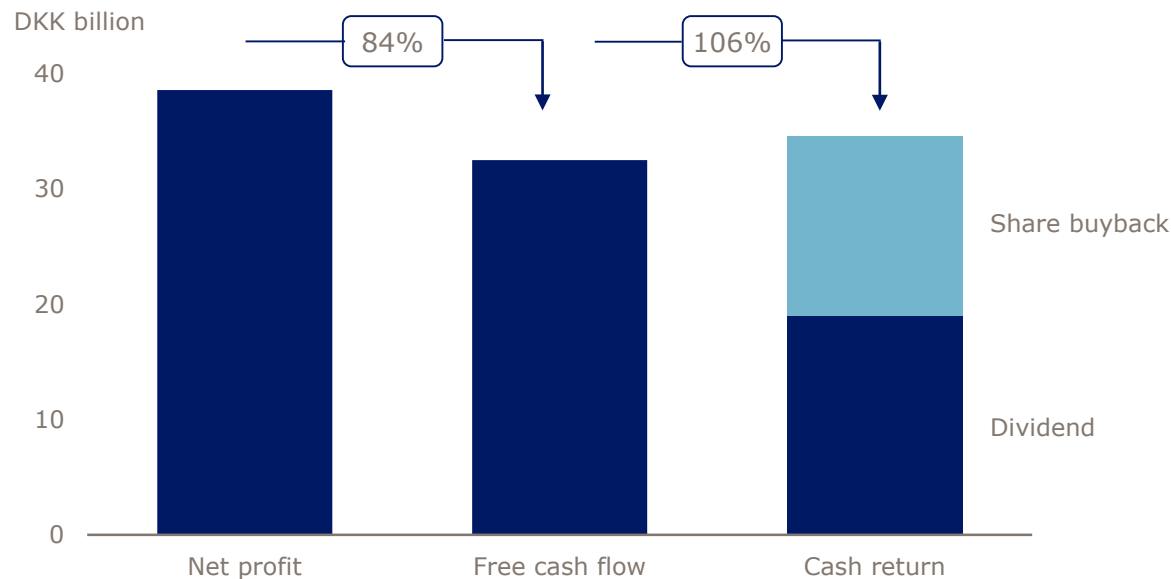
Over time, Sales & Distribution cost ratio to gradually decline



Administration cost ratio to decline

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

Cash conversion and cash allocation, FY2018



Solid cash conversion and return of cash to shareholders

- Cash conversion historically above 90%
- Novo Nordisk has returned DKK 109 billion to shareholders over the last three years
- 23 years of increasing dividends
- Very solid balance sheet
- M&A up to USD 5 billion

Novo Nordisk is on-track to achieve current long-term financial targets

Cash conversion (3-year average)

Target: 85%

2019 status¹: 93%

OPAT/NOA

Target: 80%

2019 status¹: 120%

Average operating profit growth

Target: 5%

2019 status²: 4.7%

¹ Based on YTD 2019 performance provided in connection with 9M 2019 report

² Based on FY 2019 guidance provided in connection with 9M 2019 report and with 2015 as the base year

Financial outlook

- Deliver solid sales and operating profit growth
 - Deliver 6-10% sales growth in International Operations
 - Transform 70% of sales in the USA¹
- 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

¹ 2015-2022

Sources, notes and abbreviations – PS and Financials

- **Slide 214:** API: Active pharmaceutical ingredients
- **Slide 226:** OPAT: Operating profit after tax; NOA: Net operating assets

STRATEGIC ASPIRATIONS 2025



LEANDRO KUSTER
Switzerland
Leandro has haemophilia A

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

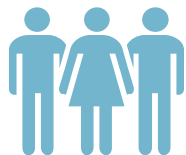
Sustained growth opportunities – strategic aspirations for 2025



Purpose and
sustainability



Innovation and
therapeutic focus



Commercial execution



Financial outlook

Purpose and sustainability



Novo Nordisk has a clear purpose



Being respected for adding value to society



Progress towards zero environmental impact

circular FOR zero

●
SOLVE GLOBAL
ENVIRONMENTAL
CHALLENGES

●
LEAVE ZERO
ENVIRONMENTAL
IMPACT

●
EMBED CIRCULAR
MINDSET ACROSS
ORGANISATION

Purpose and sustainability – strategic aspirations for 2025

Purpose and sustainability

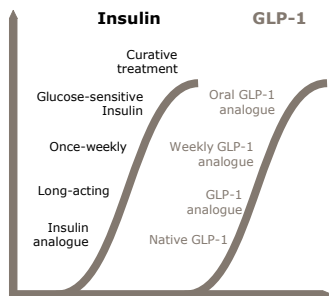


- Being respected for adding value to society
- Progress towards zero environmental impact
- Ensure distinct core capabilities and evolve culture

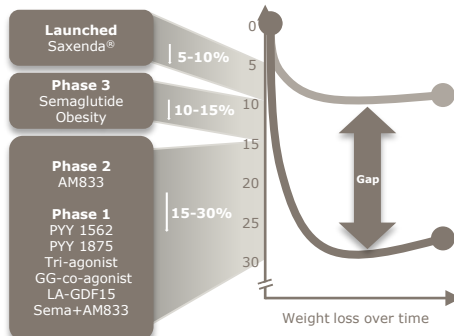
Innovation and therapeutic focus



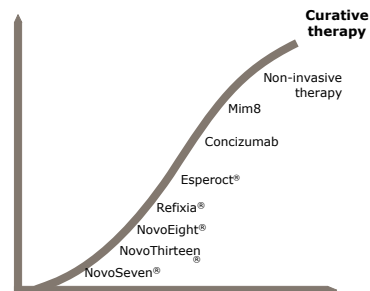
Further raise the innovation bar for diabetes treatment



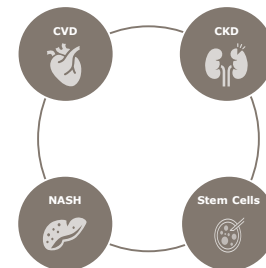
Develop a leading portfolio of superior treatment solutions for obesity



Strengthen and progress the Biopharm pipeline



Establish presence in Other serious chronic diseases



Innovation and therapeutic focus – strategic aspirations for 2025

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 Biopharm pipeline
- Establish presence in Other serious chronic diseases focusing on CVD, NASH and CKD

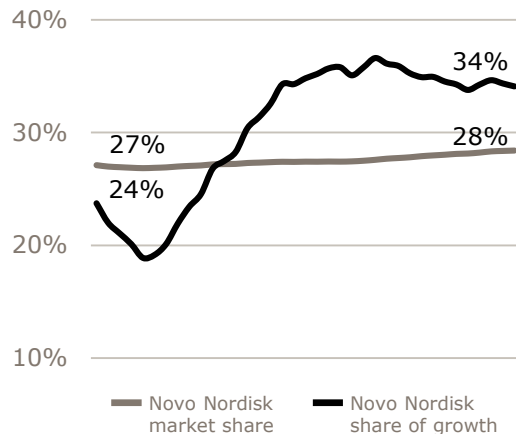


Commercial execution - Diabetes

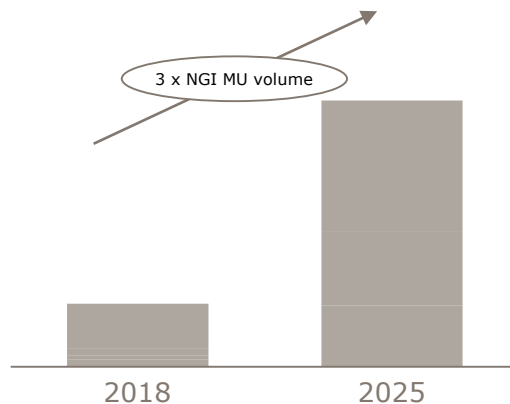


Novo Nordisk is gaining global diabetes market share

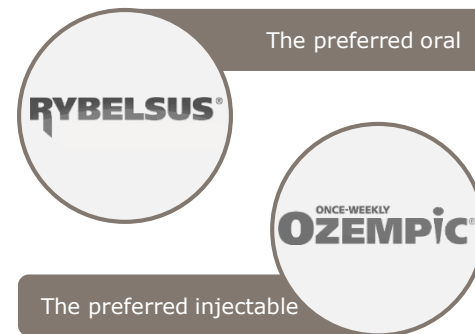
Global diabetes value market



New-generation insulin portfolio expected to increase volume



There is room for both oral and injectable GLP-1s to drive class growth

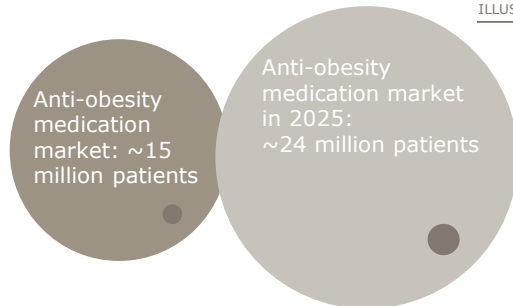


Commercial execution – Obesity and Biopharm



Strengthen Obesity leadership and double current sales

ILLUSTRATIVE



Secure a sustained growth outlook for Biopharm

Internal and external innovation to drive long-term growth



Bringing **internal innovation** to market by pipeline progression



Ensuring future growth by leveraging **external innovation**

Launch excellence

esperoct®

Somapacitan

refixia®

Concizumab

Commercial execution – strategic aspirations for 2025

Commercial execution

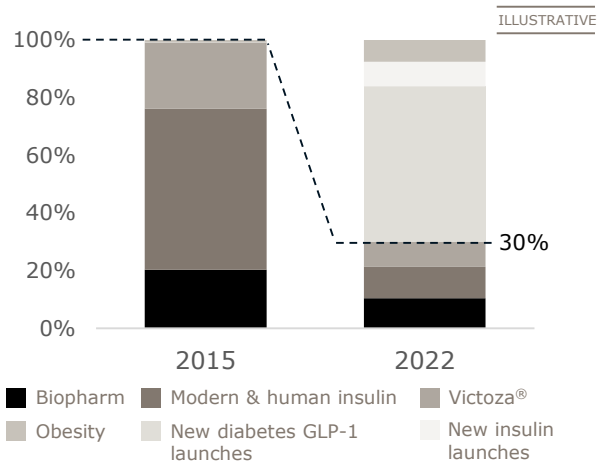


- Strengthen Diabetes leadership - aim at global value market share of more than 1/3
- Strengthen Obesity leadership and double current sales
- Secure a sustained growth outlook for Biopharm

Financial outlook

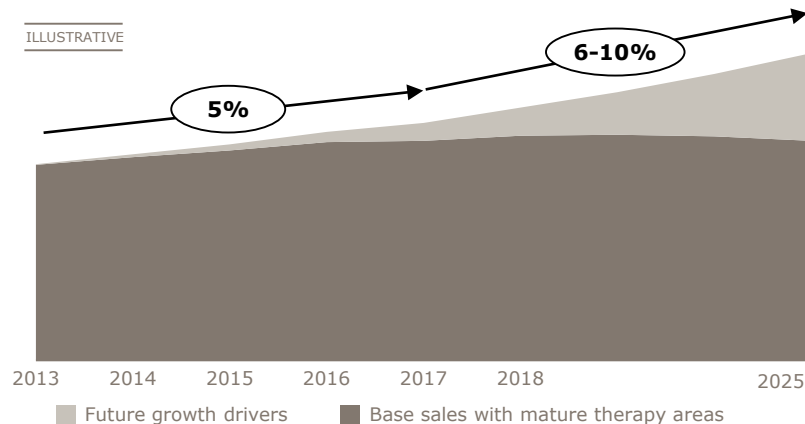


Novo Nordisk USA is turning around 70% of sales in a short period of time



Accelerated sales growth outlook of 6-10% in International Operations to outperform historic growth rates

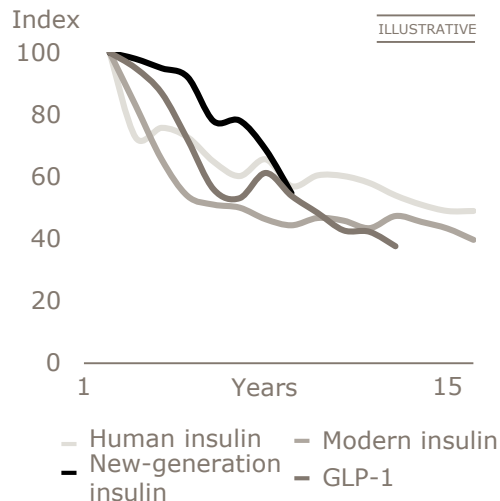
ILLUSTRATIVE



Financial outlook



Leverage global manufacturing network to drive efficiencies



Focus on driving solid sales growth and investing to build future growth assets



Focus on driving sales growth



Gross margin to remain broadly stable



Over time, Research & Development cost ratio to gradually increase

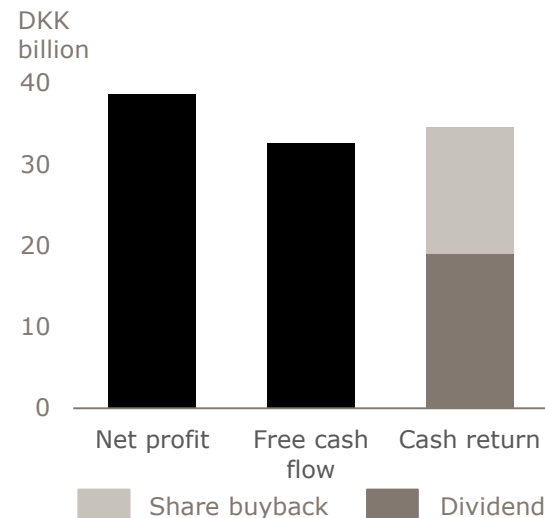


Over time, Sales & Distribution cost ratio to gradually decline



Administration cost ratio to decline

High cash conversion leading to solid cash return to shareholders



Financial outlook – strategic aspirations for 2025

Financial outlook

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 - Transform 70% of sales in the USA¹
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Sustained growth opportunities – strategic aspirations for 2025

Purpose and sustainability



- Being respected for adding value to society
- Progress towards zero environmental impact
- Ensure distinct core capabilities and evolve culture

Innovation and therapeutic focus



- Further raise the innovation-bar for diabetes treatment
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