

# REGION CHINA



HAN GUIZHAN  
Han has type 2 diabetes  
China

# 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.

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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

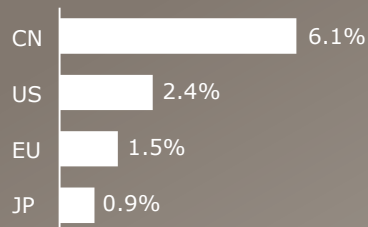
**Note: All notes, sources and abbreviations for this presentation are found in the appendix.**

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

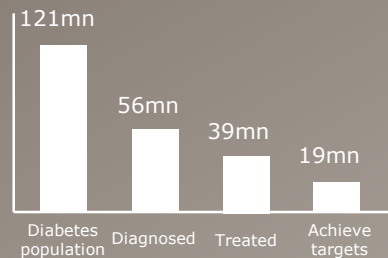


# 2<sup>nd</sup>

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

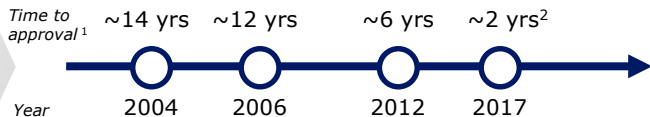


## Capitalising on opportunities provided by positive changes in policy and regulatory environment

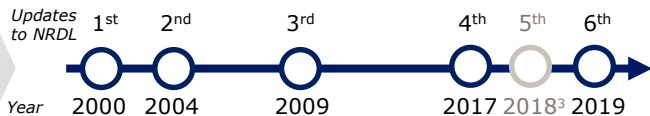
Healthy China Action 2019-2030

- 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**

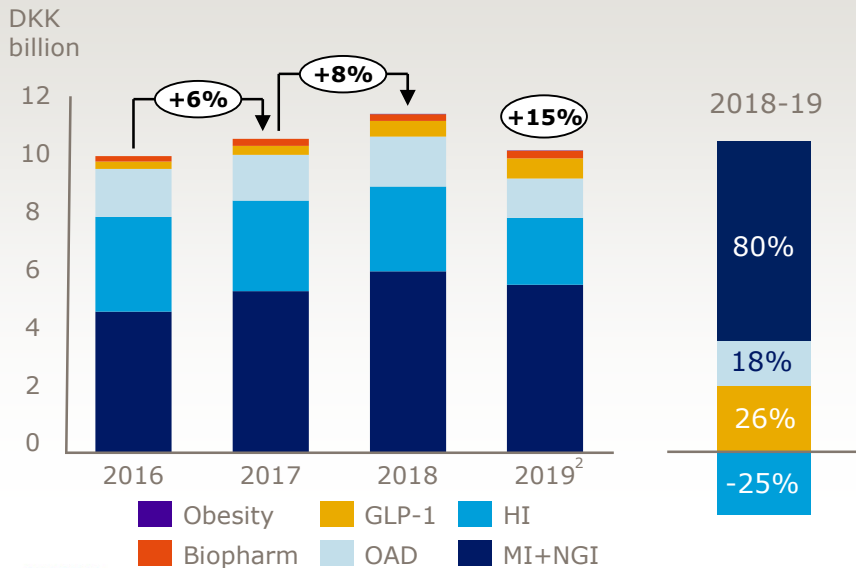


# Novo Nordisk has a strong presence and a clear strategy to continue growth and leadership in Region China



## Celebrating 25 years of success in Region China ~7 million patients treated in 2019<sup>1</sup>

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 2025<sup>1</sup>



**Maximise portfolio**



**Drive commercial excellence**



**Shape market**

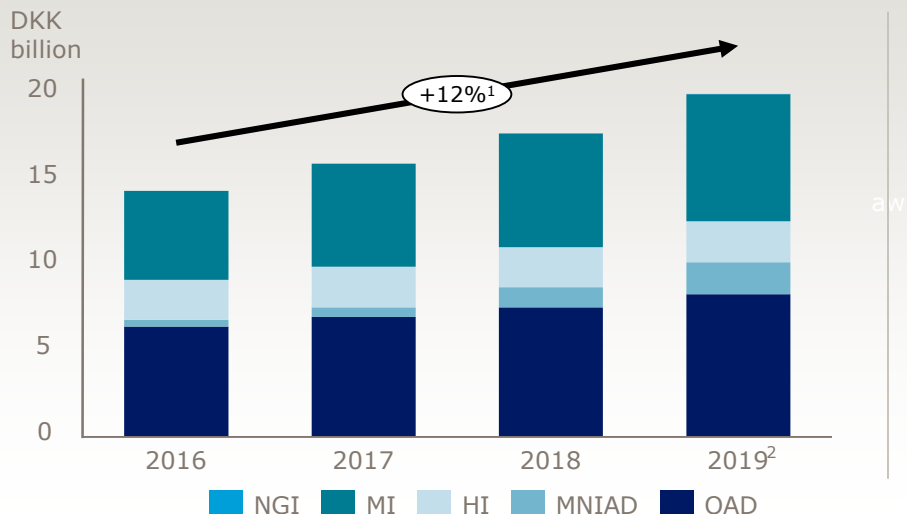


**Accelerate innovation**

# 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

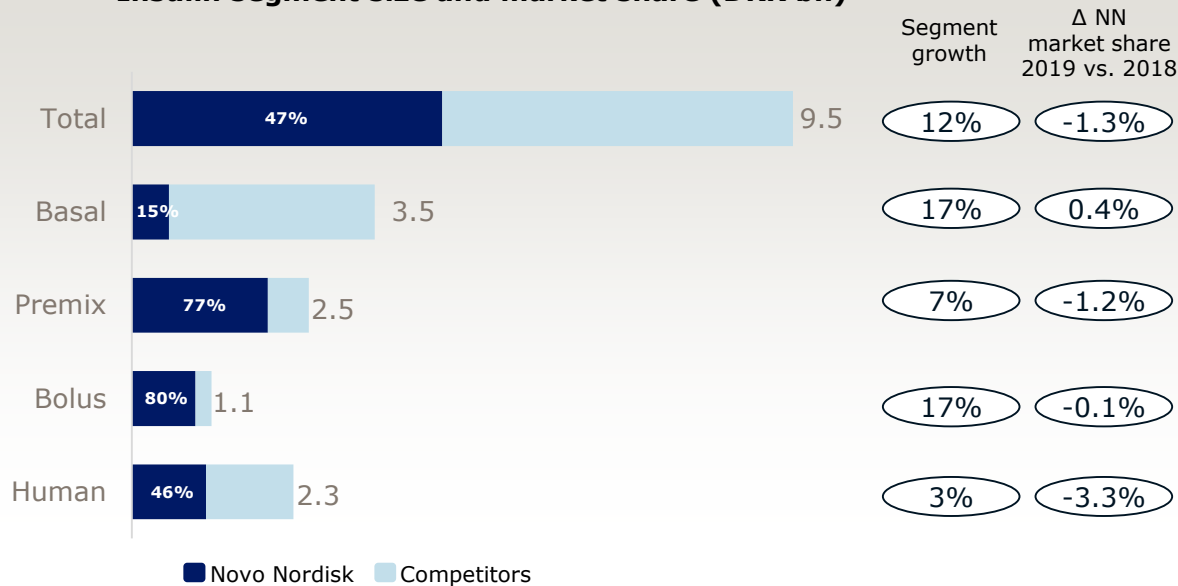
### Oral anti-diabetic

- 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®**

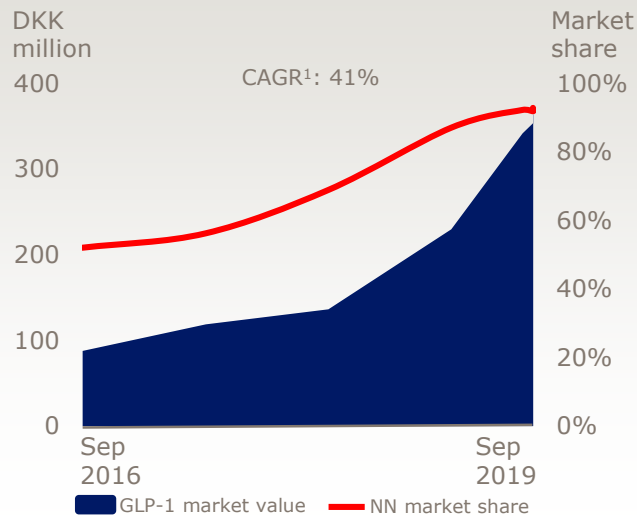
Strengthen premix

**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®

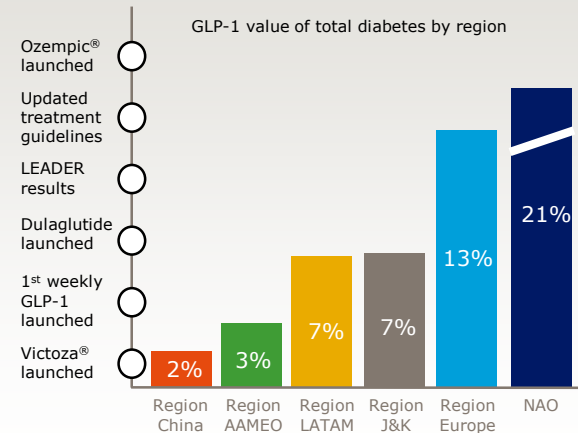


## Increasing competition but strong upcoming portfolio and tactics in place

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



## GLP-1 penetration levels across Novo Nordisk regions

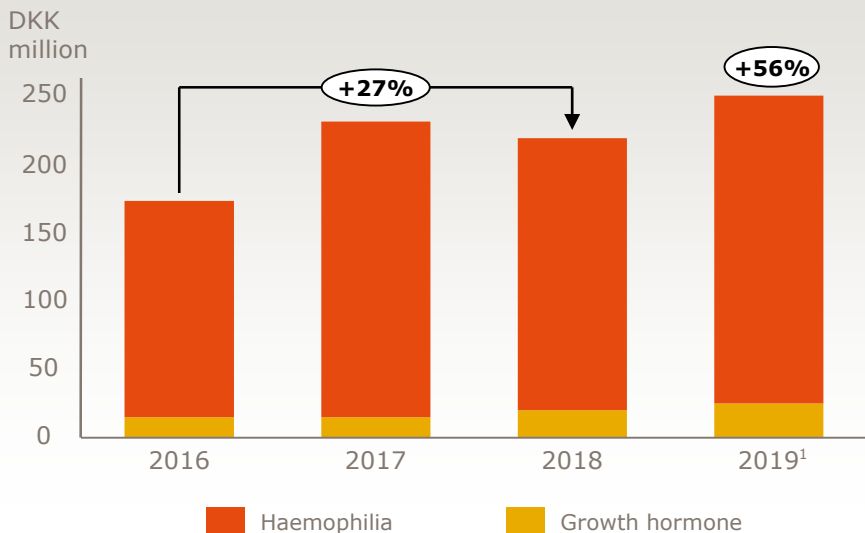




# Strengthening Biopharm's footprint and building the obesity market is expected to diversify future business



**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 obesity<sup>2</sup>

*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



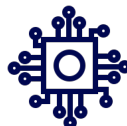
**45 cities**   **2,200 GPs**

## 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<sup>®</sup>
- Actrapid<sup>®</sup>
- GlucaGen<sup>®</sup>
- Insulatard<sup>®</sup>
- Mixtard<sup>®</sup>
- NovoLin<sup>®</sup>
- NovoMix<sup>®</sup>
- NovoNorm<sup>®</sup>
- NovoRapid<sup>®</sup>
- Fiasp<sup>®</sup>
- VICTOZA<sup>®</sup>  
CV Indication
- RYBELSUS<sup>®</sup>
- LAI287
- Levemir<sup>®</sup>
- RYZODEG
- TRESIBA<sup>®</sup>
- VICTOZA<sup>®</sup>
- norditropin<sup>®</sup>
- NovoSeven<sup>®</sup>
- Xultophy
- OZEMPIC<sup>®</sup>
- novoeight<sup>®</sup>
- SemaObesity

|                         |                        |                          |
|-------------------------|------------------------|--------------------------|
| Actraphane <sup>®</sup> | NovoMix <sup>®</sup>   | VICTOZA <sup>®</sup>     |
| Actrapid <sup>®</sup>   | NovoNorm <sup>®</sup>  | norditropin <sup>®</sup> |
| GlucaGen <sup>®</sup>   | NovoRapid <sup>®</sup> | NovoSeven <sup>®</sup>   |
| Insulatard <sup>®</sup> | Levemir <sup>®</sup>   |                          |
| Mixtard <sup>®</sup>    | RYZODEG                |                          |
| NovoLin <sup>®</sup>    | TRESIBA <sup>®</sup>   |                          |

Less innovative<sup>1</sup>



Less diversified<sup>1</sup>



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



## Novo Nordisk Portfolio

- Actraphane<sup>®</sup>
- Actrapid<sup>®</sup>
- Glucagen<sup>®</sup>
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- NovoSeven<sup>®</sup>
- Kultophy
- OZEMPIC<sup>®</sup>
- novoeight<sup>®</sup>
- SemaObesity

## Future Product Portfolio

|                         |                        |                                       |                        |
|-------------------------|------------------------|---------------------------------------|------------------------|
| Actraphane <sup>®</sup> | NovoMix <sup>®</sup>   | VICTOZA <sup>®</sup>                  | OZEMPIC <sup>®</sup>   |
| Actrapid <sup>®</sup>   | NovoNorm <sup>®</sup>  | norditropin                           | novoeight <sup>®</sup> |
| Glucagen <sup>®</sup>   | NovoRapid <sup>®</sup> | NovoSeven <sup>®</sup>                | SemaObesity            |
| Insulatard <sup>®</sup> | Levemir <sup>®</sup>   | Fiasp <sup>®</sup>                    | LAI287                 |
| Mixtard <sup>®</sup>    | RYZODEG                | VICTOZA <sup>®</sup><br>CV Indication |                        |
| NovoLin <sup>®</sup>    | TRESIBA                | RYBELSUS <sup>®</sup>                 |                        |

More innovative<sup>1</sup>



More diversified<sup>1</sup>



## 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

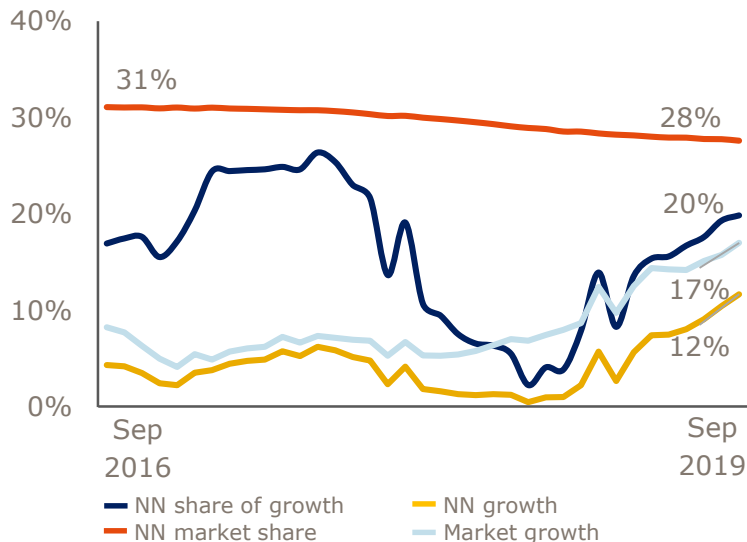
# Sources, Notes and Abbreviations – Region China

- **Slide 3:** Sources: GDP growth, IMF table for 2019 real GDP projection, [https://www.imf.org/external/datamapper/NGDP\\_RPCH@WEO/OEMDC/ADVEC/WEOWORLD/CHN/DNK](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 4:** <sup>1</sup>Time from CTA submission to approval; source: DXY insight database; <sup>2</sup>Currently only 1 data point for biologic import product; <sup>3</sup>Opened for oncology products only
- **Slide 5:** <sup>1</sup>Number for mainland China only; <sup>2</sup>First nine months, 2019; source: Company reported numbers; OAD: Oral anti-diabetic; MI: Modern insulin; NGI: New-generation insulin
- **Slide 6:** <sup>1</sup>3-year CAGR; <sup>2</sup>Year-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 7:** Source: IQVIA, MAT, Sep 2019; IQVIA covers around 50% of the total Chinese market (hospital data)
- **Slide 8:** <sup>1</sup>3-year CAGR; Source: IQVIA, MAT, Sep 2019; IQVIA covers around 50% of the total Chinese market (hospital data)
- **Slide 9:** <sup>1</sup>First 9 months, 2019; <sup>2</sup>Obesity 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 11:** <sup>1</sup>Innovative products: Product with a compound or formulation patent; Diversified means products other than insulin
- **Slide 12:** <sup>1</sup>Innovative products: Product with a compound or formulation patent; Diversified means products other than insulin

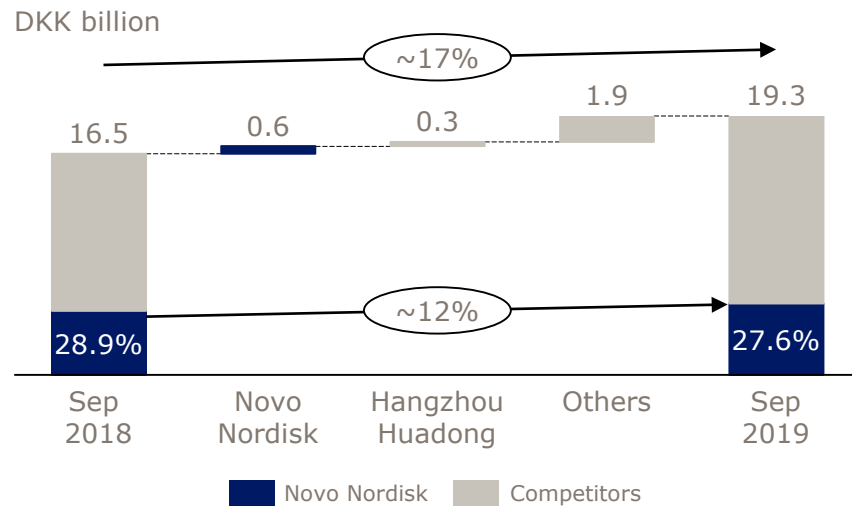
# Region China: Diabetes market share and market growth



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



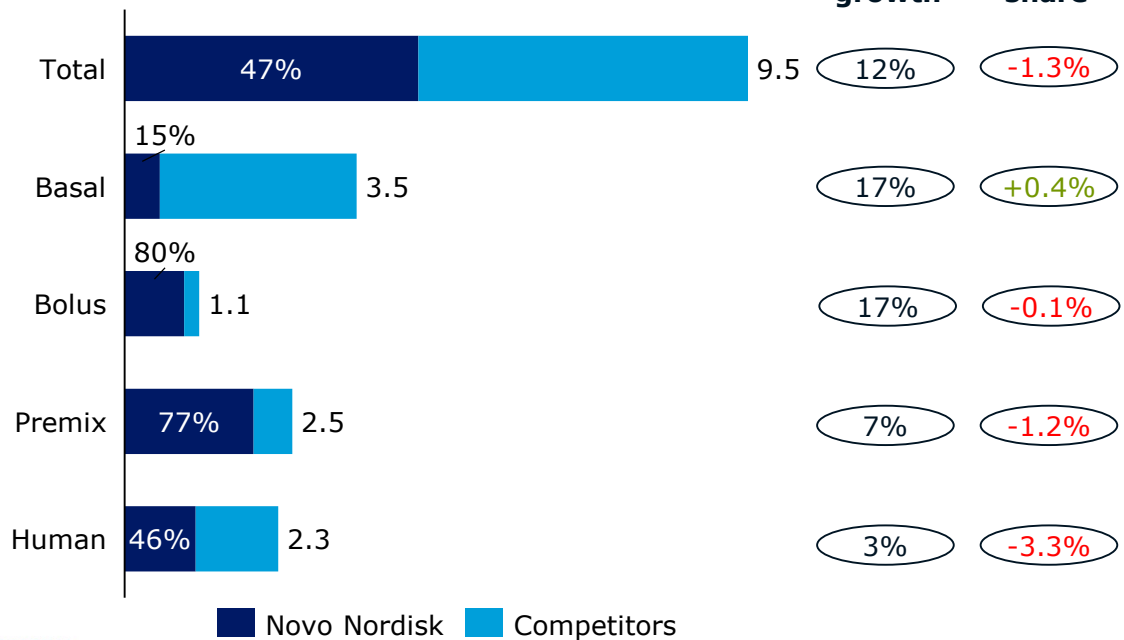
**Diabetes market size and growth**



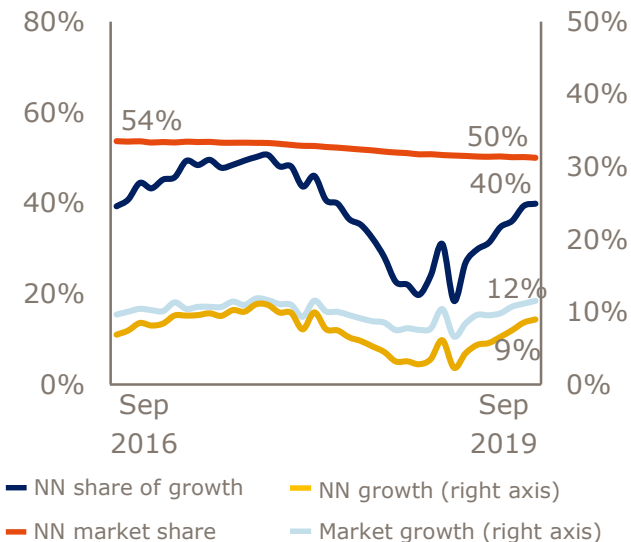
# Region China: Insulin market size and volume share of growth and market share



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



## Insulin volume: Share of growth and market share

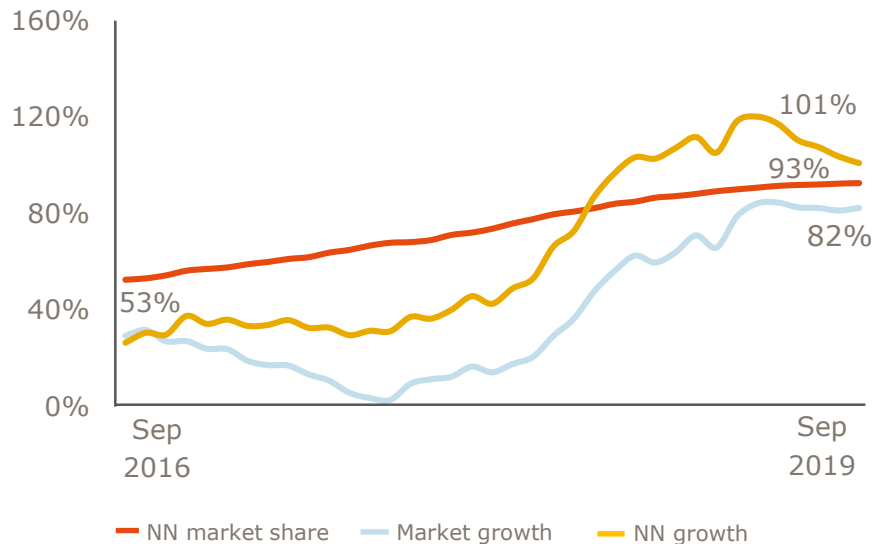




# Region China: GLP-1 market share and market growth



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



## GLP-1 market size and growth

