novo nordisk – a focused healthcare company

Investor presentation
First half of 2016

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Agenda

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

Forward-looking statements

Novo Nordisk's reports filed with or furnished to the US Securities and Exchange Commission (SEC), including the company's Annual Report 2015 and Form 20-F, which are both filed with the SEC in February 2016 in continuation of the publication of the Annual Report 2015, and presentations made, 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 recall, 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.

Please also refer to the overview of risk factors in 'Managing risks' on p 42-43 of the Annual Report 2015.

Unless required by law, Novo Nordisk is under no duty and undertakes no obligation to update or revise any forward-looking statement after the distribution of this presentation, whether as a result of new information, future events or otherwise.

Important drug information

- Victoza® (liraglutide 1.2 mg & 1.8 mg) is approved for the management of type 2 diabetes only
- Saxenda® (liraglutide 3 mg) is approved in the US and EU for the treatment of obesity only

Highlights – First half of 2016

Sales development

- Sales increased by 7% in local currencies and 5% in Danish kroner
  - USA grew by 7% in local currencies and accounted for 50% share of growth in local currencies
  - International Operations and Region China grew by 11% and 10% in local currencies, respectively
  - Victoza® increased by 14% in local currencies and accounted for 32% share of growth in local currencies
  - New-generation insulin now accounts for 28% share of growth in local currencies

Research and Development

- Victoza® statistically significantly reduced the risk of major adverse cardiovascular events in the LEADER trial by 13%
- Tresiba® showed significant lower variance in the glucose-lowering effect compared to insulin glargine U300 in PK/PD trial
- IDegLira received positive 16-0 vote in favour of approval from FDA Advisory Committee
- Phase 2a trial with oral insulin OI338GT completed with generally encouraging results

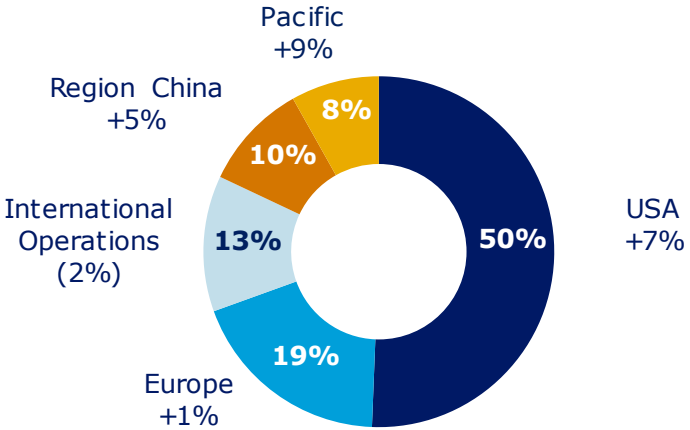
Financials

- Adjusted operating profit[1] increased by 8% in local currencies
- Diluted earnings per share increased by 9% to 7.63 DKK per share, adjusted for the partial divestment of NNIT it increased by 23%
- 2016 financial outlook:
  - Sales growth is now expected to be 5-7% measured in local currencies (around 2% lower in reported currencies)
  - Adjusted operating profit growth is still expected to be 5-8% measured in local currencies (around 3% lower in reported currencies)
- An interim dividend of DKK 3.00 per share of DKK 0.20 will be paid in August 2016

[1] Adjusted operating profit accounts for partial divestment of NNIT and out-licensing of assets for inflammatory disorders, both in 2015

All regions contribute to local sales currencies growth in the first half of 2016

Sales as reported – first half of 2016



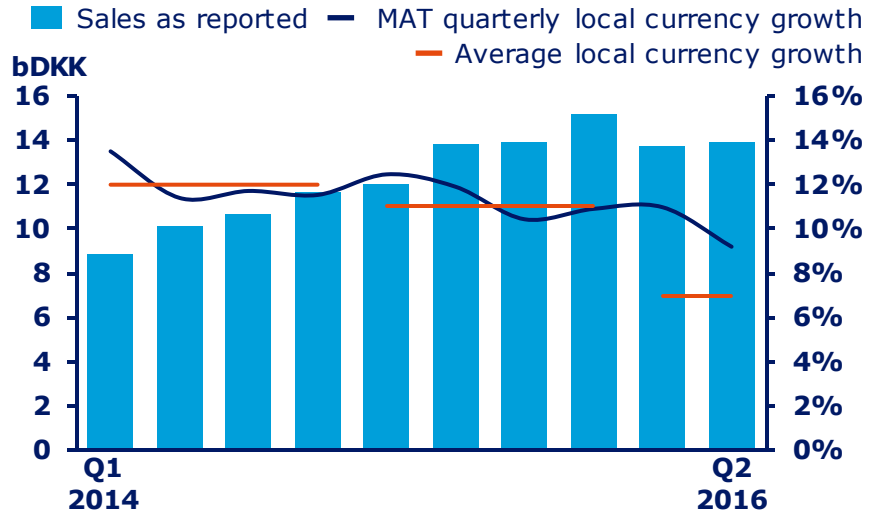
Sales of DKK 54,671 million (+5%)

Growth analysis – first half of 2016

Local currencies	Growth	Share of growth
USA	7%	50%
Europe	2%	7%
International Operations	11%	21%
Region China	10%	14%
Pacific	8%	8%
Total sales	**7%**	**100%**

Modest US sales growth in the second quarter reflects more challenging competitive environment

Modest sales growth in Q2 2016

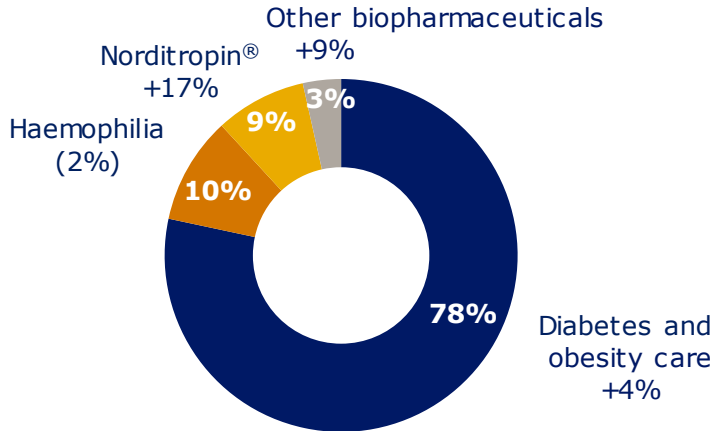


Key factors impacting growth

- Sales growth primarily driven by Tresiba®, Victoza® and Saxenda®
- Declining sales of modern insulin due to impact from
  - Wholesaler inventory management
  - NovoLog® contract loss
  - Lower impact from list price increases
  - Phasing of rebates
- Decline in sales of haemophilia products due to increasing competitive pressure and clinical trial activities

Sales growth is driven by Victoza® and new-generation insulin

Sales as reported – first half of 2016



Sales of DKK 54,671 million (+5%)

Note: Norditropin® sales growth in the first half of 2016 is derived primarily from the USA reflecting a positive non-recurring adjustment to rebates in the Medicaid patient segment

Growth analysis – first half of 2016

Local currencies	Growth	Share of growth
New-generation insulin[1]	174%	28%
Modern insulin	0%	2%
Human insulin	(1%)	(1%)
Victoza®	14%	32%
Other diabetes and obesity care[2]	25%	15%
Diabetes and obesity care	**7%**	**76%**
Haemophilia[3]	(1%)	(1%)
Norditropin®	19%	20%
Other biopharmaceuticals[4]	10%	5%
Biopharmaceuticals	**8%**	**24%**
Total	**7%**	**100%**

[1] Comprises Tresiba®, Ryzodeg® and Xultophy®
[2] Primarily NovoNorm®, needles and Saxenda®
[3] Comprises NovoSeven®, NovoEight® and NovoThirteen®
[4] Primarily Vagifem® and Activelle®

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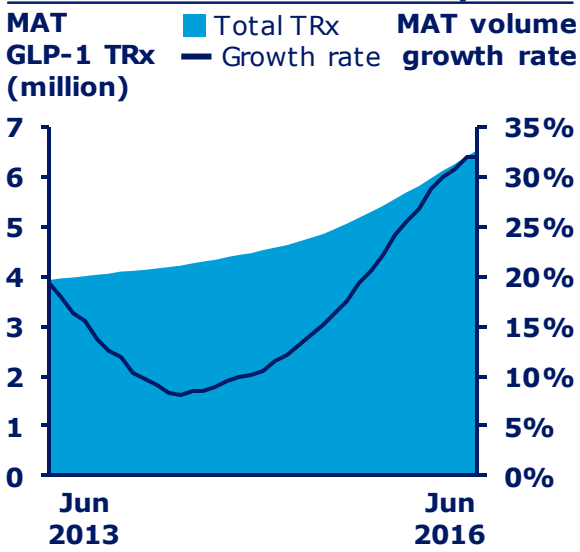
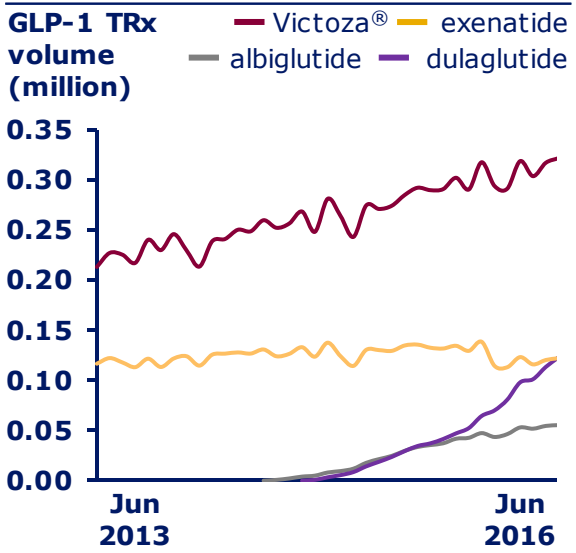
Victoza® maintains leadership in the faster growing US GLP-1 market

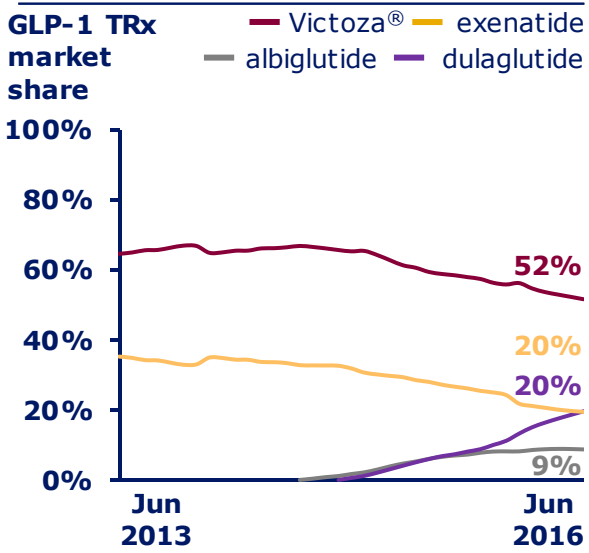
US GLP-1 market development



US GLP-1 market TRx volume



US GLP-1 market shares



Source: IMS NPA MAT, June 2016

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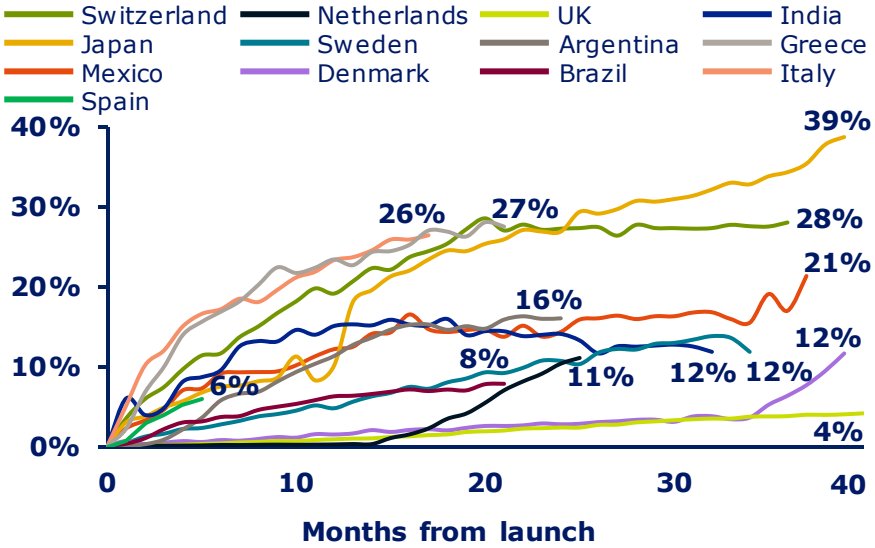
Roll-out of new-generation insulin portfolio is progressing

Key launch observations

- **Tresiba**® launched in 45 countries with solid penetration in markets with similar reimbursement as insulin glargine
- **Ryzodeg**® commercially launched in Mexico, India, Bangladesh, Japan, Russia and now Lebanon
- **Xultophy**® launched in Switzerland, Germany, the United Kingdom, Sweden, Hungary and now Greece

Tresiba® value share of basal insulin segment in selected countries, excl USA



Note: Limited IMS coverage in India
Source: IMS Monthly value figures, May 2016

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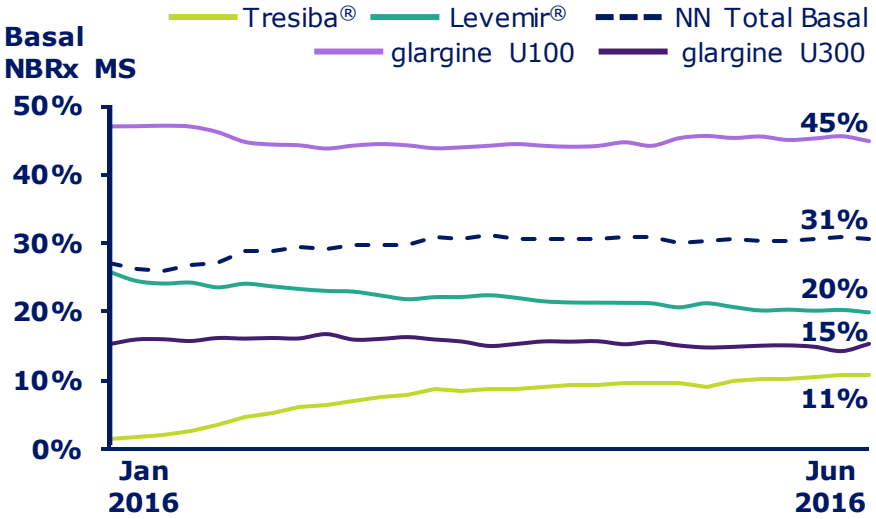
Steady uptake of Tresiba® in the USA

Weekly US NBRx volume market shares



Note: The graph does not show NPH, which accounts for the residual market share
Source: IMS weekly data, 15 July 2016, excludes Medicaid
NBRx: New-to-brand prescriptions; MS: Market share

Tresiba® launched in the USA

- Full commercial launch in January 2016 following specialist engagement in Q4 2015
- Tresiba® volume market share has reached 2.9%
- Tresiba® U200 accounts for approximately 80% of total Tresiba® volume

Source: IMS weekly data, 15 July 2016, excludes Medicaid

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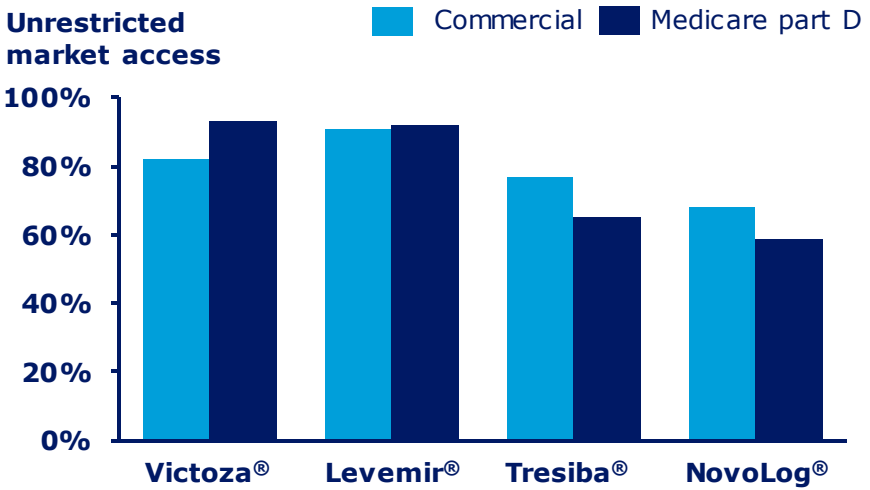
Broad market access across the diabetes portfolio is expected to be maintained in the USA for 2017

Current level of unrestricted market access for key Novo Nordisk products in the USA



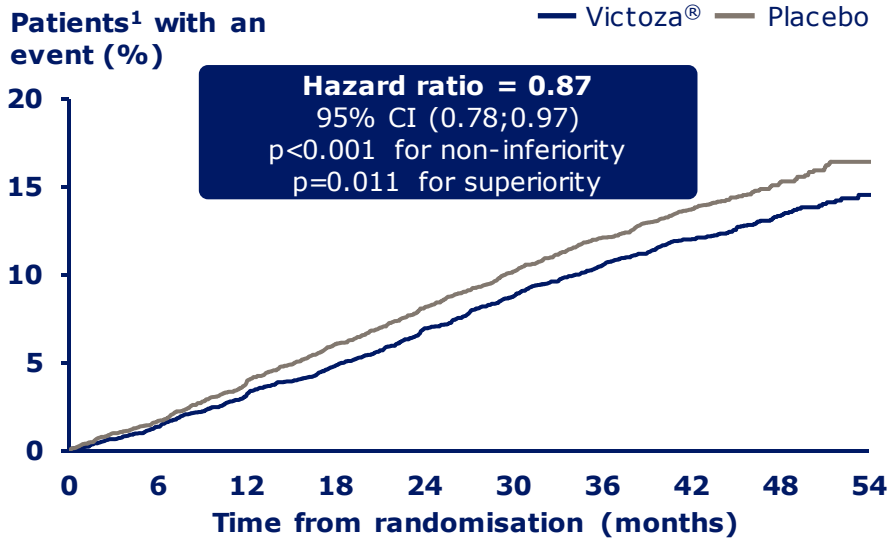
US formulary negotiations and 2017 pricing

- Majority of formulary negotiations for 2017 completed
- Market access anticipated to remain broad across the diabetes portfolio, at a level similar to 2016
- Tresiba® is expected to maintain more than 70% combined access for the patients in commercial channels and Medicare part D
- Based on the outcome of the formulary negotiations to date, net prices of the portfolio as a whole are expected to be moderately lower compared with the levels in 2016

Source: FingerTip Formulary, June 2016
Note: Unrestricted access excludes prior authorisation, step edits and other restrictions

Victoza® statistically significantly reduced the risk of major adverse cardiovascular events in the LEADER trial

13% reduction in 3-point MACE with Victoza® compared with placebo



[1]Inclusion criteria: Adults above 50 years with type 2 diabetes and established CV disease, above 60 years with multiple CV factors, HbA_{1c} ≥ 7.0%
MACE: major adverse cardiovascular events; 3-point MACE comprises cardiovascular death, non-fatal myocardial infarction and non-fatal stroke; CI: two-sided confidence interval

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Key results and next step

- Superiority of Victoza® vs placebo was confirmed for time to first MACE in people with type 2 diabetes at high CV risk
- **Victoza® reduced the MACE risk by 13%** as well as CV and all-cause mortality by 22% and 15% respectively, compared with placebo when added to standard of care
- The result was consistent across sensitivity analyses
- Victoza® appeared to have a safe and well tolerated profile, generally consistent with previous studies for Victoza®
- **Next step:** Novo Nordisk will file for an inclusion of CV data in the label for Victoza® within the next three months

Note: Indicated timeline as of financial release of first half of 2016 on 5 August 2016
CV: Cardiovascular

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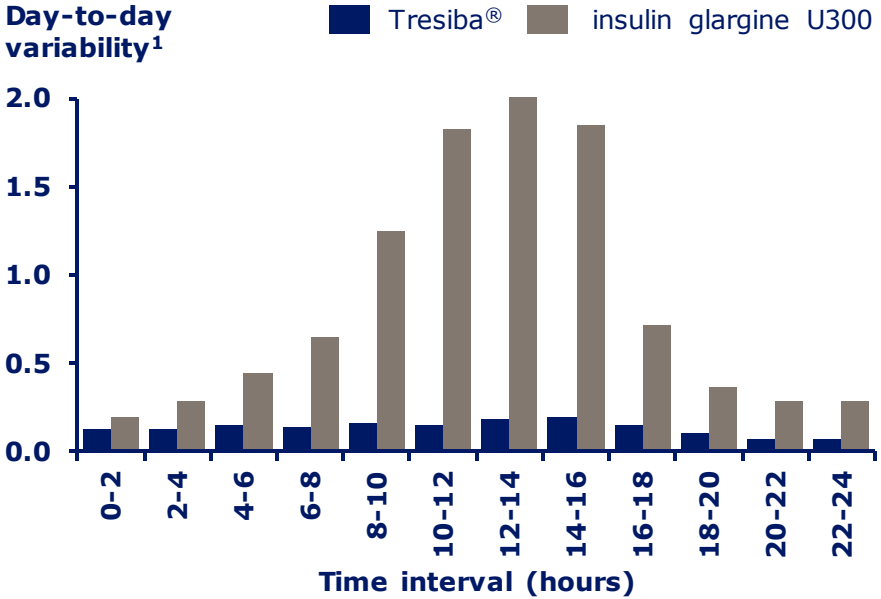
Tresiba® showed lower variability in the glucose-lowering effect compared to insulin glargine U300 in PK/PD trial

Within-subject variability in steady state



[1] Day-to-day variability in 2-hours interval of AUC_{GIR} (variance)
Note: 60 type 1 diabetic patients were enrolled and 57 completed the trial; Inclusion criteria: Age 18-65 years, diagnosis of type 1 diabetes, Fasting C-peptide <0.3 nmol/L, BMI: 18.5-29 kg/m², HbA_{1c}: <9%
AUC_{GIR}: area under glucose infusion curve

Key results and next step

- The day-to-day **variability** in the glucose-lowering effect was approximately **four-times lower with Tresiba®** compared to insulin glargine U300 when evaluated by within-subject variance
- Within-subject variability was consistently lower for Tresiba® than insulin glargine U300 over the entire 24-hour period
- Insulin glargine U300 showed a statistically significantly* lower potency compared to Tresiba® of approximately 30%
- **Next step:** Initiation of large 3b head-to-head trial study in type 2 diabetes to document clinical benefits including hypoglycaemia, with expected start in 2017

* $p<0.001$

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Key development milestones

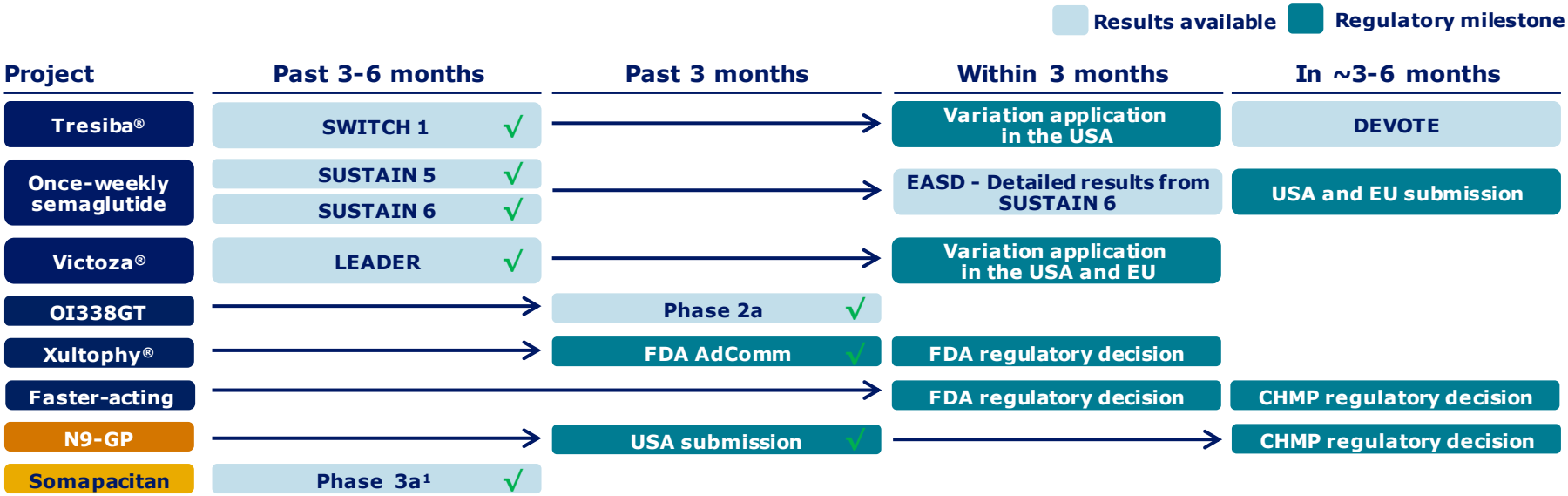
IDegLira (NN9068) received a positive 16-0 vote in favour of approval from the FDA Advisory Committee

Phase 2a trial with oral insulin OI338GT (NN1953) completed with generally encouraging results, while OI320GT (NN1957) was discontinued based on portfolio considerations

Proof-of-concept phase 2a study with the GLP-1/GIP dual-agonist NN9709 met the primary end-point but will be discontinued due to portfolio considerations

Long-acting factor IX (NN7999) filed for regulatory approval in the USA

R&D news flow with several regulatory decisions expected in the next six months



Diabetes Haemophilia Growth disorders

Note: Indicated timeline as of financial release of first half of 2016 on 5 August 2016; ¹ Study conducted in adult growth hormone disorder

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Financial results – first half of 2016

DKK million	H1 2016	H1 2015	Change
Sales	54,671	52,259	5%
Gross profit	46,392	44,526	4%
Gross margin	*84.9%*	*85.2%*	
Sales and distribution costs	(13,608)	(13,322)	2%
Percentage of sales	*24.9%*	*25.5%*	
Research and development costs	(6,635)	(6,285)	6%
Percentage of sales	*12.1%*	*12.0%*	
Administration costs	(1,781)	(1,741)	2%
Percentage of sales	*3.3%*	*3.3%*	
Other operating income, net	438	3,161	N/A
Non-recurring income[1]	-	*2,825*	
Operating profit	24,806	26,339	(6%)
Operating profit adjusted for non-recurring income[1]	*24,806*	*23,514*	*5%*
Financial items (net)	(251)	(3,306)	N/A
Profit before income tax	24,555	23,033	7%
Tax	(5,132)	(4,814)	7%
Effective tax rate	*20.9%*	*20.9%*	
Net profit	19,423	18,219	7%
Diluted earnings per share (DKK)	7.63	7.02	9%
Diluted earnings per share (DKK) adjusted for partial divestment of NNIT	***7.63***	***6.20***	***23%***

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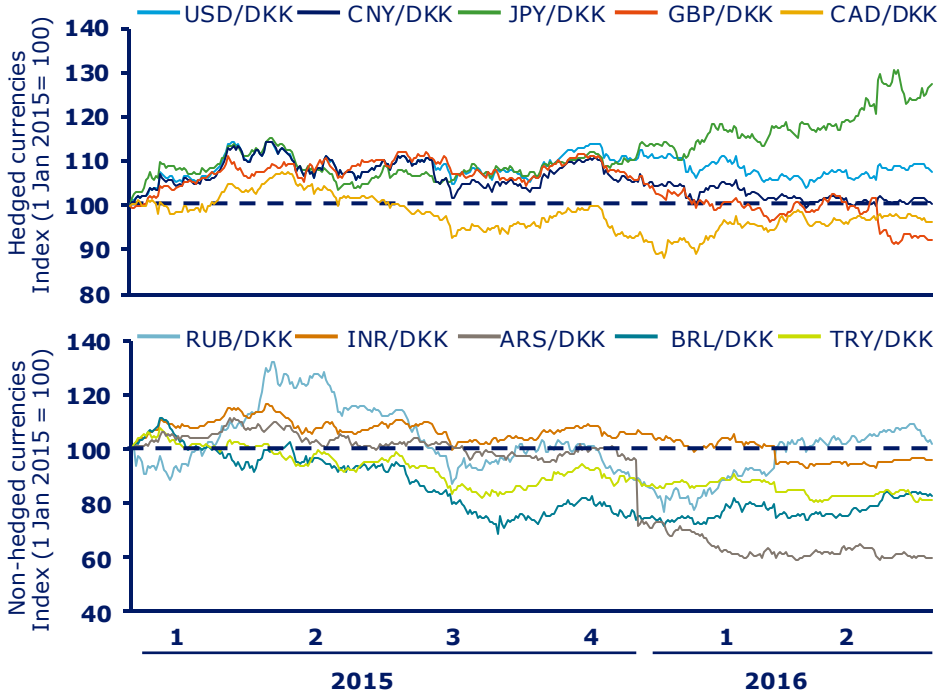
[1] Non-recurring income comprises the partial divestment of NNIT (DKK 2,376 million) and out-licensing of assets for inflammatory disorders (DKK 449 million), both in 2015

Negative currency impact in 2016 driven by unfavourable development in both hedged and unhedged currencies



Hedged Currencies	2015 average	2016 average[2]	Spot rate[2]	Impact of a 5% move[3]	Hedging (months)
USD[1]	673	669	665	2,000	12
CNY[1]	107.0	101.9	100.1	300	11[4]
JPY[1]	5.56	6.07	6.54	180	12
GBP[1]	1,028	946	880	80	12
CAD[1]	526	504	509	75	11

Non-hedged Currencies	2015 average	2016 average[2]	Spot rate[2]
RUB[1]	11.06	9.68	9.97
INR[1]	10.49	9.95	9.96
ARS[1]	0.73	0.46	0.44
BRL[1]	205	185	203
TRY[1]	248	228	222

[1] DKK per 100; [2] As of 2 August 2016; [3] Operating profit in DKK million per annum; [4] Chinese Yuan traded offshore (CNH) and USD used as proxy
Note: Operating profit impact of one of the non-hedged currencies fluctuating 5% is in the range of DKK -15 to +30 million

Financial outlook for 2016

	Expectations 5 Aug 2016	Previous expectations 29 Apr 2016
Sales growth - local currencies	**5-7%**	5-9%
Sales growth - reported	**Around 2 percentage points lower**	Around 3 percentage point lower
Operating profit growth - local currencies	**5-8%**	5-9%
Operating profit growth - reported	**Around 3 percentage points lower**	Around 4 percentage point lower
Financial items (net)	**Loss of around DKK 600 million**	Loss of around DKK 200 million
Effective tax rate	20-22%	20-22%
Capital expenditure	Around DKK 7.0 billion	Around DKK 7.0 billion
Depreciation, amortisation and impairment losses	Around DKK 3.0 billion	Around DKK 3.0 billion
Free cash flow	**Around DKK 38-41 billion**	Around DKK 35-38 billion

The financial outlook is based on an assumption of a continuation of the current business environment and given the current scope of business activities and has been prepared assuming that currency exchange rates remain at the level as of 2 August 2016

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Closing remarks

Solid market performance

- ≥10% annual diabetes care market growth driven by diabetes prevalence
- 27% value market share in diabetes care and solid leadership position
- 46% insulin volume market share with leadership position across all regions
- 45% modern and new-generation insulin volume market share
- 62% GLP-1 value market share with strong global leadership position

Promising pipeline

- The only company with a full portfolio of novel insulin products
- Semaglutide portfolio offers expansion opportunity with both injectable and oral administration
- Xultophy® supports promising outlook for insulin and GLP-1 combination therapy
- Saxenda® and multiple early stage development projects hold potential within obesity
- Broad pipeline within haemophilia and growth hormone disorders

Source: IMS MAT May 2016 volume and value (DKK) figures

Investor contact information

Share information

Novo Nordisk's B shares are listed on the stock exchange in Copenhagen under the symbol 'NOVO B'. Its ADRs are listed on the New York Stock Exchange under the symbol 'NVO'. For further company information, visit Novo Nordisk on the internet at: novonordisk.com

Upcoming events

16 Sep 2016	Investor presentation at the European Association for the Study of Diabetes (EASD)
28 Oct 2016	Financial statement for the first nine months of 2016
02 Feb 2017	Financial statement for 2016

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Appendix

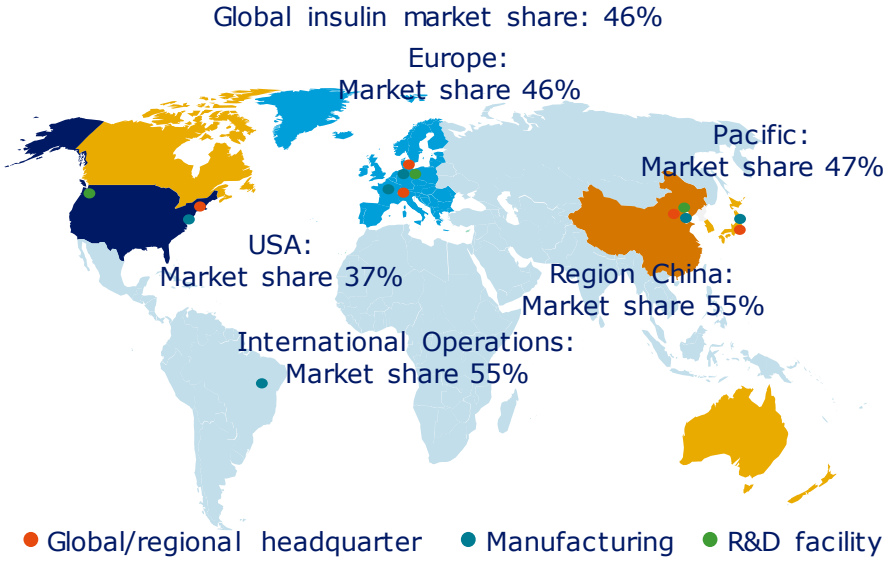
1. Novo Nordisk at a glance
2. Diabetes
3. Biopharmaceuticals
4. Financials
5. Sustainability

Novo Nordisk at a glance

Global leader in diabetes care

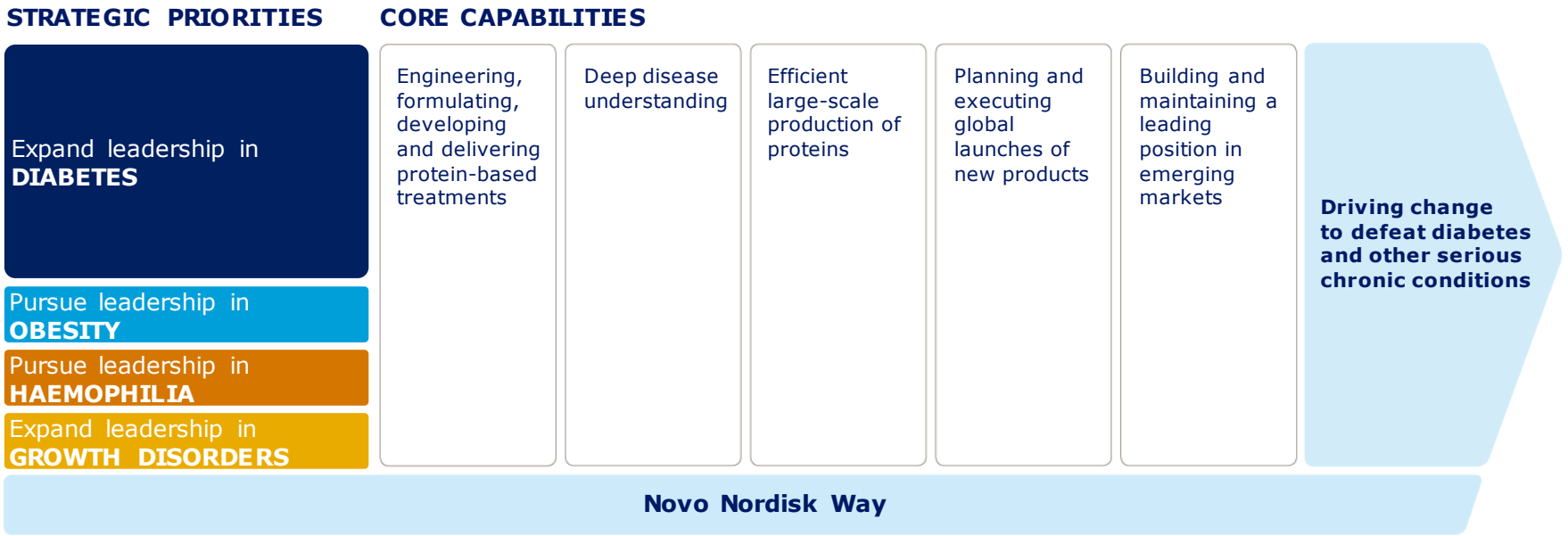
- A **focused** pharmaceutical company with **leading positions** in diabetes, haemophilia and growth hormone
- **Pursuit of double digit top line growth for diabetes care franchise** driven by diabetes pandemic
- Significant **growth opportunities** fuelled by global presence and strong R&D pipeline
- **High barriers to entry** in biologics
- **Operating profit growth** targeting **10%**
- Earnings **conversion to cash** targeting **90%**
- **Cash generated returned to shareholders**

Global insulin market leadership



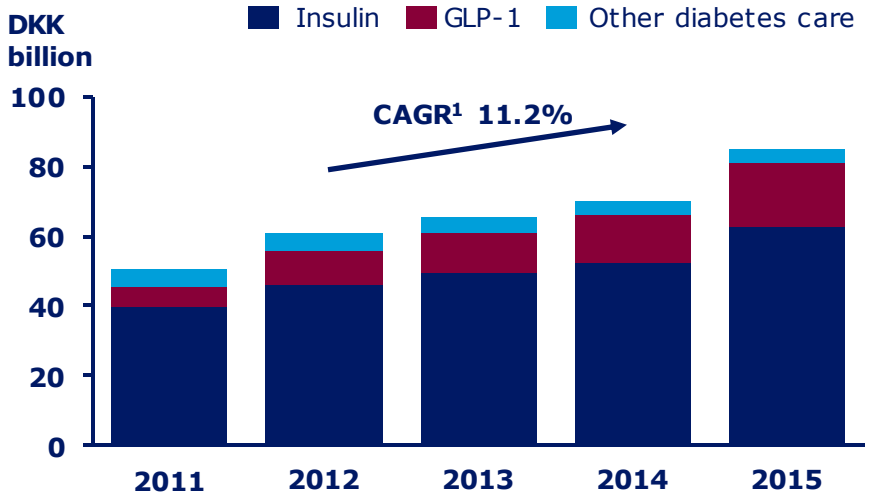
Source: IMS MAT May 2016 volume figures

Novo Nordisk works with four strategic focus areas based on five core capabilities



Long-term financial targets are based on the pursuit of double digit growth for the diabetes care franchise

Reported Novo Nordisk diabetes care sales by treatment class



Expected future growth drivers for Novo Nordisk's diabetes care franchise

- **Volume growth:**
  Continued underlying growth of global diabetes market while GLP-1 segment growing at higher rate
- **Market share gains:**
  Market share gains driven by best in-class portfolio
- **Value upgrade:**
  Continued upgrade from older generations of insulin and GLP-1s and change in mix of product portfolio

¹ CAGR in local currencies for 2011-2015

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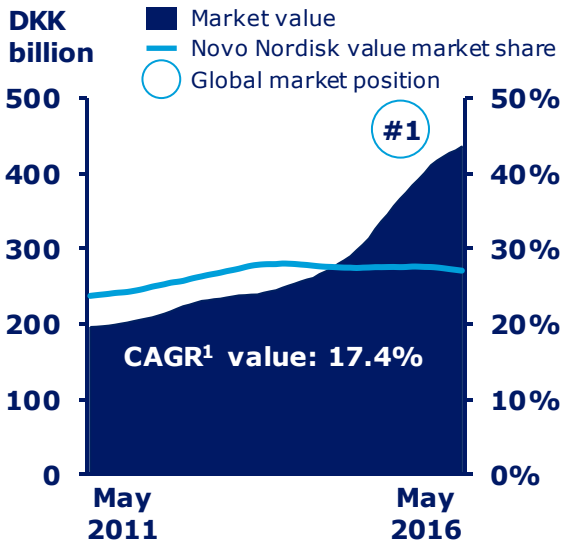
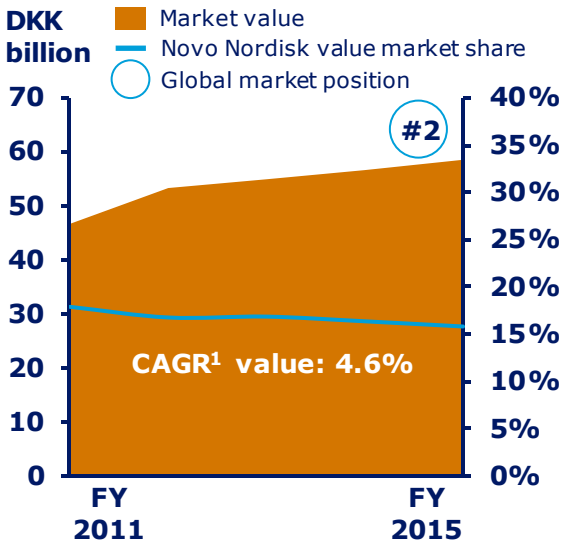
Novo Nordisk has leading positions in diabetes, haemophilia and growth disorders

Diabetes



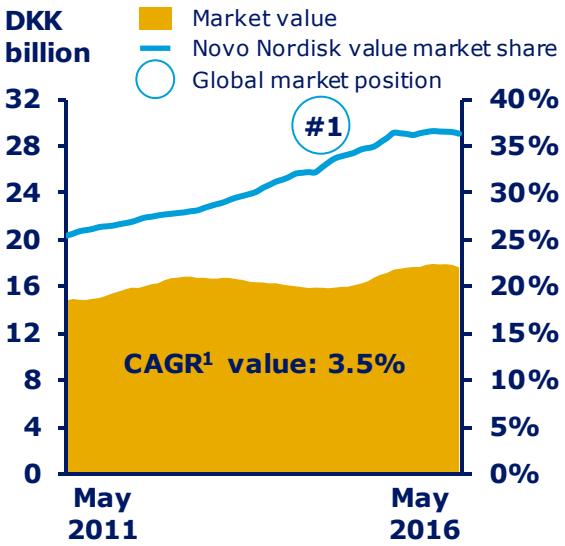
¹ CAGR for 5-year period
Source: IMS MAT May, 2016 value figures

Haemophilia



Note: Annual sales figures for Haemophilia A, B and inhibitor segment
¹ CAGR for 5-year period
Source: Company reports

Growth disorders



¹ CAGR for 5-year period
Source: IMS MAT May, 2016 value figures

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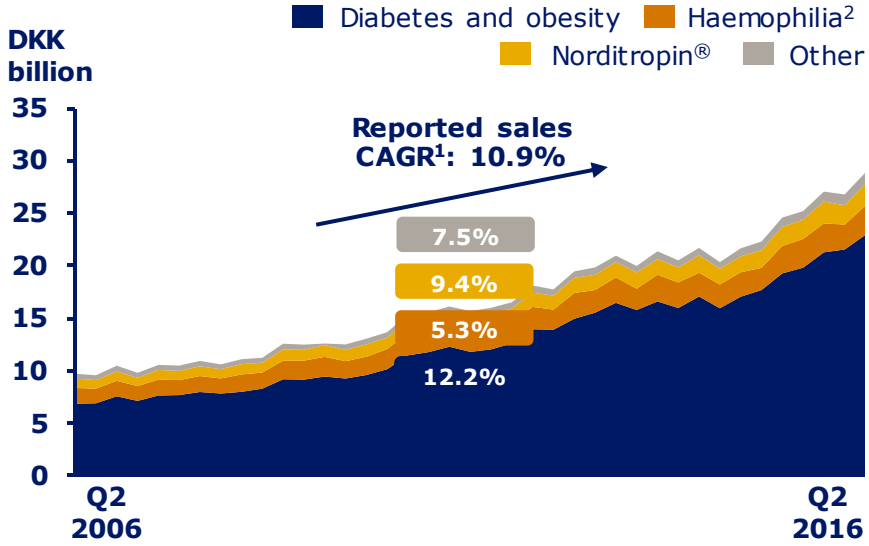
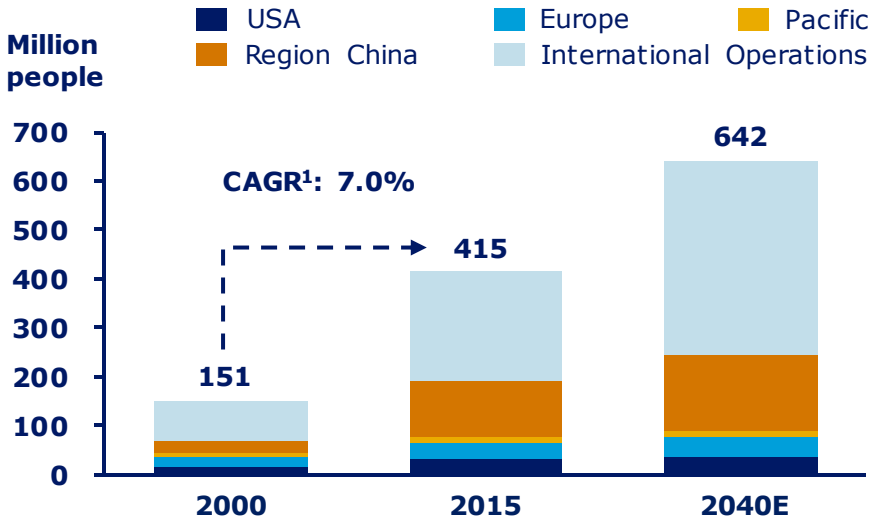
Top line growth driven by diabetes pandemic

Novo Nordisk reported quarterly sales by therapy



[1] CAGR for 10-year period
[2] Haemophilia includes NovoSeven®, NovoThirteen® (as of Q1 2013) and NovoEight® (as of Q1 2014)

Diabetes Atlas 7th Edition projects that 642 million people will have diabetes by 2040



Note: 20-79 age group
[1] CAGR for 15-year period
Source: International Diabetes Federation: Diabetes Atlas 1st and 7th Edition, 2000 and 2015

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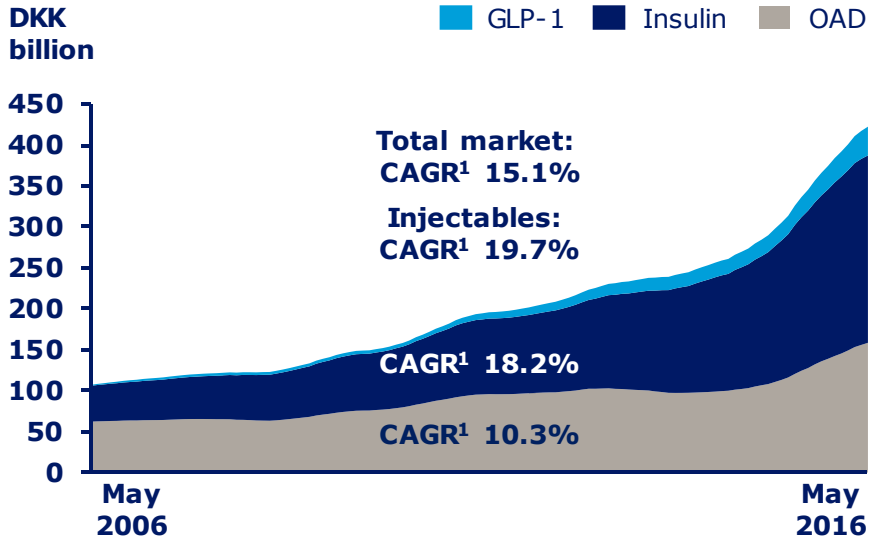
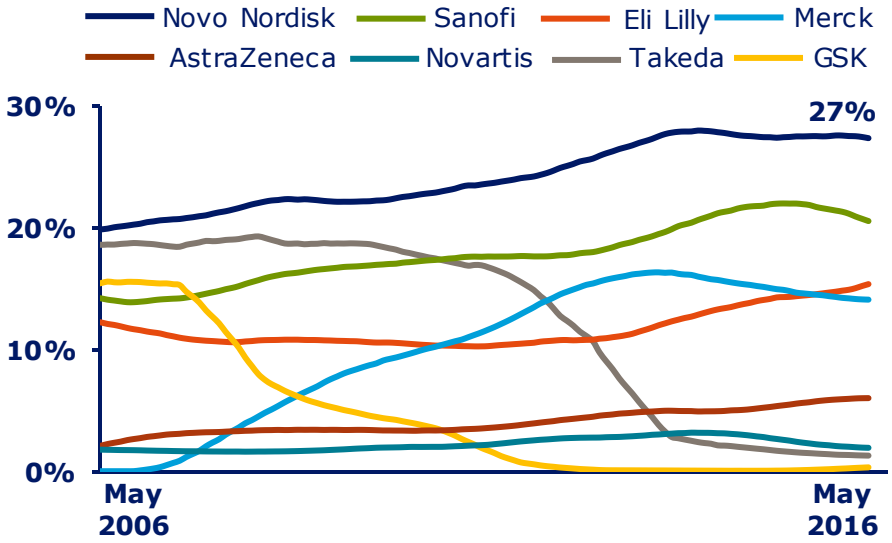
Novo Nordisk has a strong leadership position within the growing diabetes care market

Global diabetes care market by treatment class



[1] CAGR for 10-year period
OAD: Oral Anti-diabetic
Source: IMS Monthly MAT May, 2016 value figures

Global diabetes care value market share



Source: IMS Monthly MAT May, 2016 value figures

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Significant growth opportunities fuelled by strong R&D pipeline across all four strategic focus areas

PHASE 1	PHASE 2	PHASE 3	SUBMITTED	APPROVED[1]
LAI287 – QW basal insulin	OI338GT – Oral insulin	Semaglutide – QW GLP-1	Xultophy® (US)	Levemir®
NN1406 – Mealtime insulin	Semaglutide – QD GLP-1	OG217SC – Oral GLP-1	Faster-acting insulin aspart	NovoRapid®
G530L – Glucagon analogue	Anti-IL-21 and liraglutide	N8-GP – Long-acting rFVIII	N9-GP - Long-acting rFIX	NovoMix®
NN9838 – Amylin analogue	Semaglutide – QD GLP-1	Somapacitan – QW GH		Tresiba®
NN9747 – PYY analogue				Ryzodeg®
NN7415 – Concizumab				Xultophy® (EU)
				Victoza®
				Saxenda®
				NovoSeven®
				NovoEight®
				NovoThirteen®
				Norditropin®

Diabetes
Obesity
Haemophilia
Growth disorders

[1] Approved in all triad markets (US, EU and Japan), unless noted

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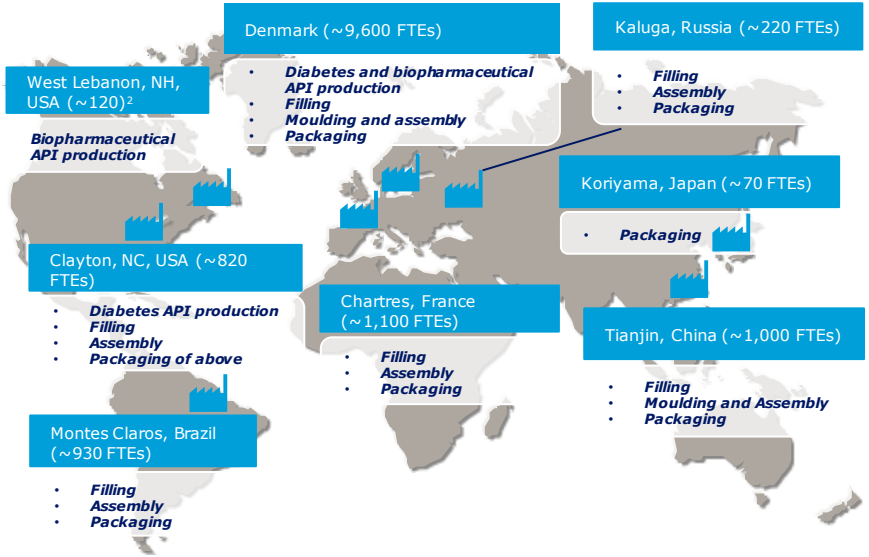
Growth opportunities supported by strong global presence in both sales and manufacturing

FTEs in sales regions[1]

USA:	**~5,100**
Europe:	**~2,800**
International Operations:	**~5,400**
Pacific:	**~1,400**
Region China:	**~2,900**
Total non-HQ/manufacturing FTEs:	**17,600[1]**

Global manufacturing setup



[1] FTEs represent full-time equivalents in Novo Nordisk's sales regions (excludes a.o. employees in headquarter, research sites and manufacturing sites) as of June 2016
[2] New Hampshire facility is currently under establishment

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High barriers to entry in biologics

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

Patent protection[1]

	EU/US
Xultophy® insulin degludec/liraglutide (rDNA origin) injection	2029[2]
TRESIBA® insulin degludec (rDNA origin) injection	2028/29
RYZODEG® 70% insulin degludec and 30% insulin aspart (rDNA origin) injection	2028/29
Levemir® (insulin detemir)	2018/19
NovoMix® (biphasic insulin aspart)	exp 2015/17[3]
NovoRapid® (insulin aspart)	2017[3]/17[3]
VICTOZA®	2023[4]/23[5]
norditropin®	2017/17[3]
NovoSeven® (recombinant Factor VIIa)	exp/exp

Unique value chain position

- Research & Development
- Manufacturing
- Commercialisation

- History of protein engineering
- Highly efficient, flexible and capital intensive manufacturing
- Global commercial footprint

[1] List does not include all marketed Novo Nordisk products. [2] Protected by patents on the individual compounds insulin degludec and liraglutide as listed. [3] Formulation patent expiration year
[4] Assuming paediatric extension [5] Saxenda patent identical to the Victoza® patent
Source: Novo Nordisk

Significant barriers to entry for biosimilar players

Research & Development

- Need to show comparability in PK/PD trials
- Strict regulatory requirements in EU and US
- Requirement for both drug and device offering

Manufacturing

- Significant economies of scale with incumbents
- Significant up-front CAPEX requirements with slow return on investment

Commercialisation

- Large and fragmented target audience
- Cost pressure from payers
- On-going conversion to next generation drugs and slow market dynamics

PK: Pharmacokinetic, PD: Pharmacodynamic; CAPEX: Capital expenditure

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Diabetes and obesity

Diabetes – the inability to manage blood sugar levels appropriately

Facts about diabetes

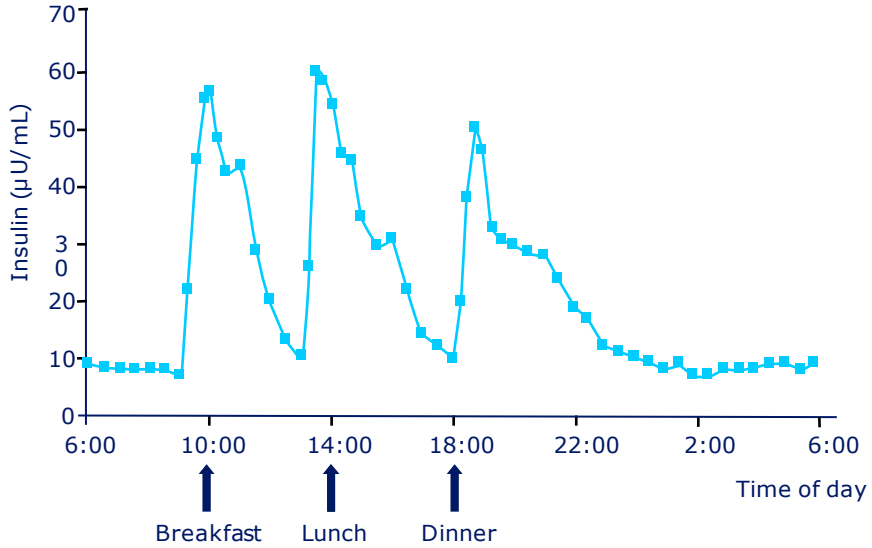
Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces[1]

Primary classifications[2]:

Type 1 diabetes: Complete insulin deficiency due to destruction of beta-cells in the pancreas

Type 2 diabetes: Characterised by some degree of insulin resistance and insulin deficiency

Insulin secretion profile



[1] Diabetes fact sheet N°312, WHO, October 2013
[2] Polonsky et al. J Clin Invest 1988;81:442–48

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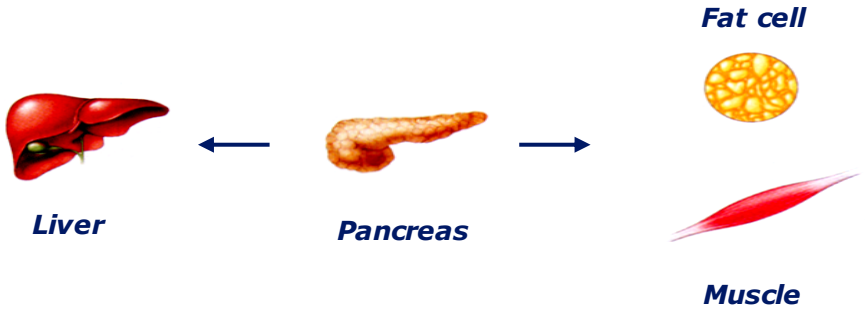
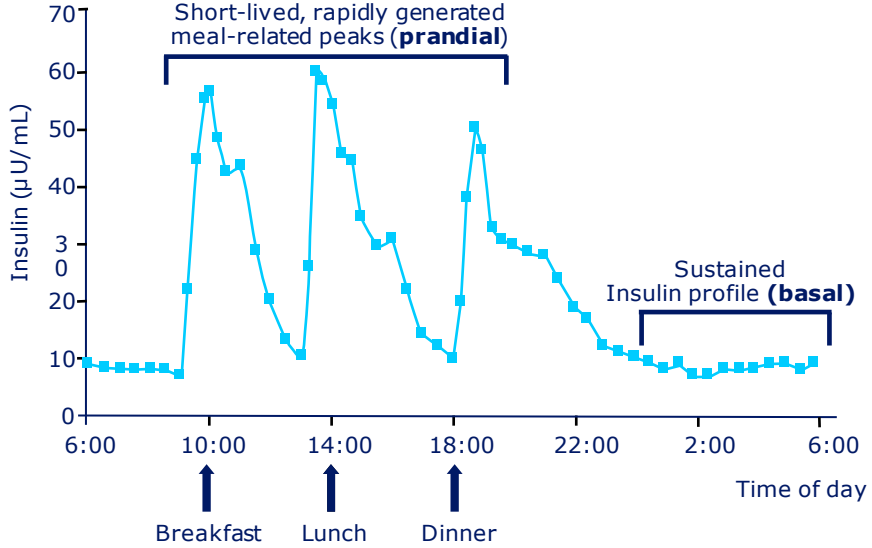
Insulin – a hormone enabling blood sugar to enter cells

Insulin enables glucose to become energy

- Facilitates uptake of blood sugar into cells
- Inhibits glucose release from the liver



The aim of insulin therapy is to recreate normal blood insulin profile



Source: Polonsky et al. J Clin Invest 1988;81:442–48

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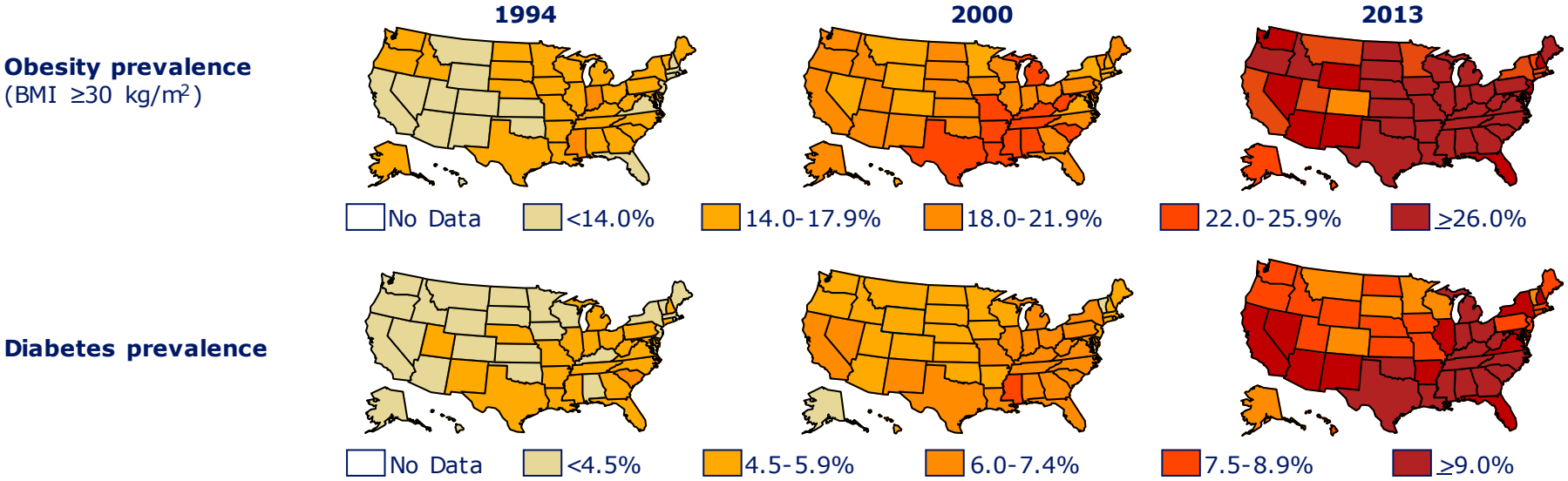
Diabetes pandemic is fuelled by growing rates of obesity

US CDC data on obesity and diabetes prevalence among adults



CDC: Centers for Disease Control and Prevention
Source: CDC's Division of Diabetes Translation. National Diabetes Surveillance System available at http://www.cdc.gov/diabetes

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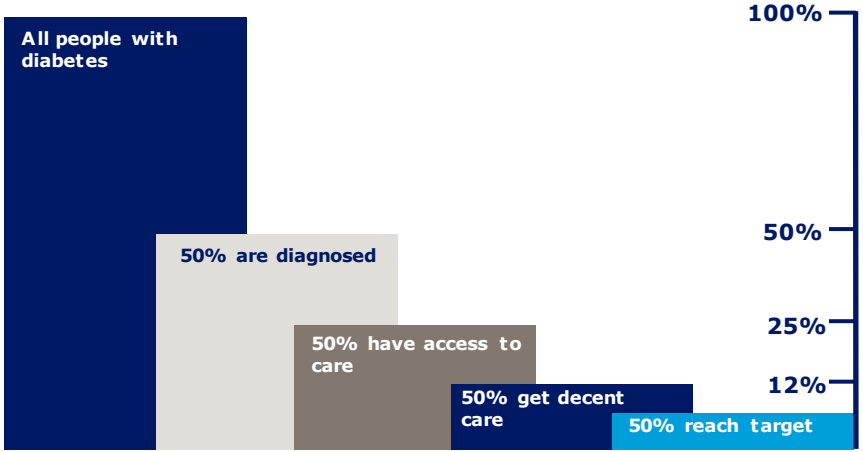
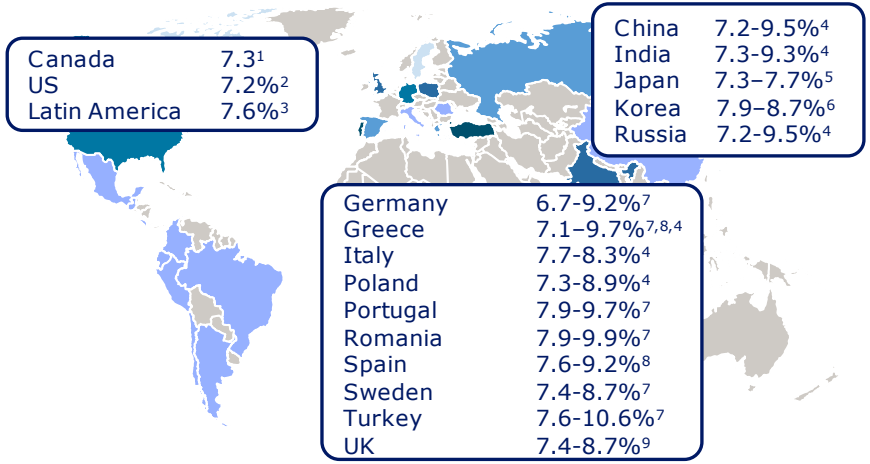
Poor diagnosis rates, lack of access to optimal treatment and poor glycaemic control remain global problems

Diagnosis and optimal treatment remains a challenge – the rule of halves



The worldwide challenge of glycaemic control: Mean HbA_{1C} in type 2 diabetes



[1] Harris et al. Diabetes Res Clin Pract 2005;70:90–7; [2] Hoerger et.al. Diabetes Care 2008;31:81–6; [3] Lopez Stewart et al. Rev Panam Salud Publica 2007;22:12–20; [4] Valensi et al. Int J Clin Pract 2009;63(3):522-31; [5] Arai et al. J Diabetes Investig. 2012 Aug 20;3(4):396-401; [6] Ko et al. Diab Med 2007;24:55–62; [7] Oguz et al. Curr Med Res Opin 2013;29:911–20; [8] Liebl et al. Diab Ther 2012;3:e1–10; [9] Blak et al. Diab Med 2012;29:e13-20

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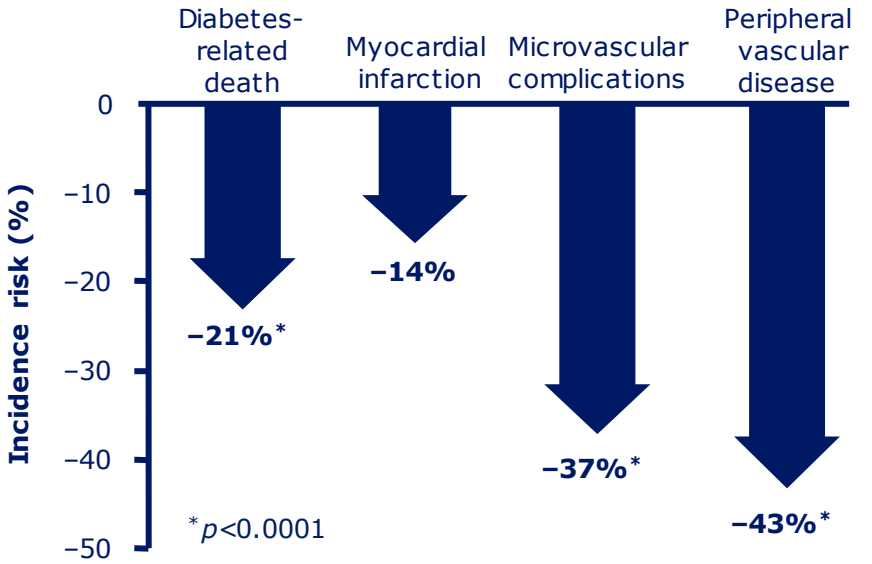
UKPDS: Tight glycaemic control reduces risk of micro- and macrovascular complications

Risk reduction by lowering HbA_{1c} by 1%-point



Source: UKPDS, Stratton et al. BMJ 2000; vol. 321:405–12

UKPDS 10 year follow-up: Legacy effect of tight glycaemic control

Relative risk reduction of intensive vs. conventional treatment (%)

SU/Insulin treated patients	1997	2007
Microvascular disease	25	24
Diabetes-related death	10	17
Myocardial infarction	16	15
All-cause mortality	6	13

Statistically significant improvement

Source: NEJM, vol. 359, Oct 2008

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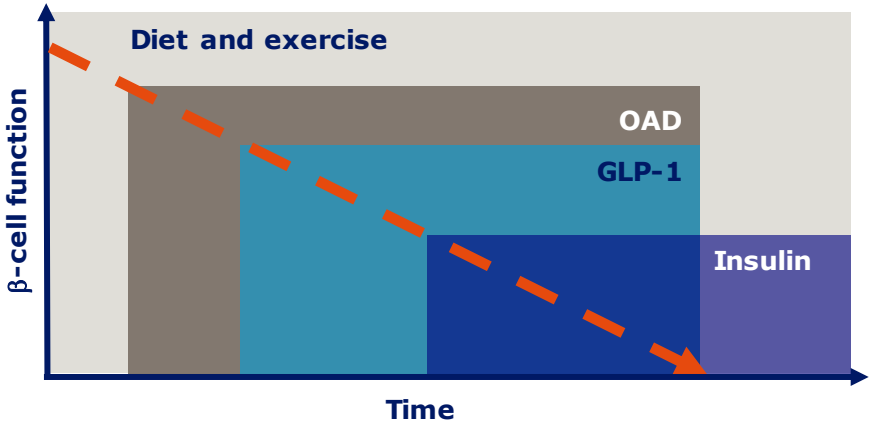
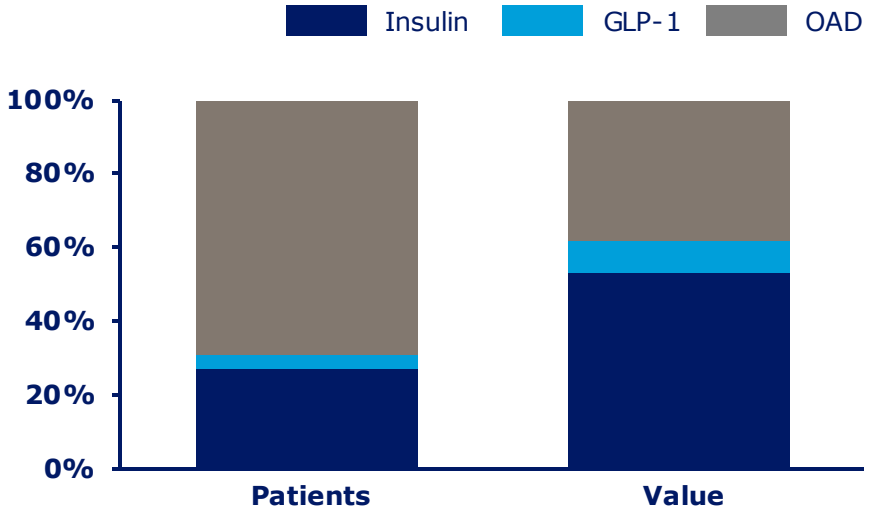
Insulin is the ultimate care for people with diabetes

Progression of type 2 diabetes and treatment intensification



Distribution of patients and value across treatment classes



Note: Patient distribution across treatment classes is indicative and based on data for US, UK, Germany and France. Value figures based on IMS MAT May 2016
Source: IMS PharMetrix claims data, IMS disease analyser, IMS Midas

OAD: Oral Anti-diabetic

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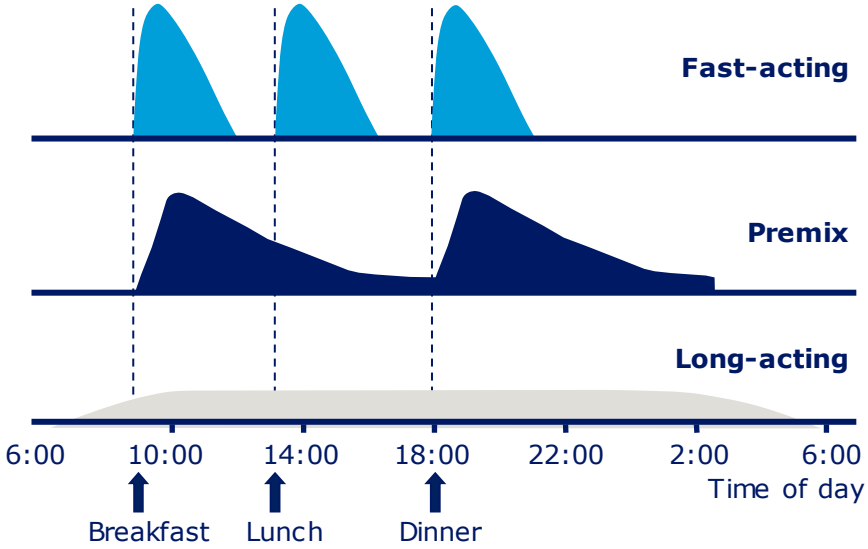
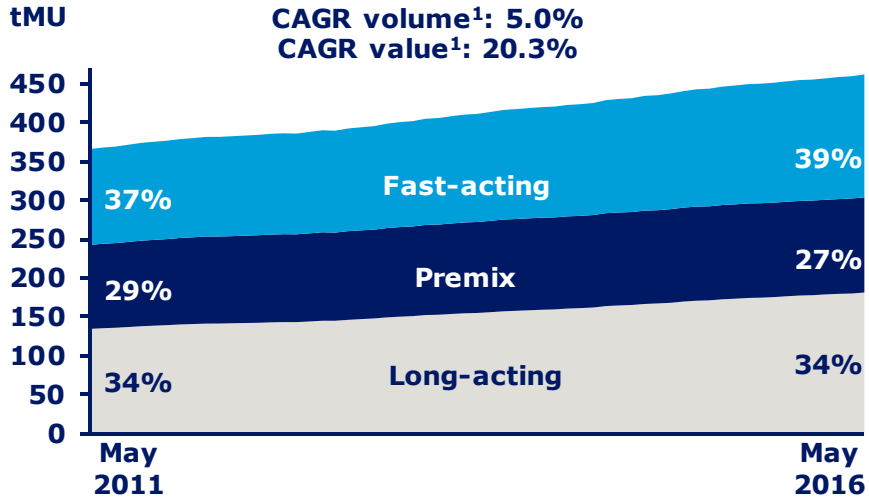
The insulin market is comprised of three segments

Insulin action profiles



Global insulin volume market by segment



[1] CAGR for 5-year period. Value in DKK
Note: US trend data reflect changes to IMS data collection coverage and methodology as of January 2012
Source: IMS Monthly MAT volume and value May (DKK) figures

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Medications used for the treatment of type 2 diabetes

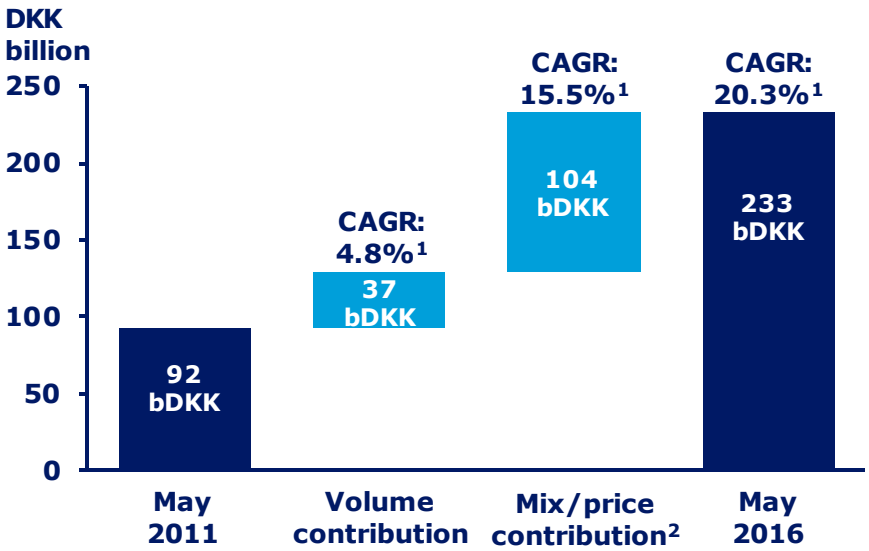
Commonly prescribed products for the treatment of type 2 diabetes

Class	HbA_{1C} change	Hypo-glycaemia	Weight change	CVD risk factors	Dosing (pr. day)	Contraindication/ undesired effects
Metformin	1.5	No	Neutral	Minimal	2 OADs	Kidney, liver
Sulfonylurea	1.5	Yes	Gain	None	1 OAD	Essentially none
TZDs	0.5 - 1.4	No	Gain	Variable	1 OAD	CHF, liver
DPP-IV inhibitors	0.6 - 0.8	No	Neutral	TBD	1-2 OAD	None
SGLT-2 inhibitors	0.5 - 0.9	No	Loss	TBD	1 OAD	Genital infections, urinary tract infections
GLP-1	1.0 - 2.0	No	Loss	TBD	Varies	GI side effects, MTC
Long-acting insulin	1.5 - 2.5	Yes	Gain	TG and HDL	1 injection	Hypoglycaemia
Fast-acting insulin	1.5 - 2.5	Yes	Gain	TG and HDL	1-4 injections	Hypoglycaemia

Note: TG and HDL: Beneficial effect on triglycerides and HDL cholesterol; CHF: Congestive heart failure; GI: Gastro intestinal; MTC: Medullary thyroid cancer; TZD: thiazolidinediones; OAD: Oral anti-diabetic; TBD: to be defined.
Sources: Adapted from: Nathan DM, et al. Diabetes Care. 2006; 29:1963-1972; Nathan DM, et al. Diabetes Care. 2007;30:753-759; Nathan DM, et al. Diabetes Care. 2008;31:173-175. ADA. Diabetes Care. 2008;31:S12-S54. WelChol PI. 1/2008.

Sustained double-digit growth in insulin market

Global insulin market growth



[1] CAGR for 5-year period
[2] IMS market value figures reflect list prices and do not account for rebates
Source: IMS Monthly MAT May, 2016 value figures

The fundamental growth drivers of the insulin market

Volume

- Rising prevalence of diabetes
  - Growing overweight and obesity prevalence
  - Ageing of populations
- Rising diagnosis rates and treatment rates
- Intensification of insulin regimens

Value

- Conversion to modern insulin and new-generation insulin
- Continued device penetration

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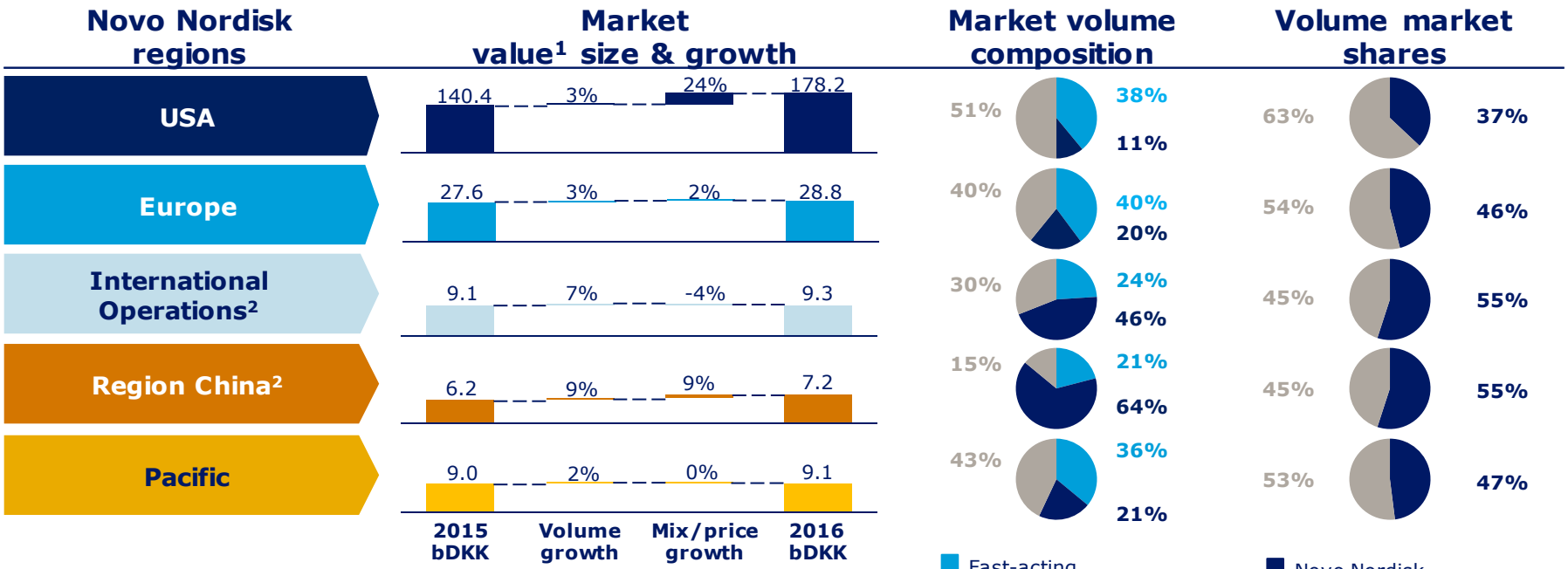
Solid insulin volume growth across regions



[1] IMS market value figures reflect list prices and do not account for rebates
[2] IMS only covers part of the channels in International Operations and Region China
Source: IMS May 2015 & 2016 Monthly MAT volume and value (DKK) figures

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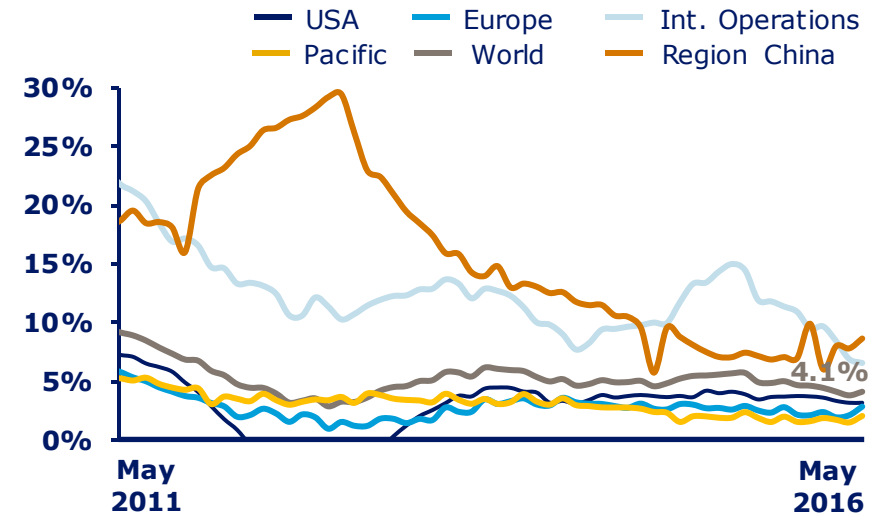
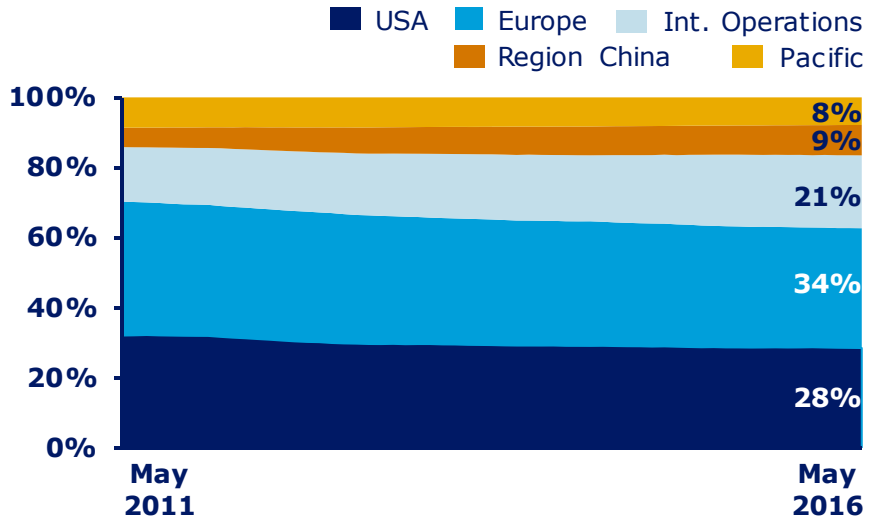
Stable global insulin volume growth

Regional insulin volume growth



Note: Data is sensitive to changes in IMS data collection and reporting methodology
Source: IMS Monthly MAT May, 2016 volume figures

Regional insulin volume market split



Note: Data is sensitive to changes in IMS data collection and reporting methodology
Source: IMS Monthly MAT May, 2016 volume figures

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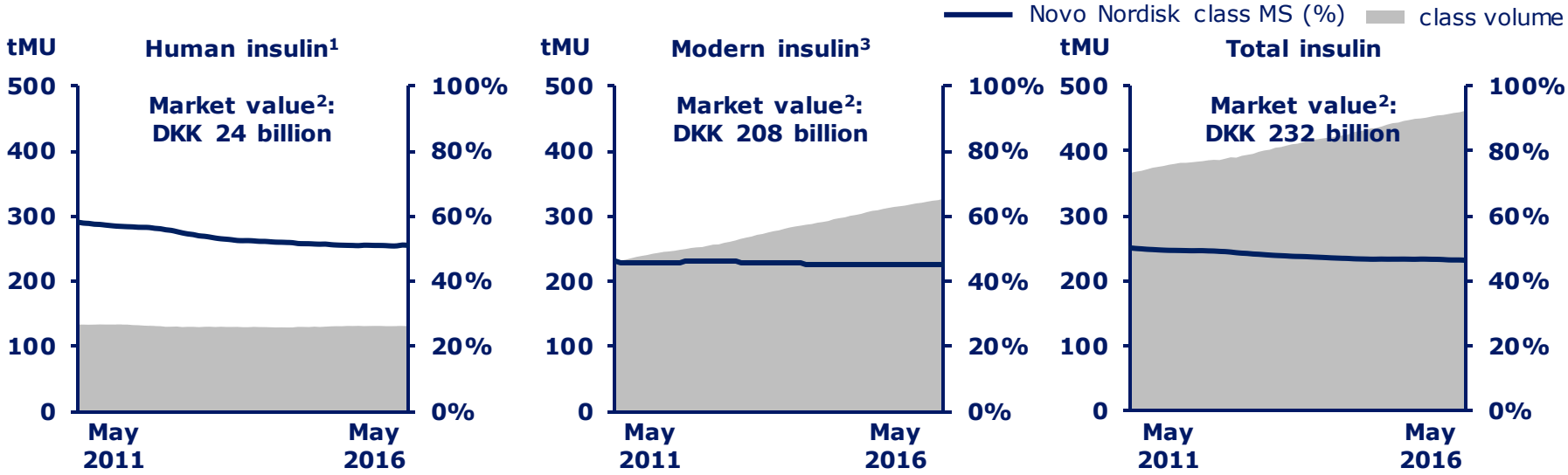
Maintaining global insulin leadership by sustaining modern insulin market share

Novo Nordisk global volume market share across insulin classes



[1] Includes animal insulin. [2] Annual value of total insulin class. [3] Includes new generation insulin
Note: Data is sensitive to changes in IMS data collection and reporting methodology
Source: IMS, Monthly MAT May, 2016 value and volume figures

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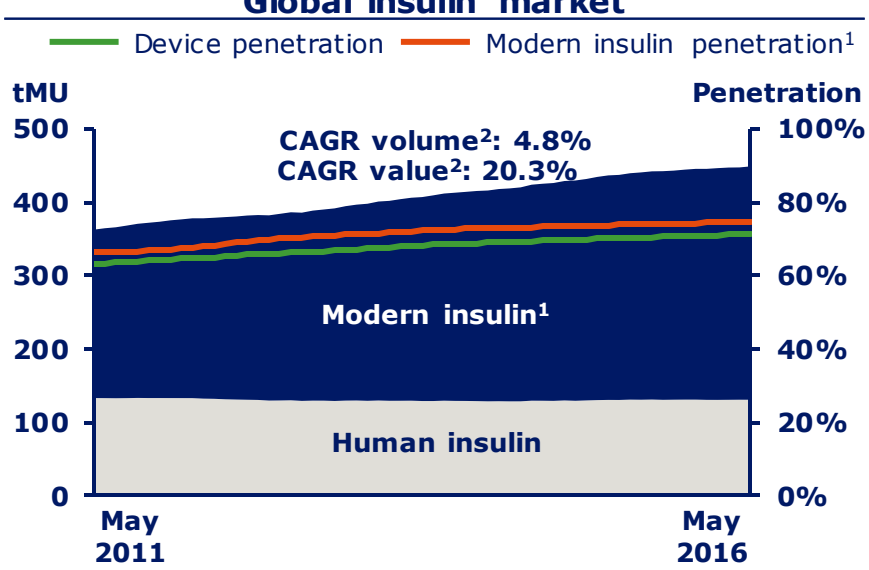
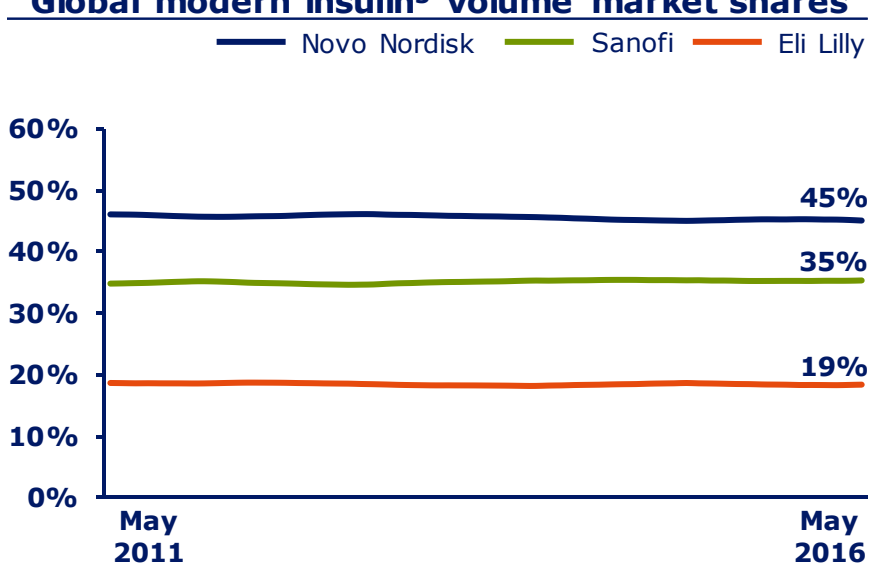
Strong underlying insulin market growth and sustained global volume market share

Global insulin market



[1] Includes new-generation insulin [2] CAGR for 5-year period
Note: Data is sensitive to changes in IMS data collection and reporting methodology
Source: IMS Monthly MAT May, 2016 volume and value (DKK) figures

Global modern insulin[3] volume market shares



[3] Includes new-generation insulin
Note: Data is sensitive to changes in IMS data collection and reporting methodology, does not add up to 100% due to other players
Source: IMS Monthly MAT May, 2016 volume figures

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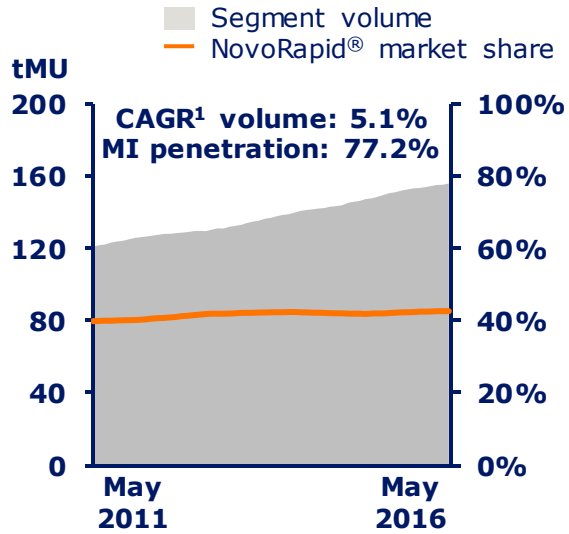
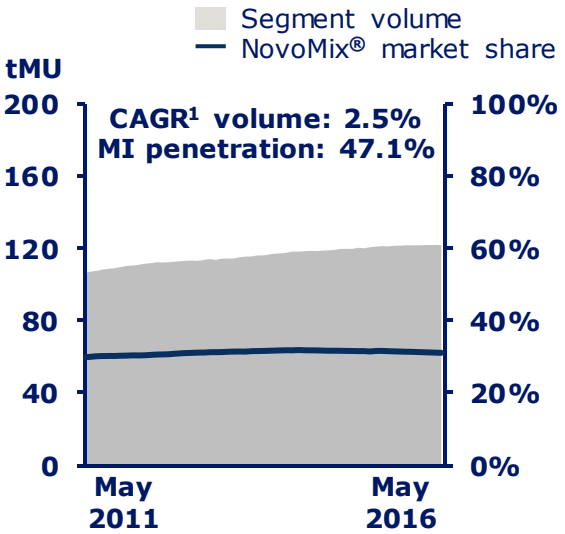
Novo Nordisk's modern insulin continue strong performance within their respective segments

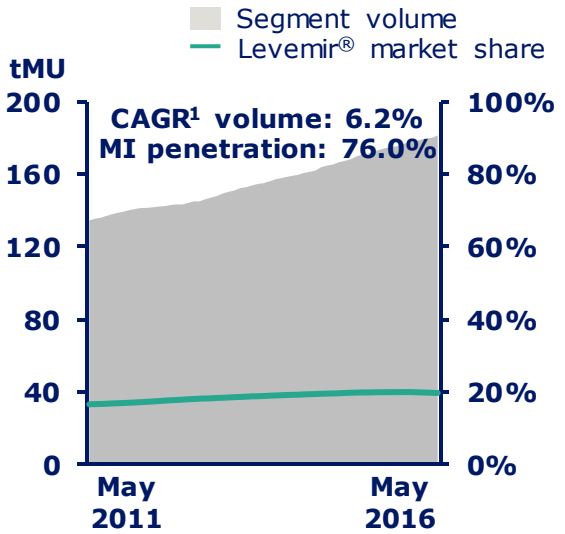
Fast-acting insulin



Premix insulin



Long-acting insulin



[1] CAGR for 5-year period

Note: Modern insulin (MI) penetration is of total segment, ie including animal and human insulin; NG: new-generation; Data is sensitive to changes in IMS data collection and reporting methodology

Source: IMS Monthly MAT May, 2016 volume figures

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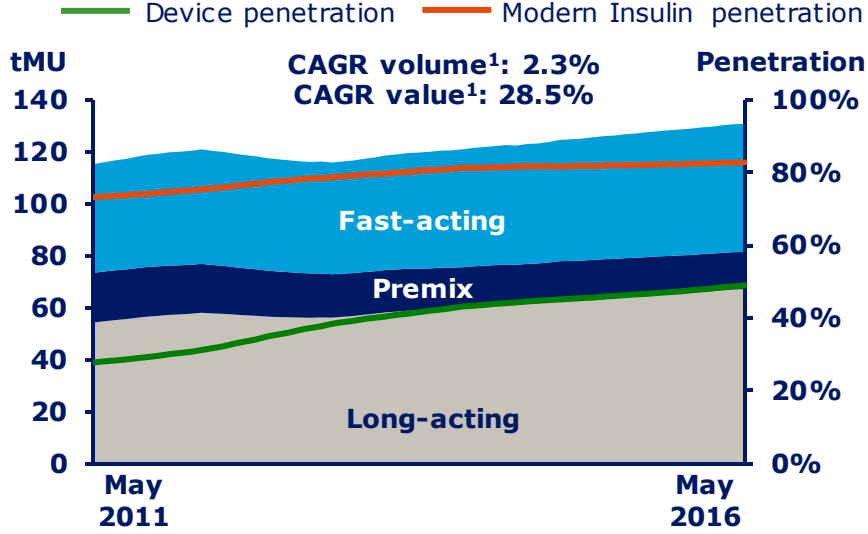
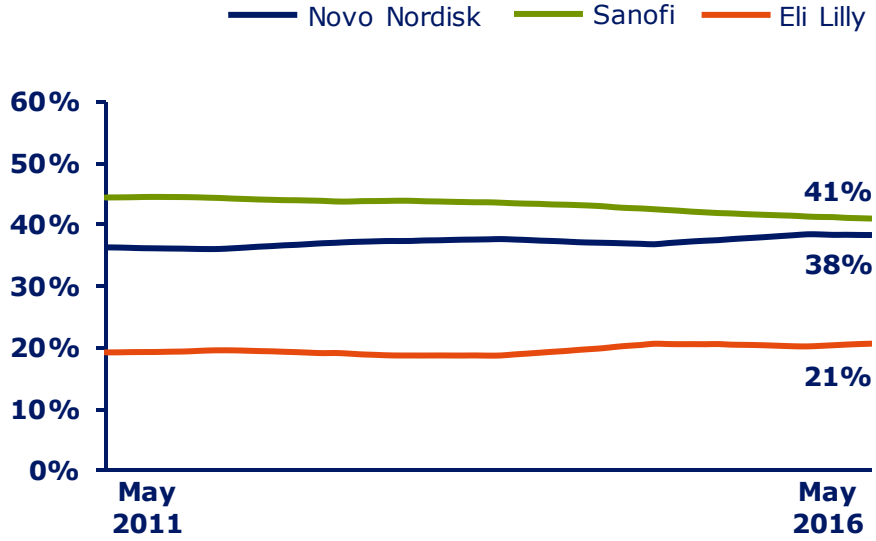
Improved US modern insulin market share

US insulin market by segments



[1] CAGR for 5-year period
Source: IMS Monthly MAT May, 2016 volume and value (DKK) figures

US modern insulin volume market shares



Source: IMS Monthly MAT May, 2016 volume figures

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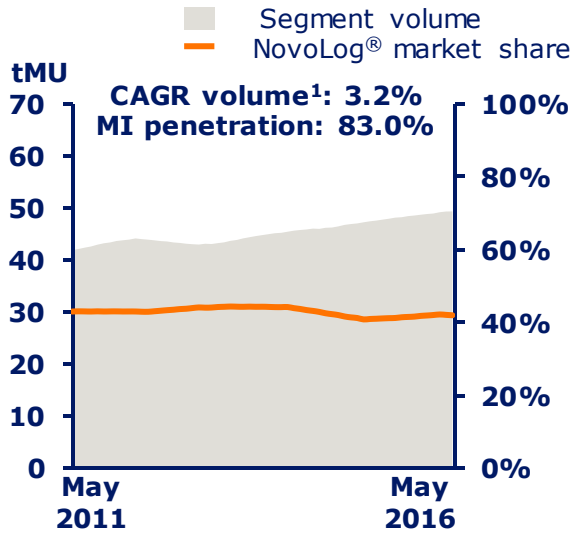
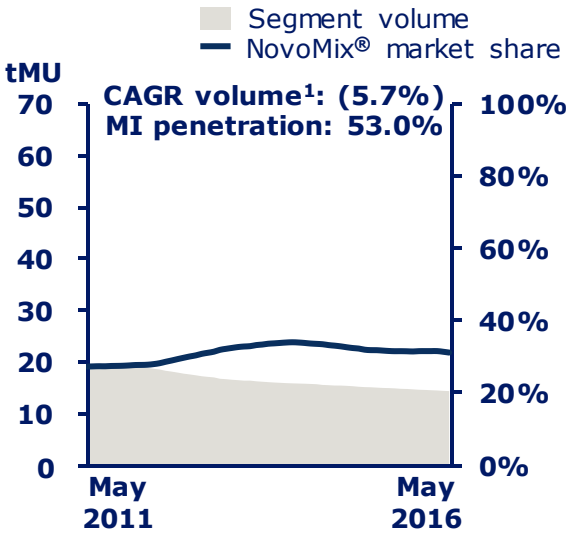
Novo Nordisk's modern insulins maintain market share in expanding US insulin market

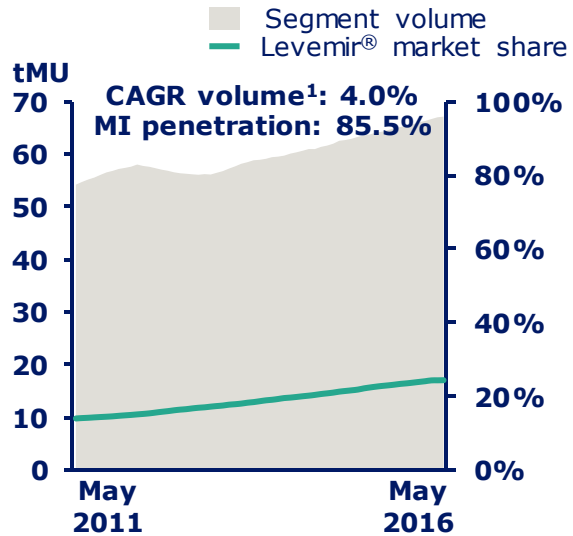
US fast-acting insulin



US premix insulin



US long-acting insulin



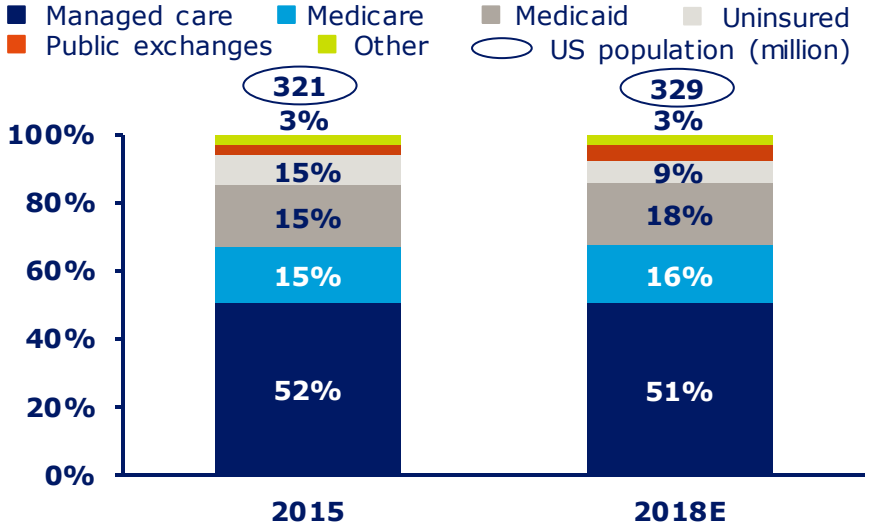
[1] CAGR for 5-year period

Note: US trend data reflect changes to IMS data collection coverage and methodology as of January 2012. Modern insulin (MI) penetration is of total segment, ie including human insulin

Source: IMS Monthly MAT May, 2016 volume figures

US health insurance is dominated by few large commercial payers with slow expansion of public insurance coverage

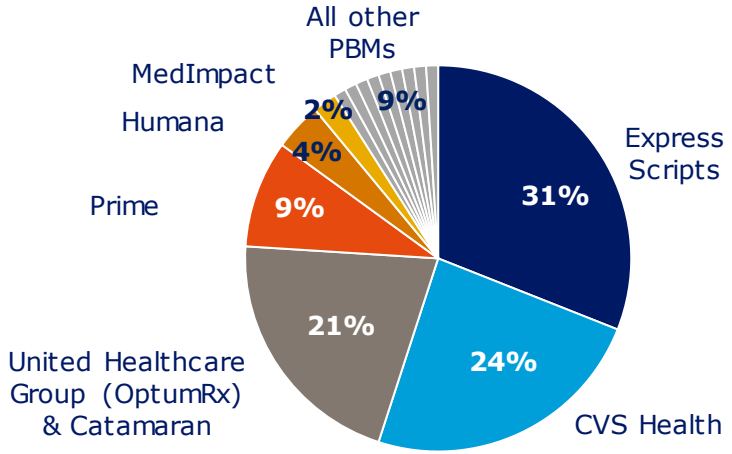
US Population by health insurance status expected to remain stable in coming years



Note: Medicaid expansion and Public Exchange estimates are based on implementation of existing Affordable Care Act. Medicaid Rx figures do not include dual eligibles covered in Part D or CHIP. Exchanges include Public Exchanges only; Private Exchanges are part of Managed Care; Centers for Medicare and Medicaid Services Office of the Actuary, Congressional Budget Office (CBO), National Association of State Budget Officers (NASBO), US Census and HSG estimates

Source: Adapted from Health Strategies Group 2015 report

In 2015 PBMs covered 245 million lives and the market has consolidated[1]



[1] 2015 chart reflects current year contractual status as of November 2015; estimates based on press releases and public information. PBM: Pharmacy Benefit Manager

Note: Cover sall main channels (Managed Care, Medicare Part D and Medicaid); market share based on claim adjudication coverage, i.e. not on formulary/rebate decision power

Source: Health Strategies Group

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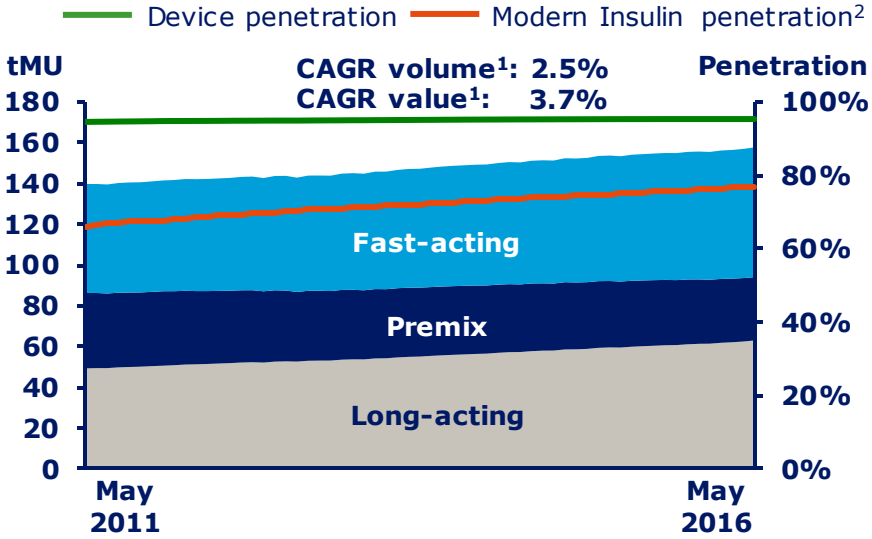
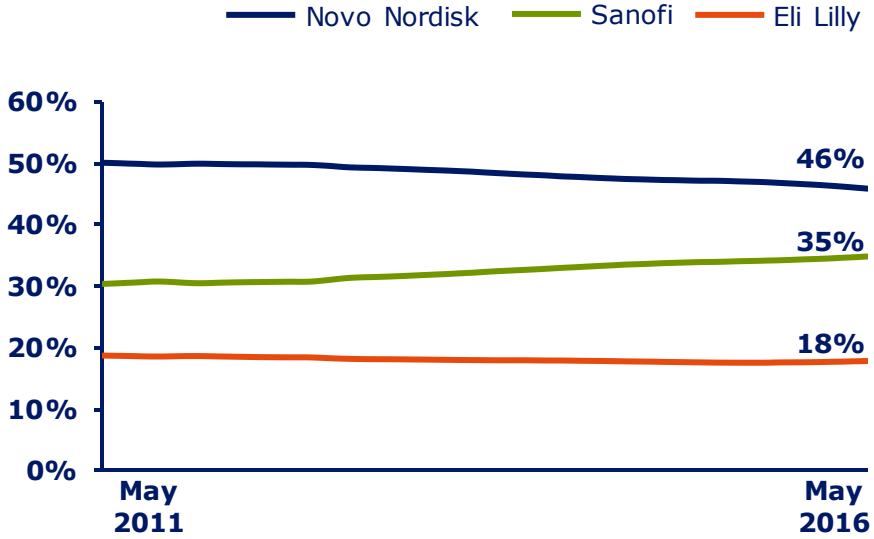
Sustained leadership position on the European modern insulin market

European insulin market by segments



[1] CAGR for 5-year period
[2] Includes new-generation insulin
Source: IMS Monthly MAT May, 2016 volume and value (DKK) figures

European modern insulin[3] volume market shares



[3] Includes new-generation insulin
Source: IMS Monthly MAT May, 2016 volume figures, numbers do not add up to 100% due to smaller insulin manufacturers

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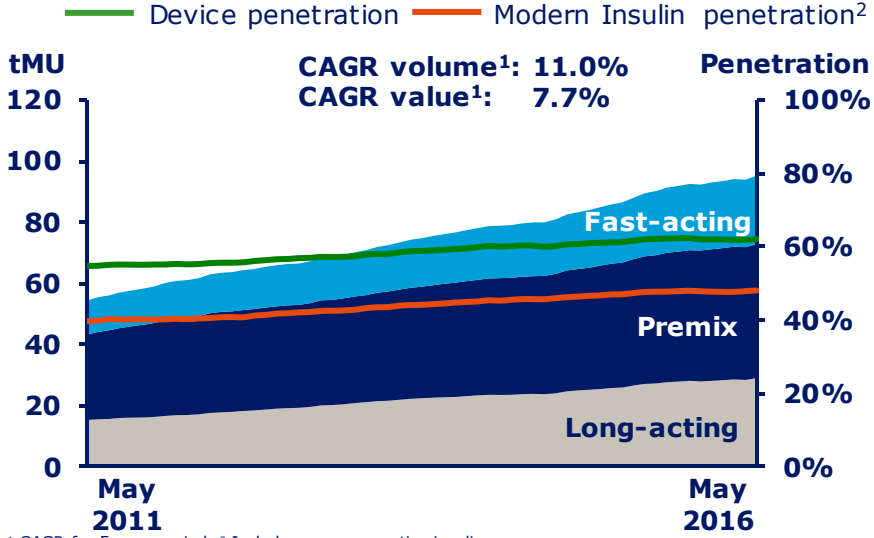
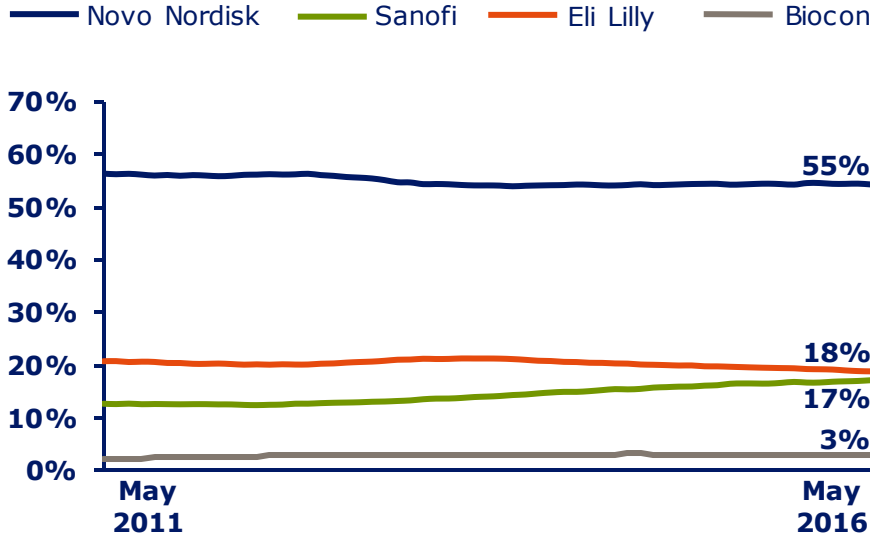
Stable leadership position in International Operations

International Operations insulin market by segments



1 CAGR for 5-year period. 2 Includes new generation insulin.
Note: IMS only covers the following 13 markets in IO (retail data): Algeria, Argentina, Brazil, Colombia, Egypt, India, Mexico, NZ, Russia, Saudi Arabia, South Africa & Turkey
Source: IMS Monthly MAT May, 2016 volume and value (DKK) figures

International Operations insulin volume market shares



Note: Only top-4 shown
Source: IMS Monthly MAT May, 2016 volume figures, numbers do not add up to 100% due to smaller insulin manufacturers

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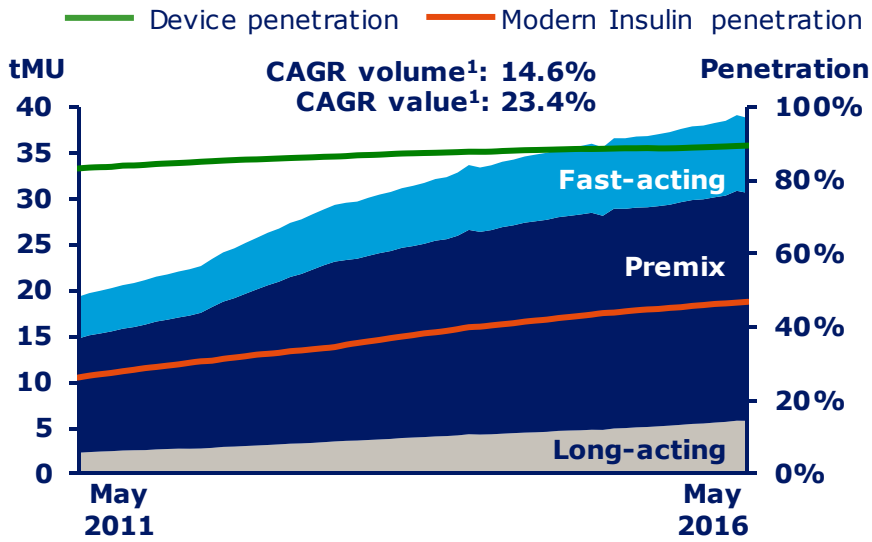
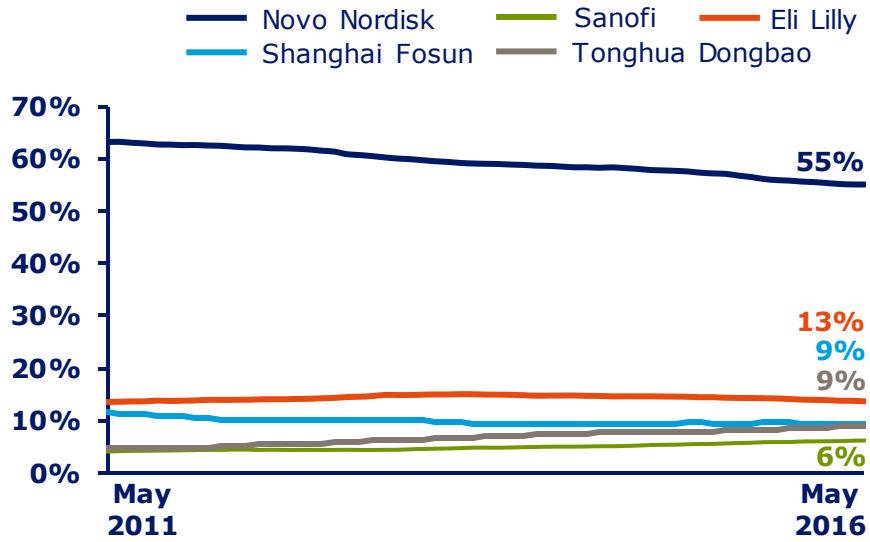
Sustained leadership position in the Chinese insulin market

Chinese insulin market by segments



¹ CAGR for 5-year period
Note: IMS covers around 50% of the total Chinese market (hospital data)
Source: IMS Monthly MAT May, 2016 volume and value (DKK) figures

Chinese insulin volume market shares



Note: Only top-5 shown
Source: IMS Monthly MAT May, 2016 volume figures, numbers do not add up to 100% due to smaller insulin manufacturers not included

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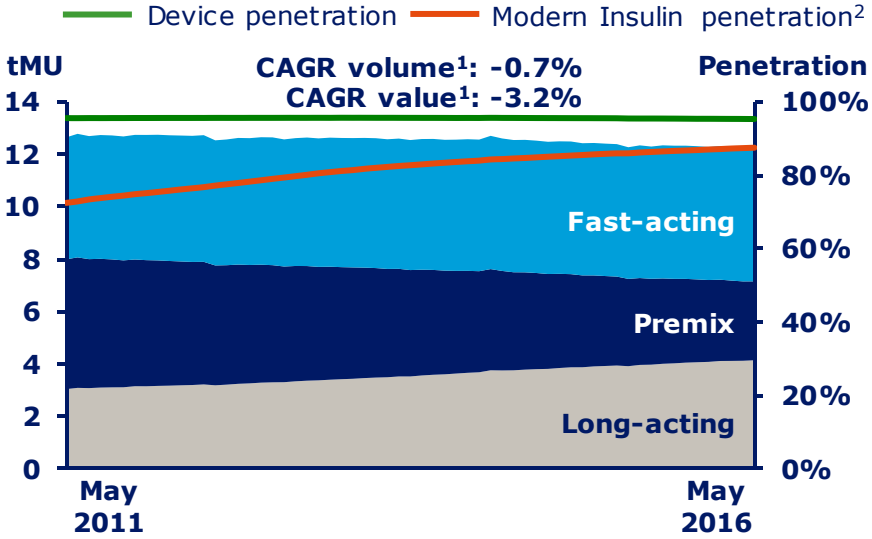
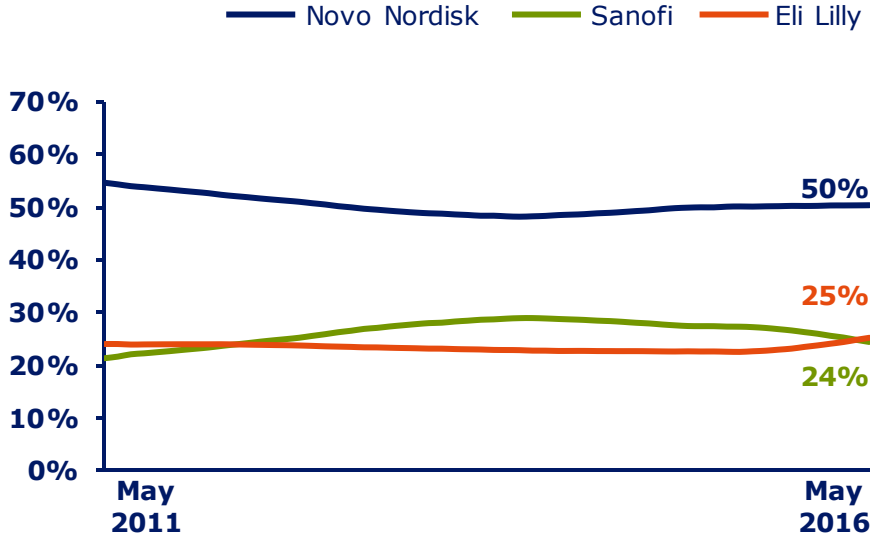
Expanding market leadership position in Japan

Japanese insulin market by segments



[1] CAGR for 5-year period
[2] Includes new-generation insulin
Source: IMS Monthly MAT May, 2016 volume and value (DKK) figures

Japanese modern insulin volume market shares



Source: IMS Monthly MAT May, 2016 volume figures

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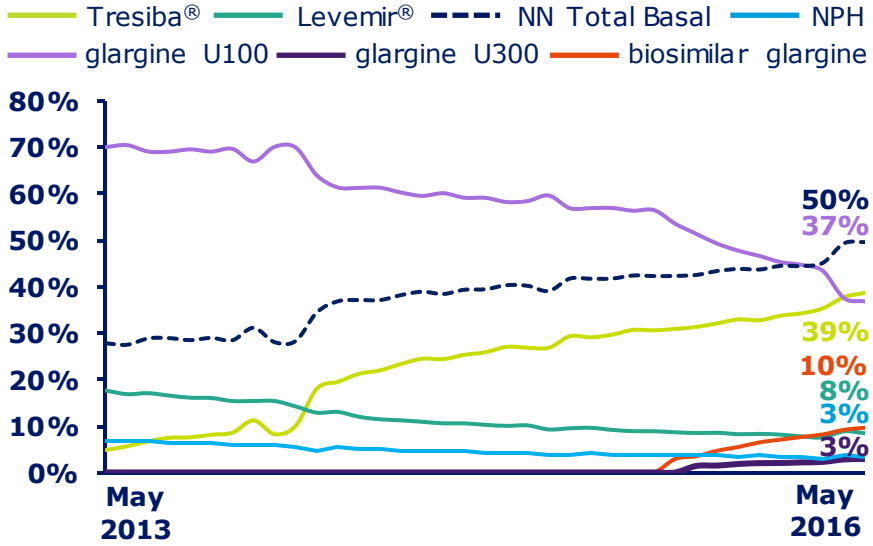
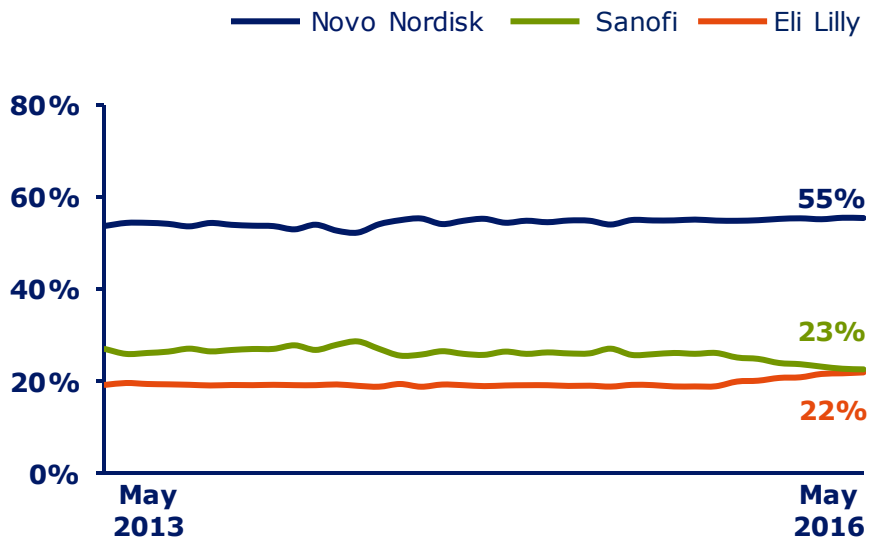
Promising Tresiba® performance strengthens total insulin market share in Japan

Japanese basal value market shares



Source: IMS Monthly May, 2016 value figures

Japanese total insulin value market shares



Source: IMS Monthly May, 2016 value figures

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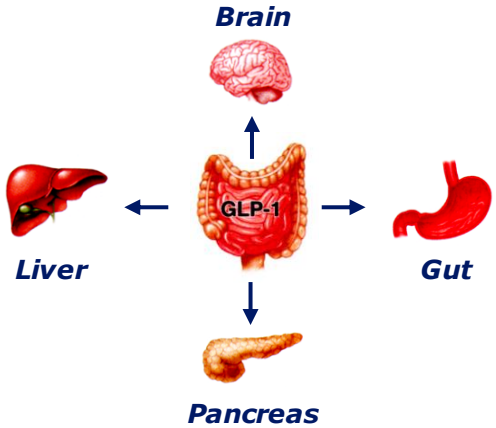
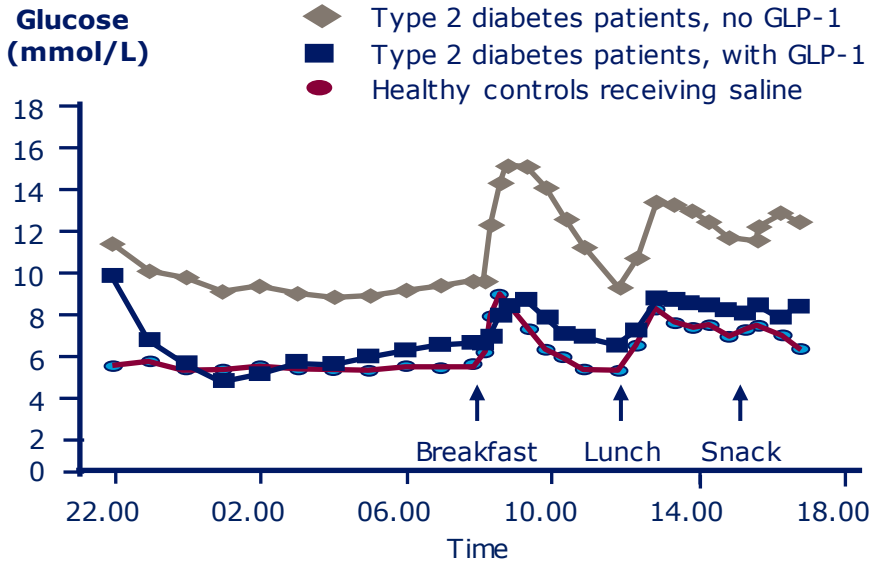
GLP-1 effect dependent on level of blood glucose – which reduces risk of hypoglycaemia

GLP-1 mechanism of action when blood sugar levels increase

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



GLP-1 lowers blood glucose in patients with type 2 diabetes



Source: Rachman et al. Diabetologia 1997;40:205–11

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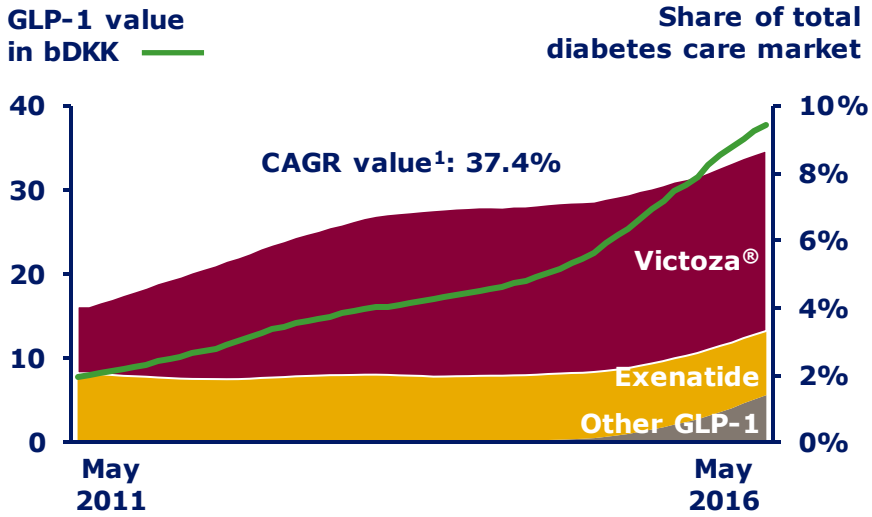
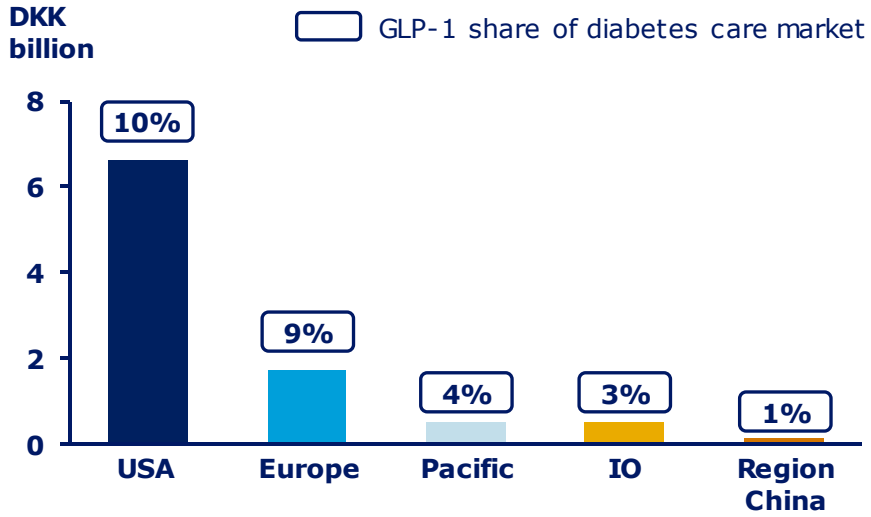
The 9% GLP-1 share of the global diabetes care market is increasing, opportunities for further penetration remain

Global GLP-1 market



Victoza® sales and GLP-1 value market share of total diabetes care market



¹ CAGR for 5-year period
Source: IMS Monthly MAT May, 2016 value figures (DKK)
Global GLP-1 market

Source: Novo Nordisk reported sales for first half of 2016 and IMS May, 2016 data

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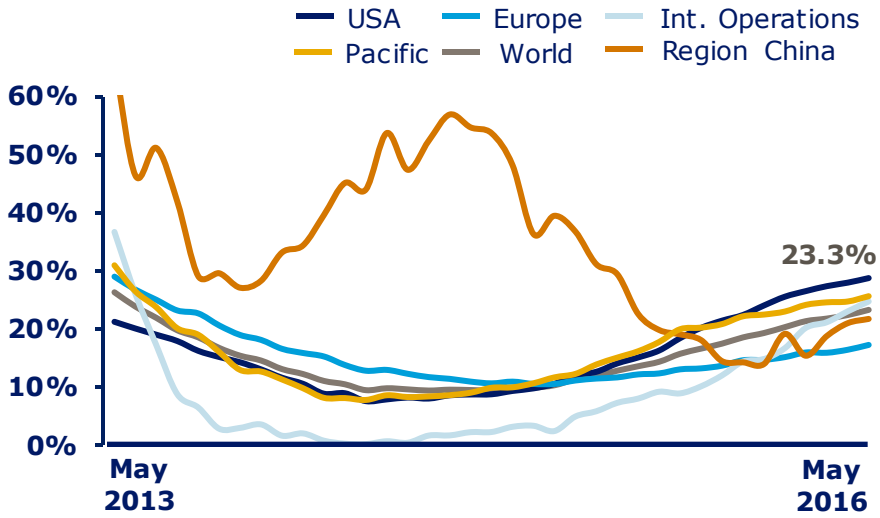
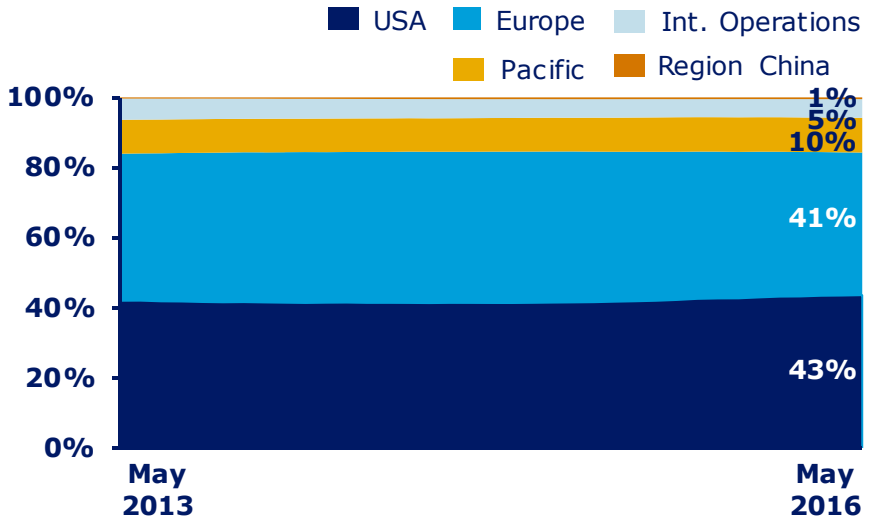
Increasing global GLP-1 volume growth across all regions

Regional GLP-1 volume growth



Note: Data is sensitive to changes in IMS data collection and reporting methodology
Source: IMS Monthly MAT May, 2016 volume figures

Regional GLP-1 volume market split



Note: Data is sensitive to changes in IMS data collection and reporting methodology
Source: IMS Monthly MAT May, 2016 volume figures

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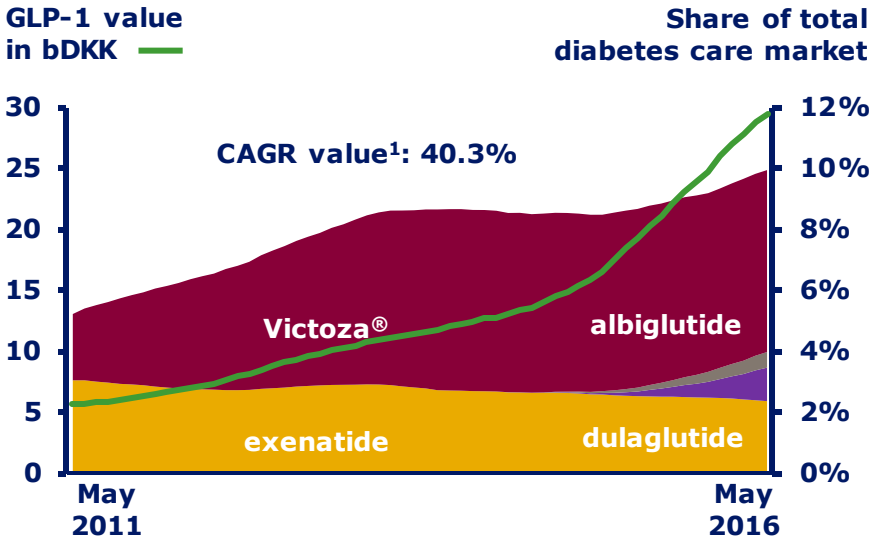
The GLP-1 segment accounts for 10% of the total diabetes care market in the US

US GLP-1 market



[1] CAGR for 5-year period
Source: IMS Monthly MAT May, 2016 value figures (DKK)

Key observations for Victoza® in the US market

- Victoza® volume market share within the GLP-1 segment is 52%[1]
- Around 70% of commercial and around 80% of Medicare Part D lives are covered without restrictions[2]
- Around 65% of new patients are new to treatment or from OAD-only regimens[3]
- Close to 70% of prescriptions are for the 3-pen pack1

[1] IMS monthly NPA data, June 2016
[2] Fingertip Formulary, July 2016
[3] IMS LRx Weekly, WE 06/24/2016

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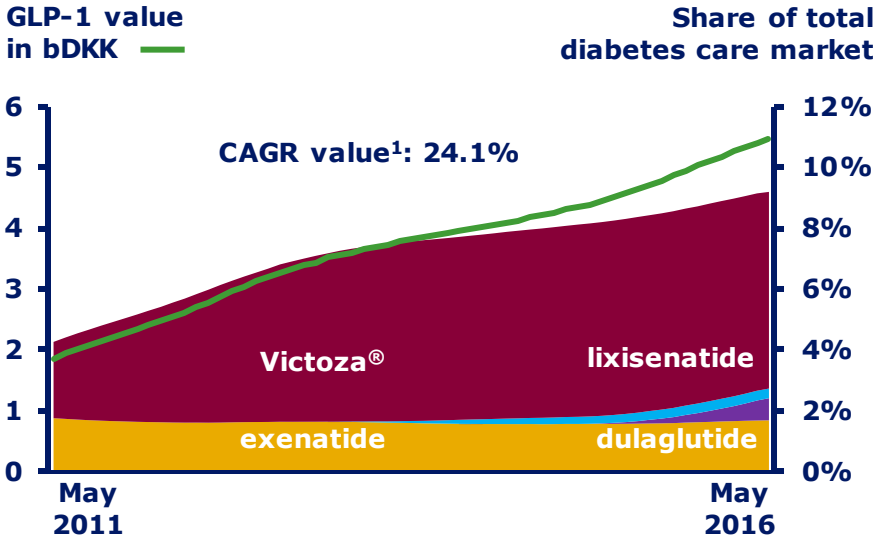
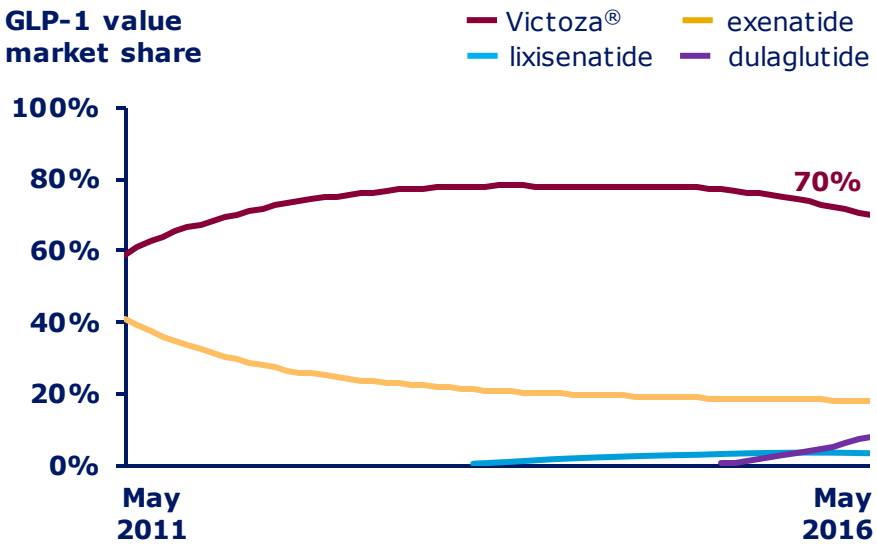
The GLP-1 segment accounts for 9% of the total diabetes care market in Europe

European GLP-1 market



[1] CAGR for 5-year period
Source: IMS Monthly MAT May, 2016 value figures (DKK)

Victoza® value market share in Europe



Source: IMS Monthly MAT May, 2016 value figures (DKK)

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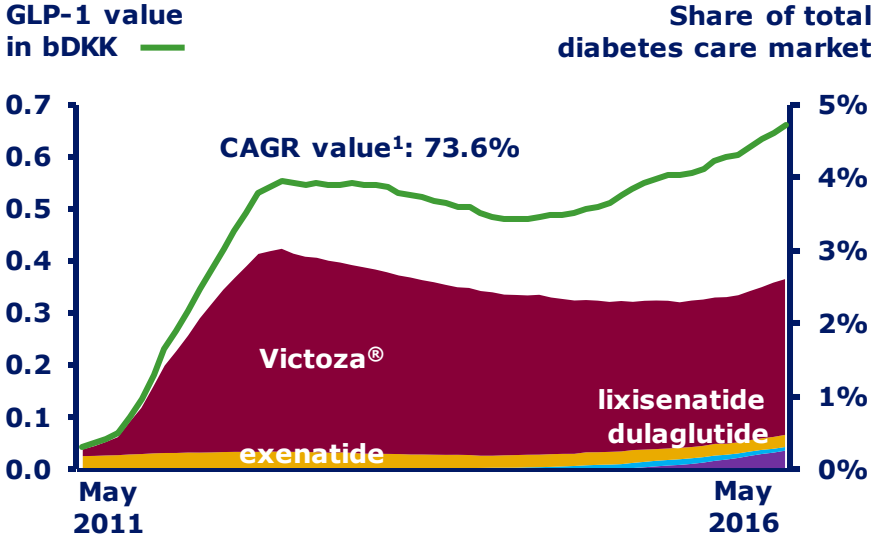
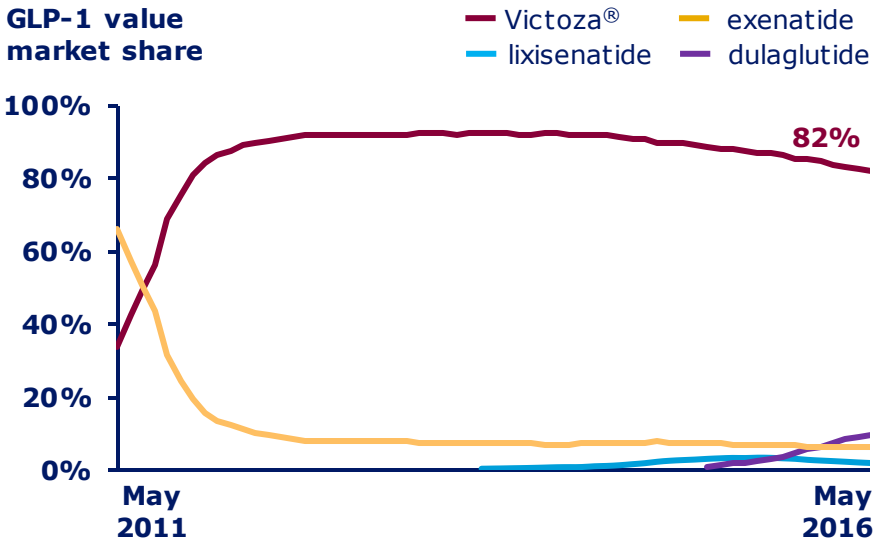
The GLP-1 segment accounts for around 3% of the total diabetes care market in International Operations

International Operations GLP-1 market



[1] CAGR for 5-year period
Source: IMS Monthly MAT May, 2016 value figures (DKK)

Victoza® value market share in International Operations



Source: IMS Monthly MAT May, 2016 value figures (DKK)

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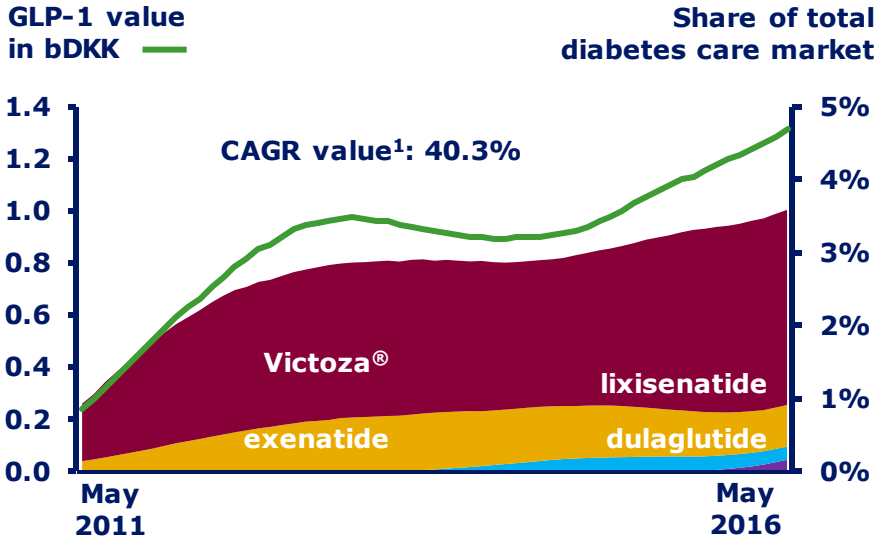
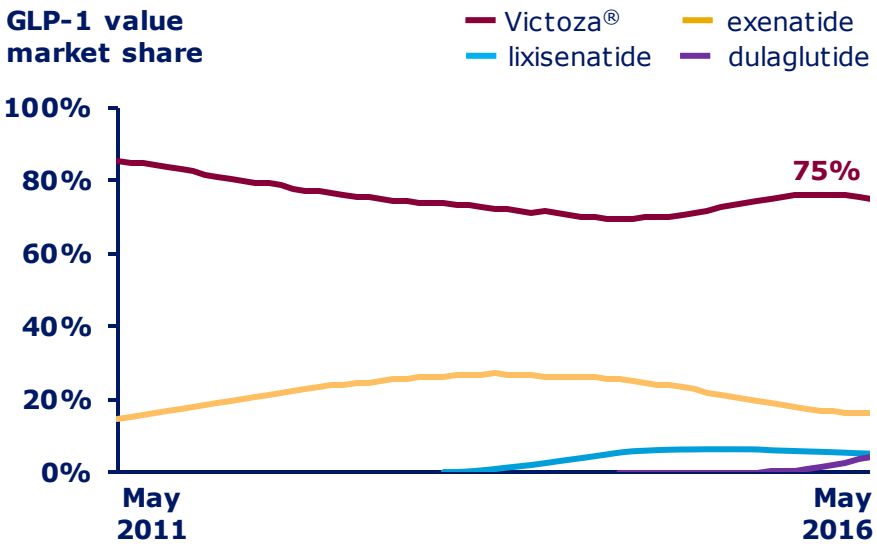
The GLP-1 segment accounts for around 4% of the total diabetes care market in Pacific

Pacific GLP-1 market



[1] CAGR for 5-year period
Source: IMS Monthly MAT May, 2016 value figures (DKK)

Victoza® value market share in Pacific



Source: IMS Monthly MAT May, 2016 value figures (DKK)

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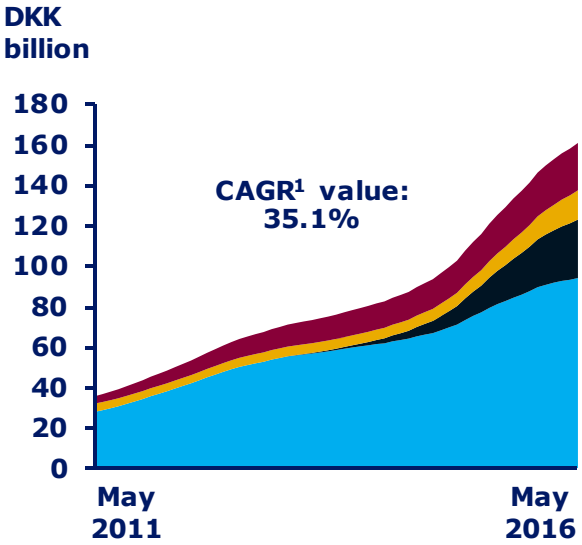
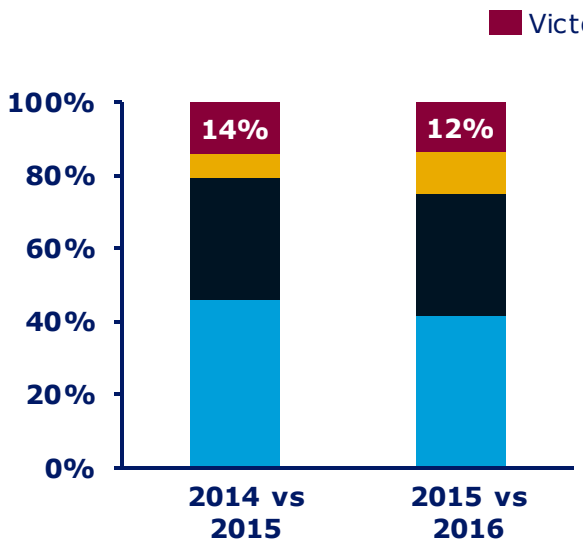
Victoza® maintain a strong position in the global DPP-IV, GLP-1 and SGLT-2 segment

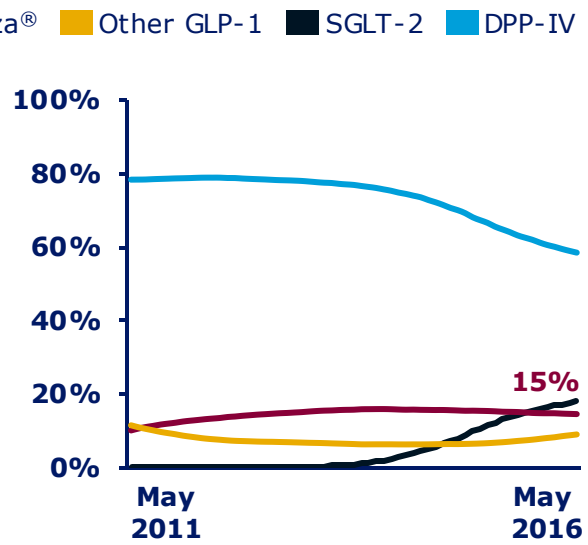
Segment value



Share of segment value growth



Segment value market shares



[1] CAGR for 5-year period

Note: Segment only includes DPP-IV, GLP-1 & SGLT-2. Other oral anti-diabetic agents and insulin excluded

Source: IMS MAT May 2016 value figures

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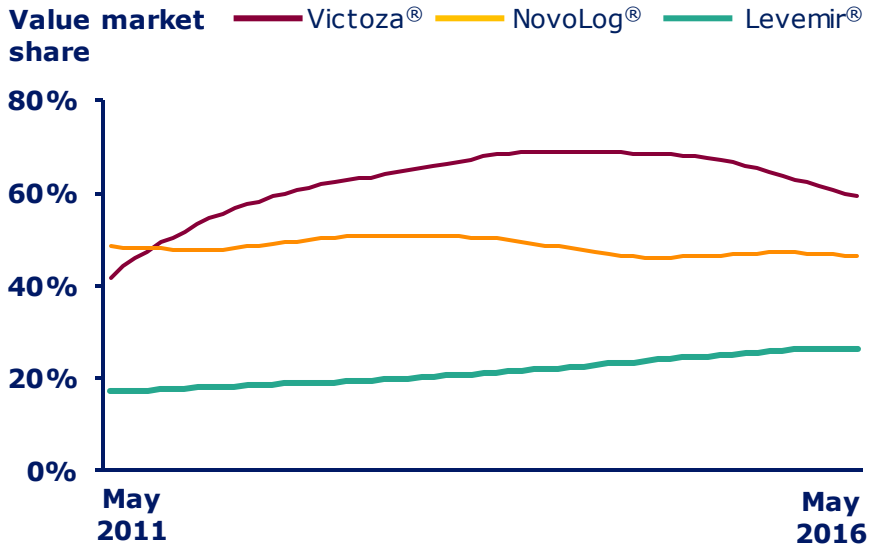
Key Novo Nordisk diabetes care products remain broadly available in the US

Value market shares of key Novo Nordisk products in the US



Source: IMS NSP May 2016; data displayed as MAT value share
Note: Market shares: NovoLog®: share of rapid acting insulin segment; Levemir®: share of basal insulin segment; Victoza®: share of GLP-1 segment

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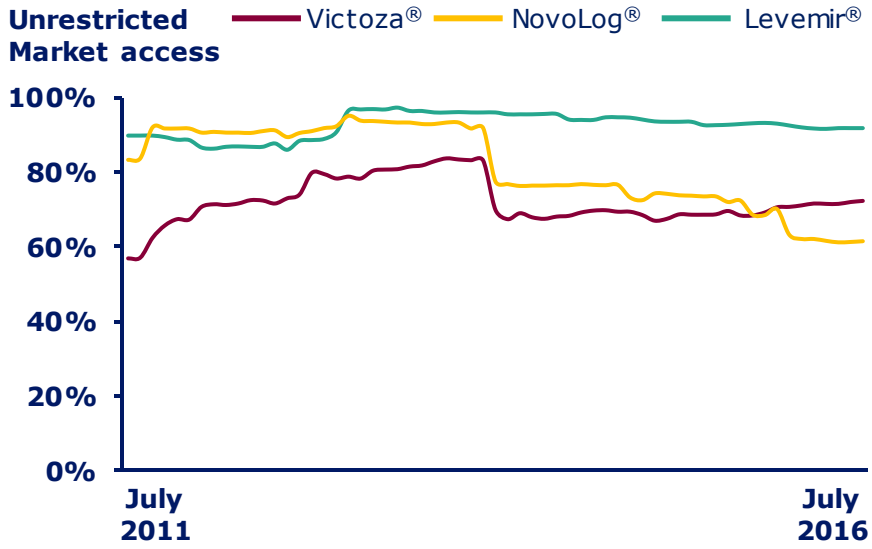
% unrestricted market access of key Novo Nordisk products in the US



Source: FingerTip Formulary, July 2016
Note: Unrestricted access excludes prior authorisation, step edits and other restrictions
Levemir® access based on FlexTouch® Pen; NovoLog® access based on FlexPen®

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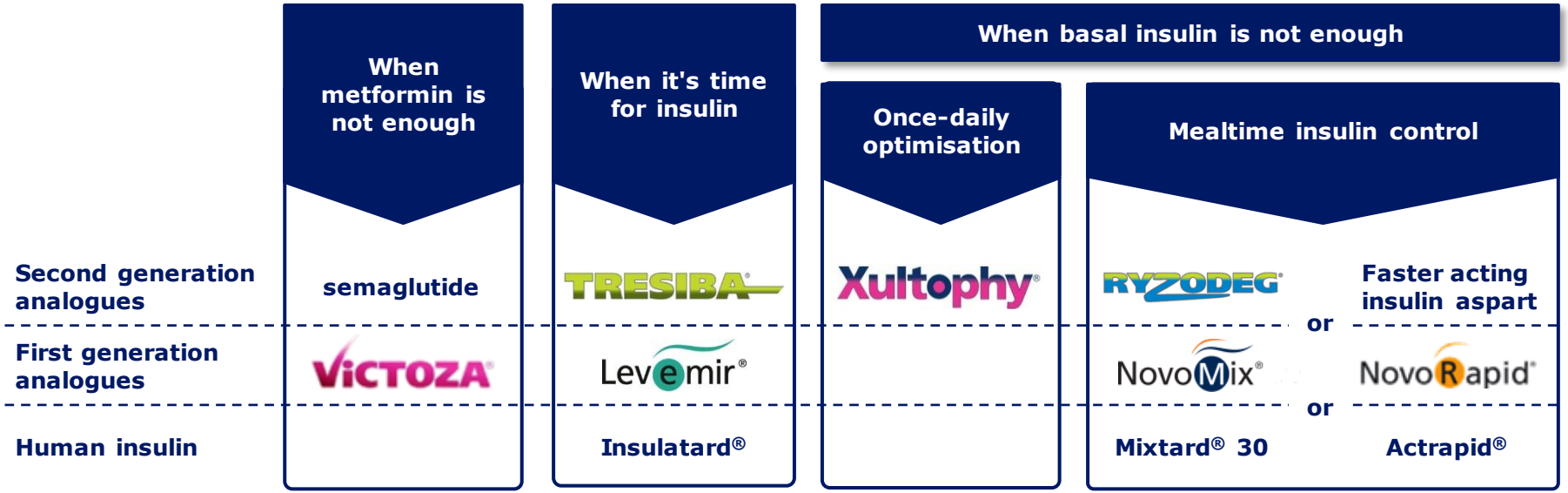
Novo Nordisk current and future product portfolio covers the type 2 diabetes treatment flow[1]

Overview of current and future products in Novo Nordisk's diabetes portfolio



[1] Pending clinical development programmes and regulatory processes for semaglutide and faster-acting insulin aspart

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R&D pipeline: Diabetes and obesity

Product/project	Type	Indication	Status (phase)				
			1	2	3	Filed	Appr.
Xultophy® (NN9068)[1]	Combination of insulin degludec and liraglutide	Type 2	■	■	■	■	■
Faster-acting insulin aspart (NN1218)	New formulation of insulin aspart	Type 1+2	■	■	■	■	
Semaglutide (NN9535)	Once-weekly GLP-1 analogue	Type 2	■	■	■		
OG217SC (NN9924)	Long-acting once-daily oral GLP-1 analogue	Type 2	■	■	■		
OI338GT (NN1953)	Long-acting oral basal insulin analogue	Type 2	■	■			
Semaglutide QD (NN9535)	Once-daily GLP-1 analogue	Type 2	■	■			
Anti-IL-21 and liraglutide (NN9828)	Immuno-metabolic combination of Anti-IL-21 and liraglutide	Type 1	■	■			
LAI287 (NN1436)	Long-acting once-weekly basal insulin analogue	Type 1+2	■				
Mealtime insulin (NN1406)	Liver-preferential mealtime insulin	Type 1+2	■				
PYY (NN9748)	Peptide YY analogue	Type 1+2	■				
Semaglutide QD (NN9536)	Once-daily GLP-1 analogue	Obesity	■	■			
G530L (NN9030)	Glucagon analogue	Obesity	■				
NN9838	Long-acting amylin analogue	Obesity	■				
PYY (NN9747)	Peptide YY analogue	Obesity	■				

[1] Approved in EU on 18 Sep 2014

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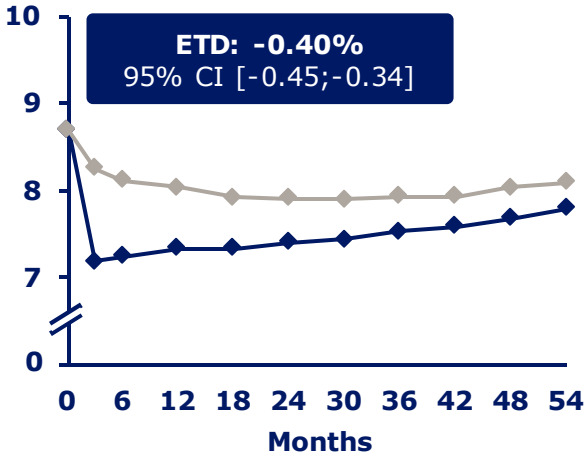
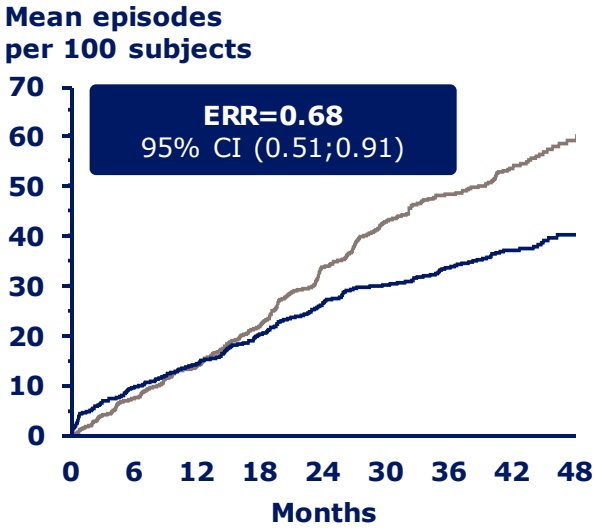
Limited HbA_{1c} difference, but lower severe hypoglycaemia rate and greater weight loss with Victoza® in LEADER trial

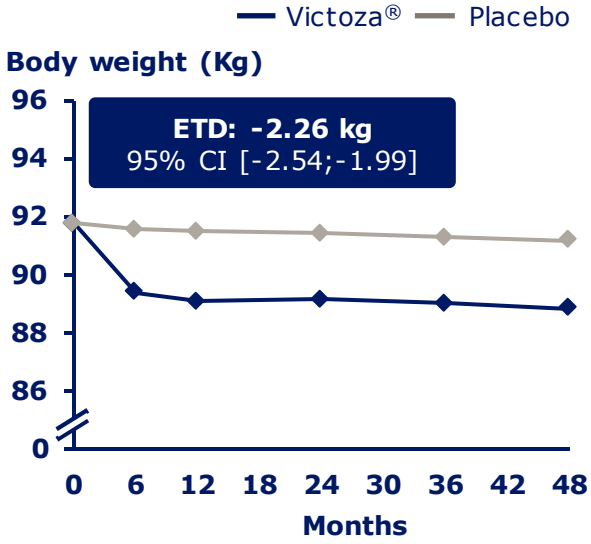
Limited difference in HbA_{1c} maintained throughout trial



Reduction in severe hypoglycaemia



Statistically significantly greater weight loss with Victoza®



ETD: estimated treatment difference, ie estimated mean change from baseline to month 36; ERR: estimated rate ratio

Source: Marso SP, Daniels GH, Brown-Frandsen K, *et al.* Liraglutide and cardiovascular outcomes in type 2 diabetes. *The New England journal of medicine*. 2016; In Press and Buse et al., Symposium 3-CT-SY24, ADA 2016

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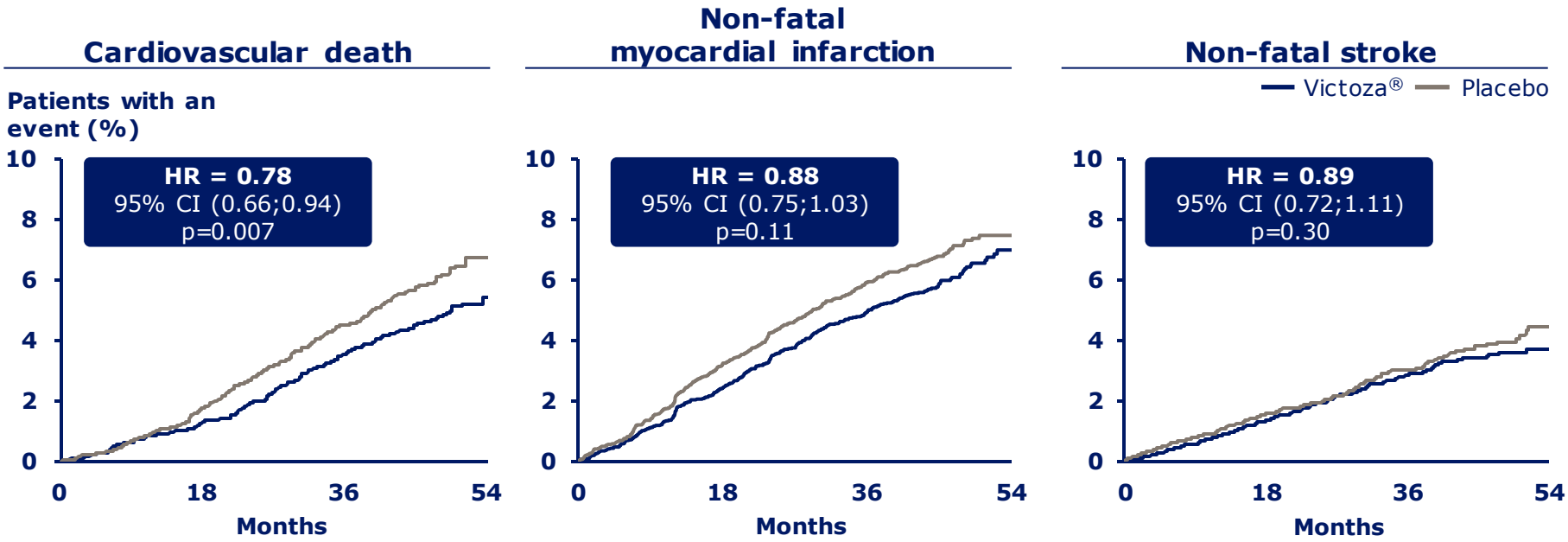
All components of 3-point MACE contributed to the reduction in cardiovascular risk in the LEADER trial



HR: hazard ratio; CI: confidence interval

Source: Marso SP, Daniels GH, Brown-Frandsen K, *et al.* Liraglutide and cardiovascular outcomes in type 2 diabetes. *The New England journal of medicine*. 2016; In Press

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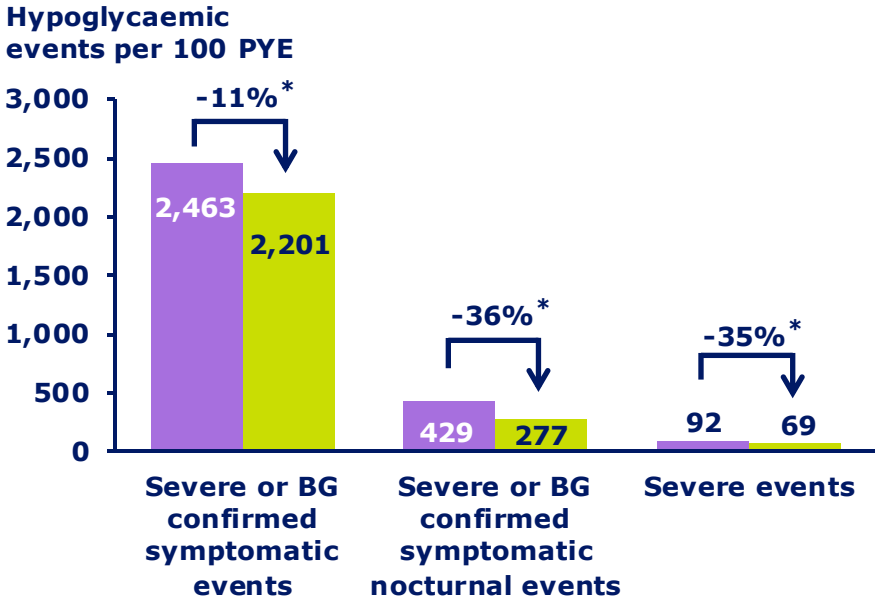
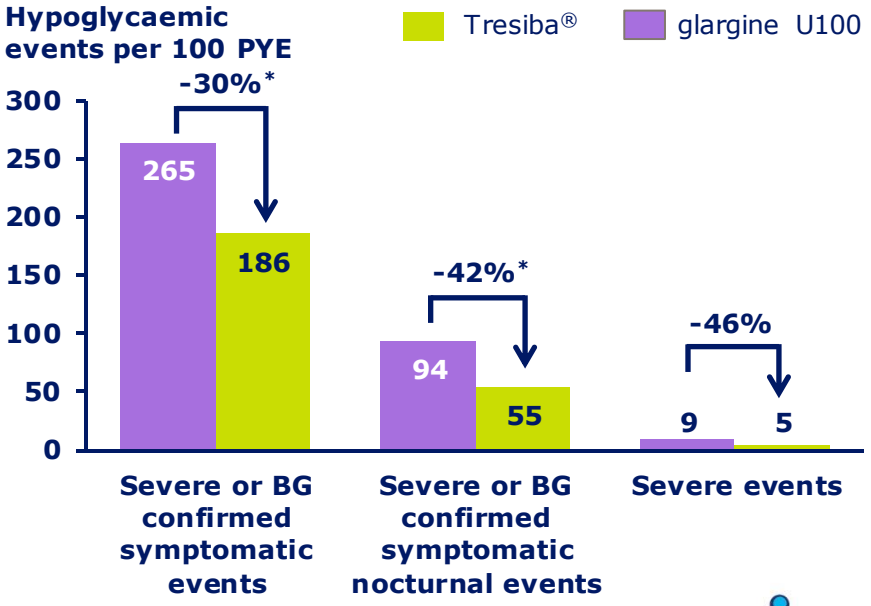
Tresiba® shows lower rate of hypoglycaemia than insulin glargine U100 in SWITCH trials – filing expected Q3 2016

SWITCH 1 – type 1 diabetes



SWITCH 2 – type 2 diabetes



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Note: The prevalence of hypoglycaemia is measured during the maintenance period; Blood glucose confirmed hypoglycaemia is defined as <56 mg/dL (<3.1 mmol/L); The confirmatory secondary endpoint of proportions of subjects experiencing severe hypoglycaemia during the maintenance period did not reach statistical significance in the SWITCH 2 trial. * Statistically significant; BG: Blood glucose; PYE: Patient years exposed

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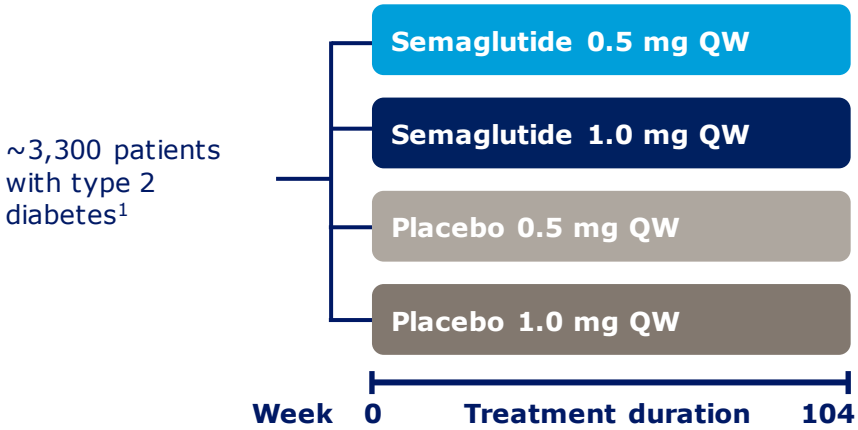
Semaglutide significantly reduces the risk of major adverse cardiovascular events in the SUSTAIN 6 trial

SUSTAIN 6 trial design



[1] Inclusion criteria: Age ≥ 50 years with clinical evidence of CV disease or ≥ 60 years with subclinical evidence of CV disease, HbA_{1c} ≥ 7.0 %, standard-of-care treatment 0-2 OAD, basal or pre-mix insulin with/without 0-2 OAD
OAD: Oral anti-diabetic

Headline results

- **Non-inferiority demonstrated** for the primary endpoint of major cardiovascular events (MACE) with semaglutide compared with placebo, with a **statistically significant** reduction of MACE
- The trial accrued around 250 MACE
- The primary endpoint of the study was defined as the composite outcome of the first occurrence of cardiovascular death, non-fatal myocardial infarction or non-fatal stroke
- **Safety profile** of semaglutide in SUSTAIN 6 was as expected and consistent with previous semaglutide clinical studies
- **Next step:** Detailed data to be presented at European Association for the Study of Diabetes (EASD) on 16 September 2016

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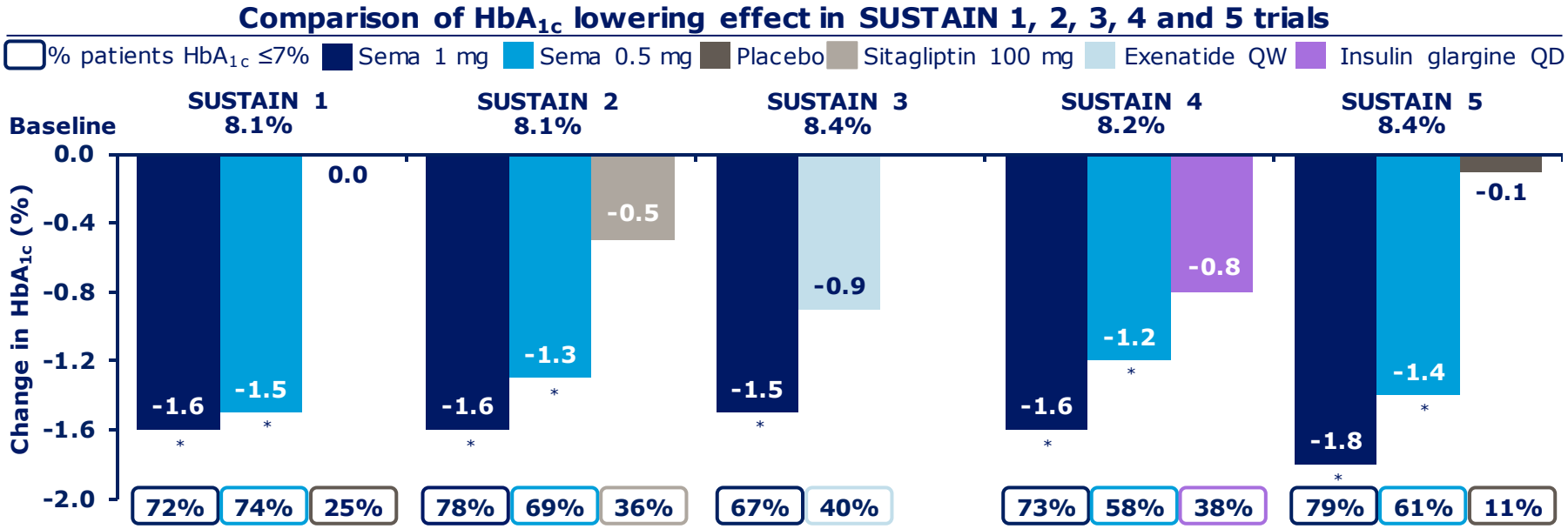
In phase 3a trials semaglutide shows best in-class potential on HbA_{1c} reduction across treatment cascade



* $p < 0.001$; QD: once daily; QW: once weekly; sema: semaglutide
Source: Novo Nordisk on file (NN9535-3623, NN9535-3624, NN9535-3625, NN9535-3626, NN9535-3627)

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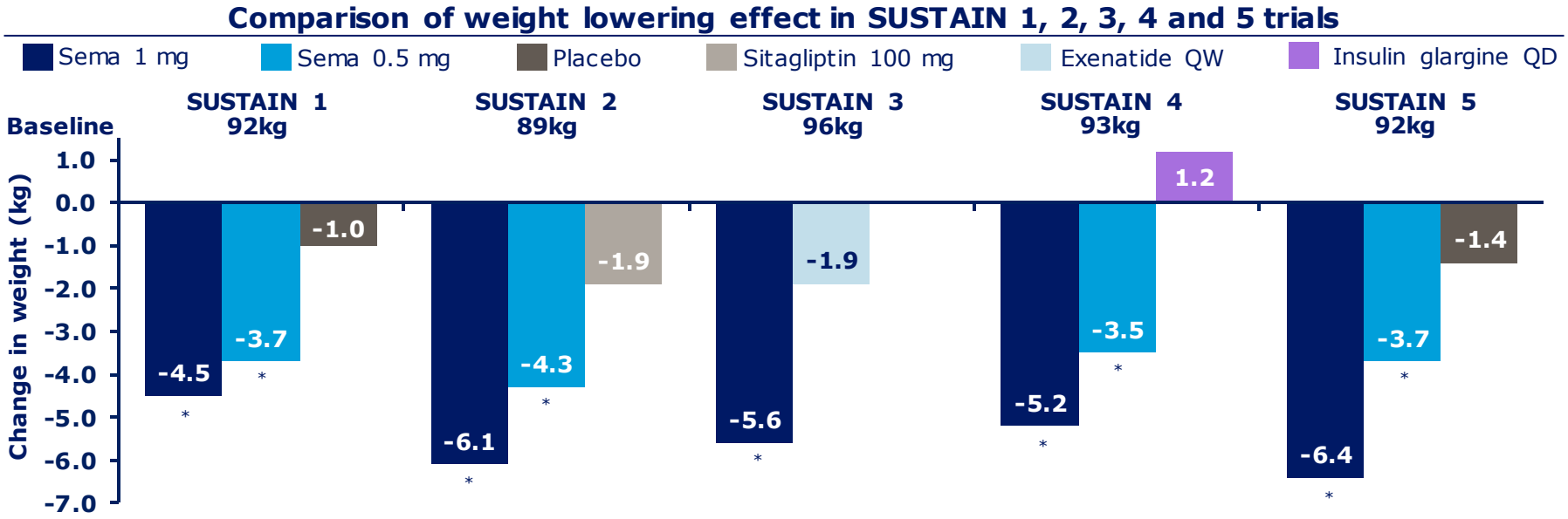
In phase 3a trials semaglutide shows best in-class weight lowering potential across treatment cascade



* $p < 0.001$; QD: once daily; QW: once weekly; sema: semaglutide
Source: Novo Nordisk on file (NN9535-3623, NN9535-3624, NN9535-3625, NN9535-3626, NN9535-3627)

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Competitive Tresiba® label across all three triad markets

Tresiba® label characteristics in triad markets

	US	Europe	Japan
Profile	• Half-life of 25 hours and duration of action of at least 42 hours • Day to day variability of 20%	• Duration of action beyond 42 hours • Four times lower day-to-day variability vs insulin glargine	• Duration of action up to 26 hours in Japanese patients • Four times lower day-to-day variability vs insulin glargine
Efficacy	• Non-inferior HbA_{1c} reduction • Numerically greater FPG reduction • Numerically lower insulin dose[1]	• Non-inferior HbA_{1c} reduction • Numerically greater FPG reduction	• Non-inferior HbA_{1c} reduction • Numerically greater FPG reduction
Safety	• Overall safety consistent with insulin • Hypoglycaemia rates for Tresiba®, but not comparator	• Overall safety consistent with insulin • Lower rate of overall and nocturnal hypoglycaemia	• Overall safety consistent with insulin • Lower rate of nocturnal hypoglycaemia in Asian subjects
Convenience	• Injection any time of day • Up to 80 and 160 units per injection	• Adjusting injection time when needed • Up to 80 and 160 units per injection	• In case of missed dose take as soon as possible

[1] Observed in majority of the trials

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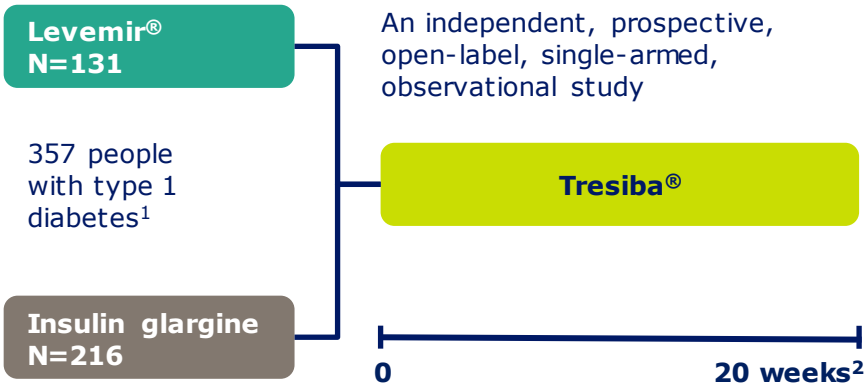
US Tresiba® label reflects the distinctly different product features compared to competitor basal insulins

	TRESIBA® insulin degludec injection	glargine U100	glargine U300
Duration of action[1]	• At least 42 hours[2]	• Up to 24 hours[3]	• Up to 36 hours[4]
Administration and dosing	• Once daily at any time of day[5] • Numerically lower dose needed vs glargine U100[8]	• Once daily at any time of day, at the same time every day[6]	• Once daily at any time during the day, at the same time every day[7] • Higher dose needed vs glargine U100[9]
Pen device	• 600 units/pen[10] • 160 units max per injection[10] • No push button extension	• 300 units/pen • 80 units max per injection • Push button extension	• 450 units/pen • 80 units max per injection • Push button extension
In-use time	• 56 days at room temperature	• 28 days at room temperature	• 42 days at room temperature

Note: Comparison based on US Package Inserts (PI) for listed products, not based on head to head comparisons.
[1] Based on Glucose Infusion Rate (GIR) data from euglycemic clamp studies; [2] Tresiba PI section 12.2; [3] glargine U100 PI section 12.2; [4] glargine U300 PI section 12.2; [5] Tresiba PI Highlights section; [6] glargine U100 PI Highlights section; [7] glargine U300 PI Highlights section; [8] Tresiba PI section 14; [9] glargine U300 PI section 14.1; [10] Tresiba U200 PI

Real-world data for Tresiba® confirms strong clinical profile and enables uptake

Study aim and key results



- **Study aim:** Exploring whether the higher cost of insulin degludec compared with insulin detemir or insulin glargine is justified by improved clinical outcomes
- **Key results** (all statistically significant)
  - mean reduction in HbA_{1c} from 8.5% to 8.2%
  - median reduction of 12% of total insulin dose
  - reduction of hypoglycaemic events of 22% and reduction of nocturnal hypoglycaemic events of 56%
- **Conclusion:** Insulin degludec was clinically useful and economically justifiable for the patients with type 1 diabetes
- Controlled studies are needed to confirm these benefits in a larger sample of real-world patients

[1] The study followed 347 consecutive type 1 diabetes patients who switched to Tresiba® from existing insulins according to predefined switching criteria such as twice daily injection, HbA_{1c} outside acceptable levels or unstable glucose and/or repeated hypoglycaemic events. A total of 10 patients were on human insulin and continuous subcutaneous insulin infusion [2] Median follow-up time

Note: Study design – Danderyd Diabetes Clinic

Source: Changes in HbA_{1c}, insulin dose and incidence of hypoglycaemia in patients with type 1 diabetes after switching to insulin degludec in an outpatient setting: an observational study, Lena Landstedt-Hallin, CMRO, 8 June 2015

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Competitive European label for Xultophy®

Xultophy® is indicated for the treatment of adults with type 2 diabetes in combination with oral glucose-lowering agents

Profile	• **Xultophy® is a fixed combination** product consisting of **insulin degludec** and **liraglutide** having complementary mechanisms of action to improve glycaemic control • Administered as dose steps: One **dose step contains 1 unit of insulin degludec and 0.036 mg of liraglutide**
Efficacy	• On average **HbA_{1c} reduction of 1.9%**[1] from baseline to end of trial confirmed to be **superior against all comparators**[2] • On average **2.7 kg weight loss** from baseline in patients inadequately controlled on basal insulin
Convenience	• **Once-daily administration** at any time of the day, preferably at the same time of the day • The pre-filled pen can provide **from 1 up to 50 dose steps in one injection**
Safety	• **Lower rates of confirmed hypoglycaemia** than with insulin degludec in patients on metformin +/- pioglitazone • **Fewer experienced gastrointestinal side effects** than patients treated with liraglutide

[1] Source: DUAL® I (NN9068-3697), DUAL® II (NN9068-3912)
[2] Insulin degludec, liraglutide and placebo

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Xultophy® has documented strong efficacy across the treatment cascade

Xultophy® key clinical results

	DUAL I Add-on to metformin ± Pio n = 833	DUAL II Add-on to metformin ± basal insulin n = 199	DUAL III Switch from GLP-1 n = 292	DUAL IV Add-on to SU ± metformin n = 289	DUAL V Switch from insulin glargine n = 557
Mean trial start HbA_{1c} (%)	8.3	8.7	7.8	7.9	8.4
Mean trial end HbA_{1c} (%)	6.4	6.9	6.4	6.4	6.6
HbA_{1c} change (%)	-1.9	-1.9	-1.3	-1.45	-1.8
% to target < 7% (%)	80.6	60.3	75.3	79.2	71.6
% to target < 6.5% (%)	69.7	45.2	63.0	64.0	55.4
Confirmed hypoglycaemia (Episodes per 100 PYE)	180.2	153.4	282	351.7	343.3
Weight change (kg)	-0.5	-2.7	+2.0	+0.5	-1.4

Note: Typical confirmed hypoglycaemia event rates for treatment with basal insulin are 142-369 episodes per 100 PYE (based on insulin glargine event rates from trials NN1250-3586, 3579 and 3672) where the FPG target and hypoglycaemia definition is similar to the DUAL trials
Source: Novo Nordisk Trial IDs: DUAL I (NN9068-3697), DUAL II (NN9068-3912), DUAL III (NN9068-3851), DUAL IV (NN9068-3951), DUAL V (NN9068-3952)

Faster-acting insulin aspart provides superior glucose control vs NovoRapid® in onset 1 trial

Creating a new formulation that satisfies an unmet medical need

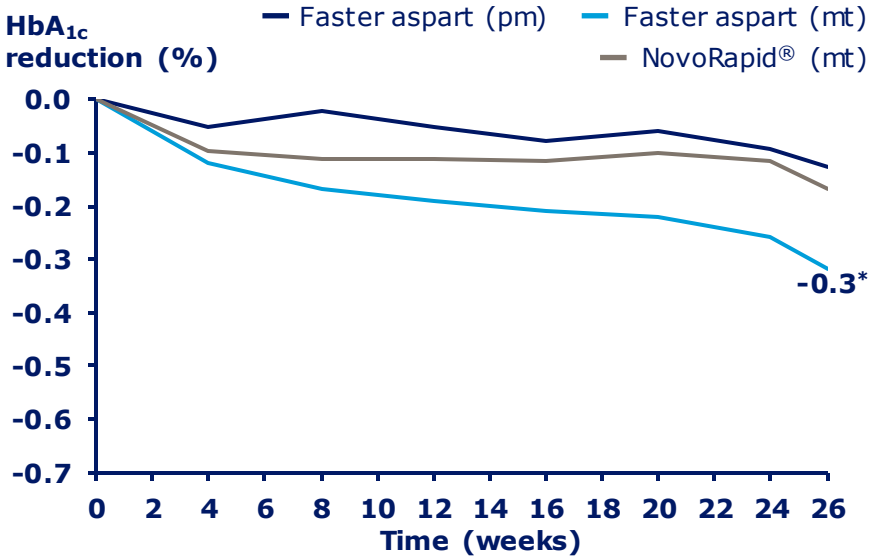
Faster-acting insulin aspart is an innovative formulation of insulin aspart:

- Vitamin B3 (nicotinamide)[1] added to increase early absorption
- Naturally occurring amino acid (arginine)[1] added to obtain stability

Faster-acting insulin aspart is intended to address unmet medical need:

- Faster absorption mimics physiological insulin action profile
- A better profile for pump and future closed loop systems

HbA_{1c} reduction in onset 1 trial after 26 weeks



[1] Concentration many times below recommended dietary daily intake

* $p<0.05$; pm: post-meal; mt: mealtime
Source: Novo Nordisk on file (NN1218-3852)

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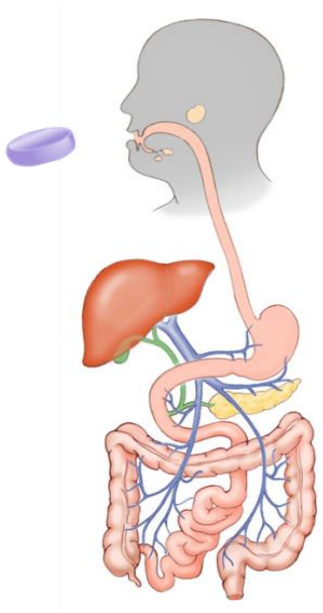
Oral peptide delivery – the gastro-intestinal route poses many challenges to absorption of intact macromolecules

Challenges

1. Breakdown of drug in the stomach/gastrointestinal tract
2. Passage across the gut barrier into the circulation
3. Ensuring a long circulation half-life

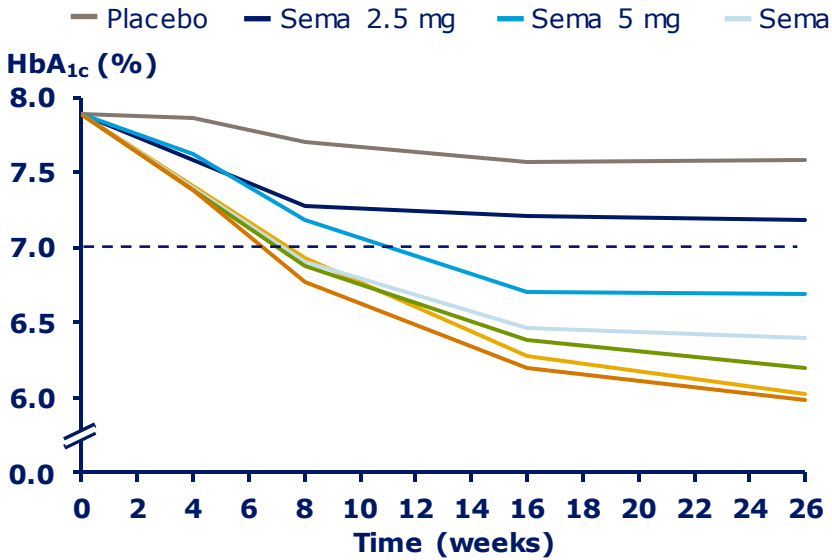


Solutions

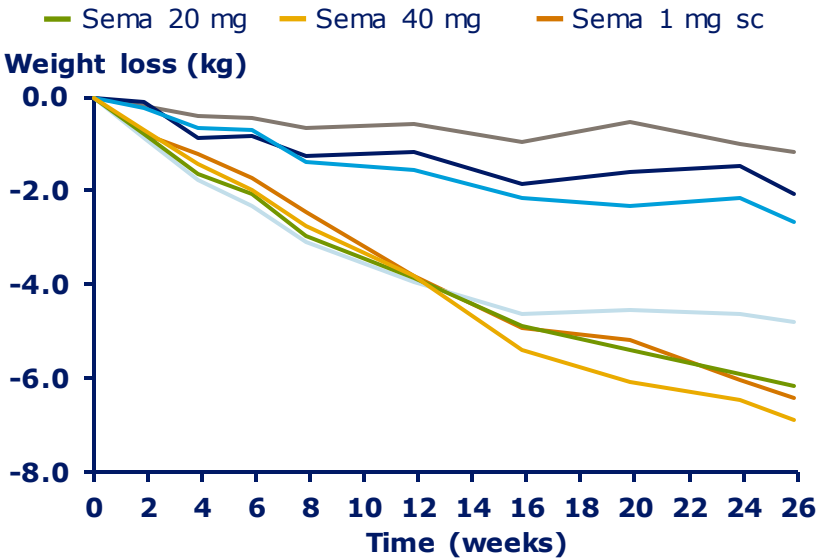
1. Stabilisation of peptide backbone and side chain
2. Tablet formulation including carrier and/or coating
3. Engineered systemic protraction mechanism

Oral semaglutide dose dependently reduced HbA_{1c} and body weight in a 26-week phase 2 trial in type 2 diabetes

HbA_{1c} reduction from a mean baseline of 7.9%



Weight loss from a mean base line of 92 kg



Inclusion criteria: Type 2 diabetes; 7.0% ≤ HbA_{1c} ≤ 9.5%; treatment with diet and exercise with or without metformin; sc: subcutaneous; sema: semaglutide
Source: Novo Nordisk on file (NN9924-3790)

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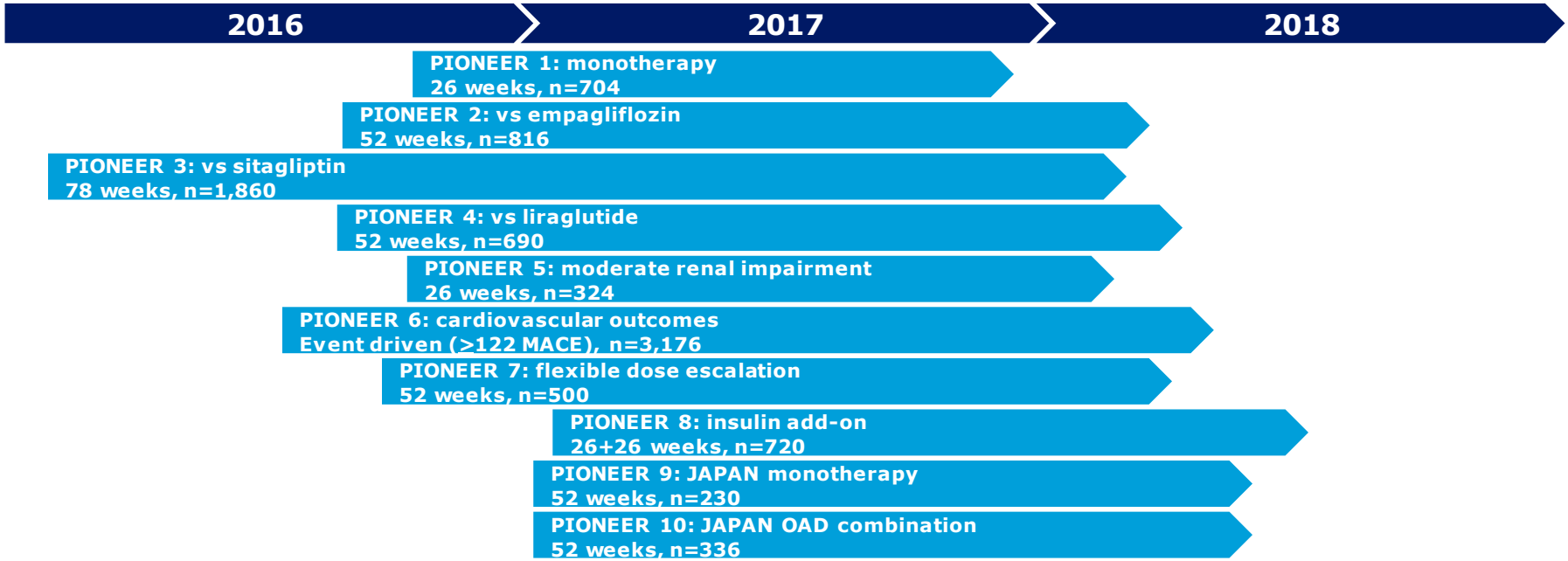
PIONEER, the global phase 3a programme for oral semaglutide to include >9,300 people with type 2 diabetes



Note: Preliminary estimated timing of trials from first patient first visit (FPFV) to last patient last visit (LPLV), n = approximate number of randomised people; MACE: Major Cardiovascular Events; OAD: oral anti-diabetic

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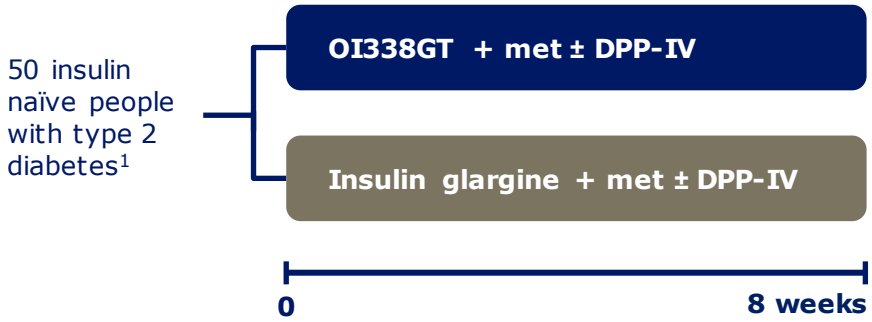
Phase 2a trial with oral insulin OI338GT completed with generally encouraging results

Phase 2a study design



Headline results and next step

- The results were generally encouraging with a **decrease in fasting plasma glucose** of approximately 2.5mmol/L for both treatment arms
- OI338GT generally appeared to have a safe and well tolerated profile
- No severe hypoglycaemic episodes were reported and overall hypoglycaemia levels appeared similar for OI338GT and insulin glargine treated subjects
- **Next step:** Therapeutic use and investment needs will be assessed of the oral insulin programme, more information will follow H2

Met: Metformin; DPP-IV: Dipeptidyl peptidase-4

[1] Inclusion criteria: Subjects diagnosed (clinically) with type 2 diabetes mellitus for at least 180 days prior to the day of screening; age of 18-70 years (both inclusive) and BMI of 25.0-40.0 kg/m^2 (both inclusive)

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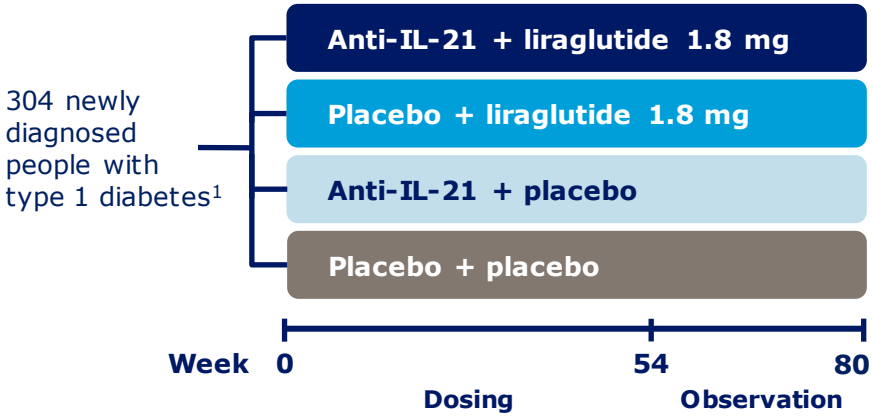
Anti-IL 21 in combination with liraglutide is an alternative approach for the treatment of type 1 diabetes

Phase 2 trial design



Rationale for Anti-IL 21 and liraglutide combination product for T1D

Anti-IL 21 plays an important role in autoimmunity with potential effect on immune disorder

- ↓ Effector cells (T and B lymphocytes and natural killer cells)
- ↓ Pro-inflammatory cytokines
- ↓ Autoantibodies
- ↓ Chemokines
- ↓ Matrix metalloproteinase (MMPs)

GLP-1 receptor agonist may promote beta-cell recovery

- ↓ Decrease beta-cell stress/apoptosis
- ↑ Stimulate beta-cell neogenesis
- ↑ Expansion of beta-cell mass in rodent models

[1] Inclusion criteria: Subjects diagnosed as type 1 diabetes for not more than 12 weeks prior to randomisation; age 18-45 (both inclusive)
Note: If liraglutide 1.8 mg is not tolerated 1.2 mg is administered. ANTI-IL: interleukin
Source: NN9828-4150

T1D: type 1 diabetes; MOA: mode of action

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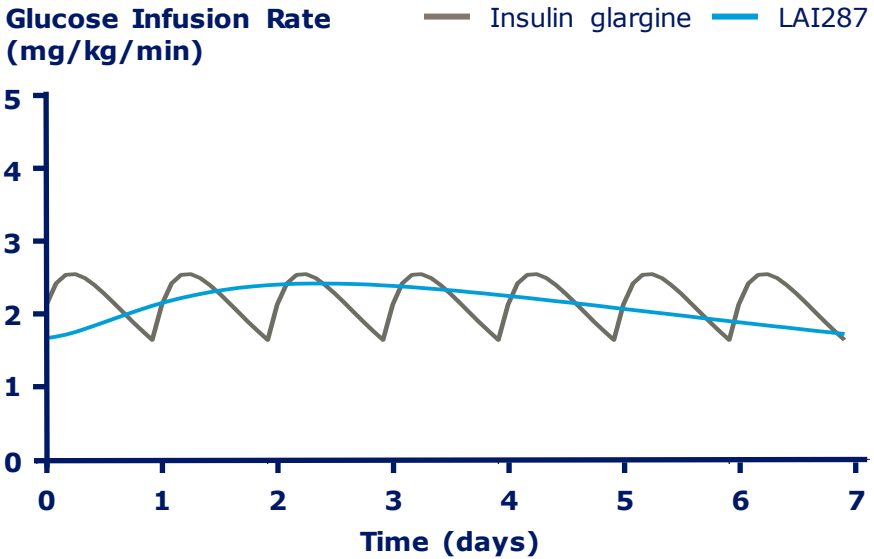
Insulin LAI287 offers potential for once-weekly dosing

LAI287 pharmacodynamic profile is compatible with once-weekly dosing



Note: pharmacokinetic simulation

Key results of phase 1 trial

- The trial evaluated short term efficacy and safety during five weeks of treatment
- LAI287 showed dose-dependent exposure and a variability comparable to that of insulin degludec
- Terminal half-life of 185 hours supporting a once-weekly dosing regimen
- LAI287 generally appeared safe and well tolerated, with most frequent adverse event being hypoglycaemia
- The side effects observed in the phase 1 trial will be further investigated

Source: Novo Nordisk on file (NN1436-4057) 48 people with type 2 diabetes, multiple dose, dose escalation trial

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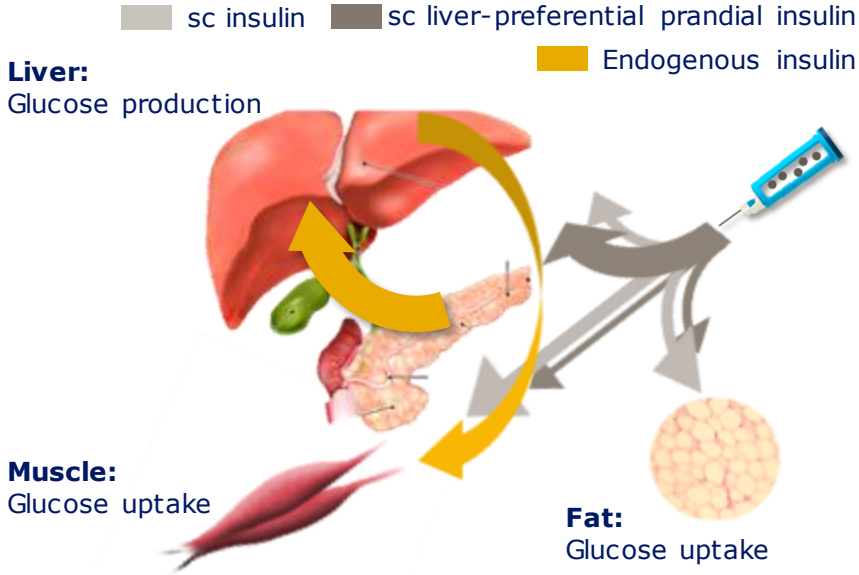
Liver-preferential mealtime insulin analogue has potential to reduce hypoglycaemia and weight gain

The liver is important for insulin action



sc: subcutaneous

Rationale and expected benefits of physiologically distributed insulin

Rationale

- Elevated hepatic glucose release drives overall higher PPG in people with type 2 diabetes compared to healthy individuals[1]
- >50% of endogenous insulin secretion is cleared by the liver
- Insulinisation of peripheral tissues with current insulin analogues is higher than for endogenous insulin

Potential benefits

- Mimics physiology of insulin distribution secreted from pancreas
- Less hypoglycaemia
- Less weight gain

Next steps

- Phase 1 trial with liver-preferential mealtime insulin (NN1406) initiated

PPG: post prandial glucose

[1] Woerle HJ et al. *Am J Physiol Endocrinol Metab* 2006;290:E67–E77

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More than 20 million people in the US have a BMI above 35 with either pre-diabetes or CV related comorbidities

Incidence of obesity in the US (million people)

Comorbidity status	BMI 27-29.9	Obesity			Total
		Class I BMI 30-34.9	Class II BMI 35-39.9	Class III BMI 40+	
No CV comorbidities[1]	15.5	11.0	4.2	3.0	**33.7**
CV comorbidities[2]	15.1	16.0	6.4	4.1	**41.6**
Pre-diabetes[3]	12.0	14.1	7.2	6.1	**39.4**
Type 2 diabetes[4]	2.0	5.0	3.6	2.3	**12.9**
Total	**44.6**	**46.1**	**21.4**	**15.5**	**127.6**

[1] Normal blood glucose without hypertension and/or dyslipidemia
[2] Normal blood glucose with hypertension and/or dyslipidaemia
[3] Impaired Fasting Glucose with or without hypertension and/or dyslipidaemia
[4] Type 2 diabetes with or without hypertension and/or dyslipidaemia
Source: 2009-2010 NHANES + revised 2011 CDC estimates and based on US population 2015. Only includes population age 20+. Distribution between obese groups on market map based on NHANES data (including only measured and not self reported BMI and also measured not self-reported diabetes status)

The US obesity burden

- Cost of obesity to health care systems of USD 147 billion annually with continued growth[5]
- Around 35% of the US adult population (over 20 years) have obesity (BMI>30)[6]
- Only around 30% of all obesity cases in the US were diagnosed in 2009[7]
- In 2010, only 3 million people in the US or around 3% of the adult population with obesity were treated with anti-obesity medication[8]

[5] Finkelstein et al. Health Affairs 28, no. 5 (2009): w822-831
[6] Flegal, KM. JAMA. 2012;307(5): Doi:10.1001/jama.2012.39
[7] Ma et al. Obesity (Silver Spring) 2009;17:1077–85
[8] Obesity. Decision resources, Inc. December 2010:38

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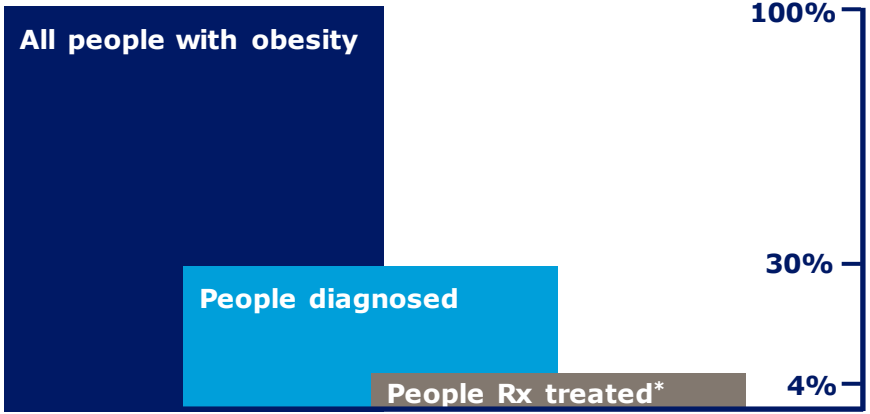
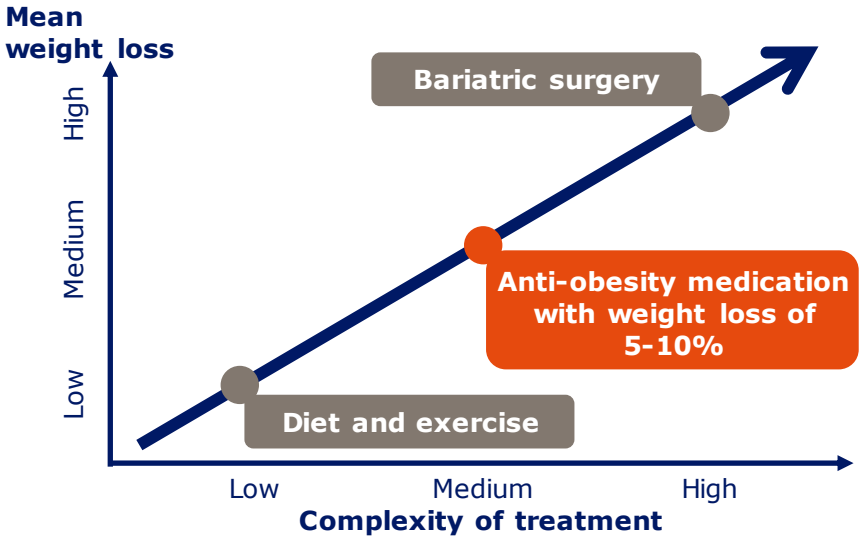
Significant unmet need in obesity management

Insufficient treatment options



Significant gaps in obesity treatment



Source: Diagnosis rate, Practice Fusion March 2014 & Treatment rate, *Understanding the Treatment Dynamics of the Obesity Market*, IMS Database (NPA), August 2014
*Rx=prescription, i.e. treated with anti-obesity medication (AOM)

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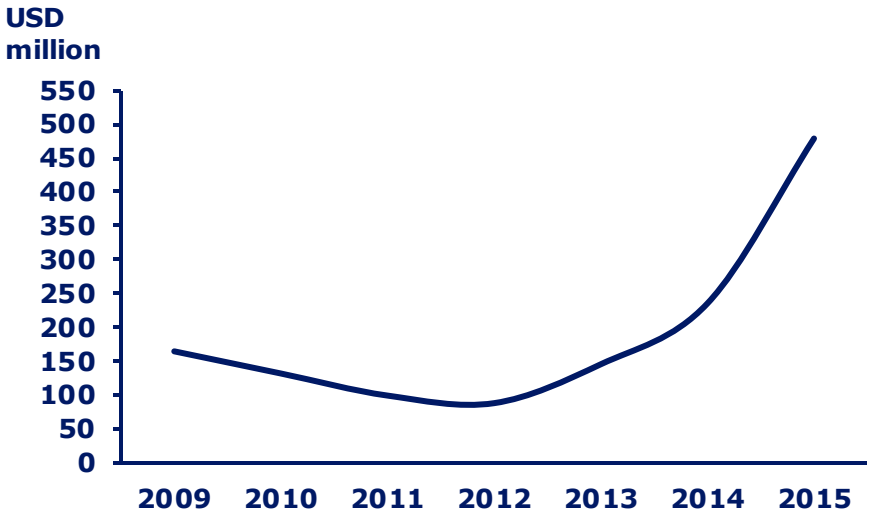
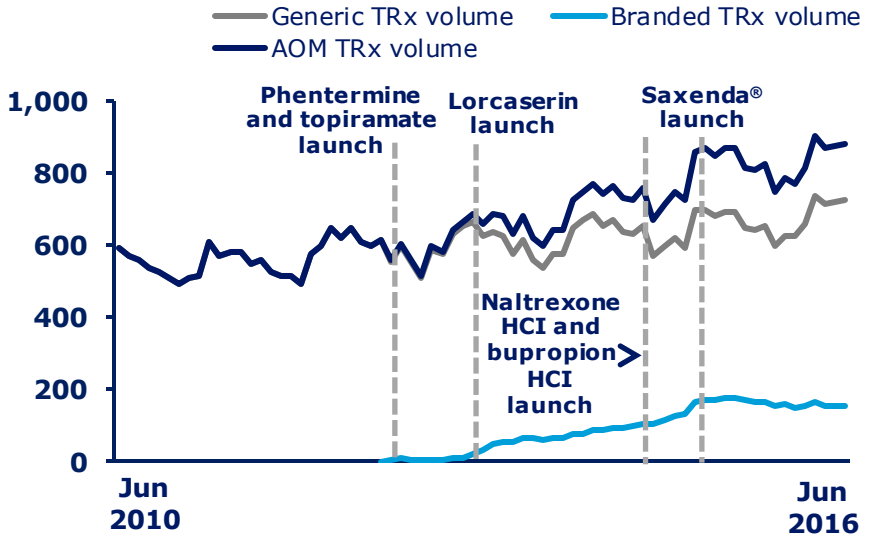
Small but growing market for anti-obesity medication in the US

Value of US obesity market remains relatively small, but it is growing



Source: IMS NSP Monthly, February 2016

Few people treated with AOM, but in recent years launches have fuelled market growth



Note: Phentermine and topiramate is the fixed combination; naltrexone HCl and bupropion HCl is the second fixed dosed combination to market. AOM: anti-obesity medication
Source: IMS NPA Monthly, June 2016

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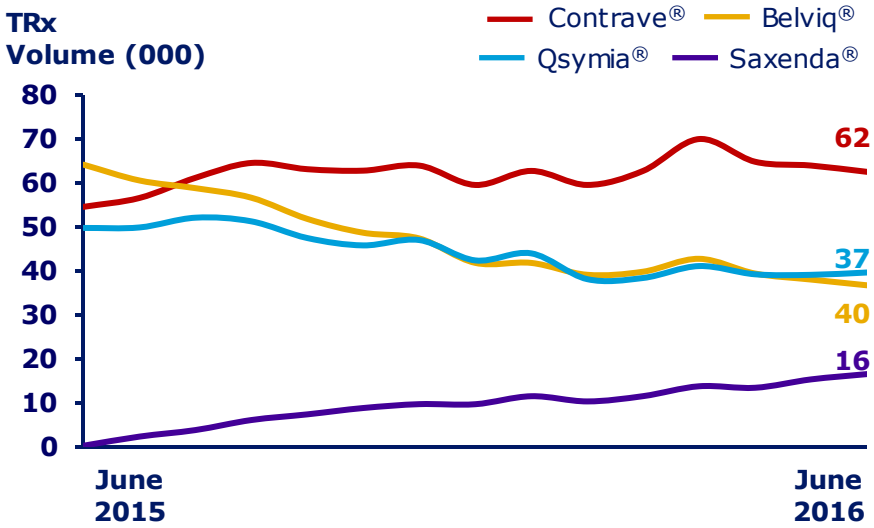
Steady prescription uptake for Saxenda® in the US

Prescription volume uptake of anti-obesity medications (AOM) recently launched in the US



Note: IMS reporting for new launches may reflect data instability due to small volume and/or supplier reporting
Source: IMS NPA TRx, monthly, June 2016

Key observations

- Saxenda® has been launched in the US, Canada, Denmark, Italy, Australia, Mexico and now Germany, Belgium, Brazil and Israel
- Saxenda® is the leader in value market share at ~42% among branded AOM in the US
- While competitors have recently reduced their promotional efforts, Novo Nordisk remains confident in the long-term obesity market growth and the evolving Novo Nordisk obesity portfolio

Source: IMS NSP, Monthly data, June 2016

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Saxenda® targeted at patients with BMI ≥35 and weight-related comorbidities

Saxenda® market approach	Saxenda® launch execution
Clear patient **segmentation**	Focus on patients with **BMI ≥35** with weight-related **comorbidities**
Focused prescriber **targeting**	Focus on current prescribers of **anti-obesity medication** and **GLP-1**
Clear product **value proposition**	Strengthened by **3-year clinical data**
Focus on engaging **prioritised** payers and employers	Formulary coverage emerging with more than **50 million lives**[1] covered

Aspiration

Build the market

BMI: body mass index

[1] Potential lives covered, based on employer opt-ins

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Competitive US label for Saxenda®

Saxenda® approved in the US for chronic weight management in individuals with a BMI ≥30, or ≥27 in the presence of at least one weight-related comorbidity[1]

Profile	• **GLP-1 receptor agonist** – a **physiological regulator** of **appetite** and **calorie intake** • Saxenda® is the first and only GLP-1 receptor agonist **approved for weight management**
Effect on body weight	• 9 in 10 lose weight and **1 in 3** people **lose more than 10%** of their body weight[2] • **Average weight loss of 9.2%** in completers at one year[2]
Effect on comorbidities	• **Improvements** in **cardiometabolic risk factors** such as hypertension and dyslipidaemia
Safety	• **Boxed warning** on thyroid C-cell tumours • **Precautions** on acute pancreatitis, acute gallbladder disease, serious hypoglycaemia[3], heart rate increase, renal impairment, hypersensitivity and suicidal ideation

[1] Examples include hypertension, type 2 diabetes and dyslipidemia. [2] Saxenda® US Package Information. [3] When used with an insulin secretagogue

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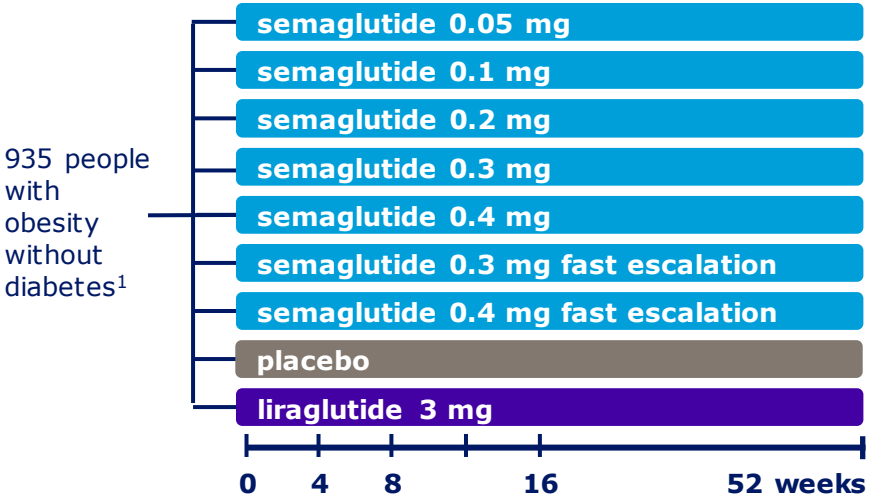
Semaglutide once daily phase 2 dose-finding trial in obesity is designed to optimise treatment outcomes

Once-daily semaglutide phase 2 trial design



[1] Key inclusion criteria: Male or female ≥18 years, BMI: ≥30 kg/m², Stable body weight (<5 kg change) ≥90 days
Note: Once-daily subcutaneous dosing in all arms, 4-week escalation steps in main arms, 2-week escalation steps in fast escalation arms

Phase 2 trial purpose and endpoints

Purpose

- To assess and compare the dose response of five doses of once-daily sc semaglutide versus placebo in inducing and maintaining weight loss after 52 weeks
- To investigate two different dose escalation regimens

Trial design

- Randomised, controlled, double-blinded
- Diet and exercise counselling in all arms

Primary endpoint

- Relative change from baseline in body weight at 52 weeks

Examples of secondary endpoints

- Proportion of subjects with weight loss of ≥ 5% or ≥ 10% of baseline body weight at 52 weeks

Results from phase 2 trial expected in 2017

QD: once-daily; sc: subcutaneous

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Long-acting obesity compounds in phase 1 development may have complimentary modes of action

Key features of compounds in phase 1 development for obesity

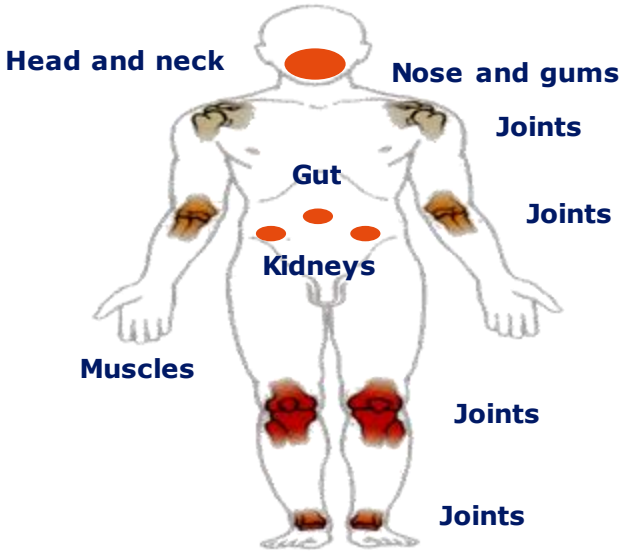
Compound	G530L – Glucagon analogue	NN9838 – Amylin analogue	NN9747 – PYY analogue
Administration	• Once-daily subcutaneous injection in combination with liraglutide	• Once-daily subcutaneous injection	• Once-daily subcutaneous injection
Mode of action	• Stimulation of energy expenditure and satiety promoting a negative energy balance	• Reduced food intake, thought primarily to be mediated by amylin receptors located in the area postrema	• Reduced food intake via selective stimulation of the Y2 receptor
Clinical development status	• Phase 1 initiated Sep 2014 • Safety/PK of single ascending doses • 160 overweight /obese people • Expected completion 2017	• Phase 1 initiated Dec 2014 • Safety/PK of single ascending doses • 58 overweight/obese people • Completed in H1 2016	• Phase 1 initiated Oct 2015 • Safety/PK of single and multiple doses • 120 overweight/obese people • Expected completion H1 2017

PK: pharmacokinetic

Biopharmaceuticals

Haemophilia: Location of bleedings and the consequences

Locations

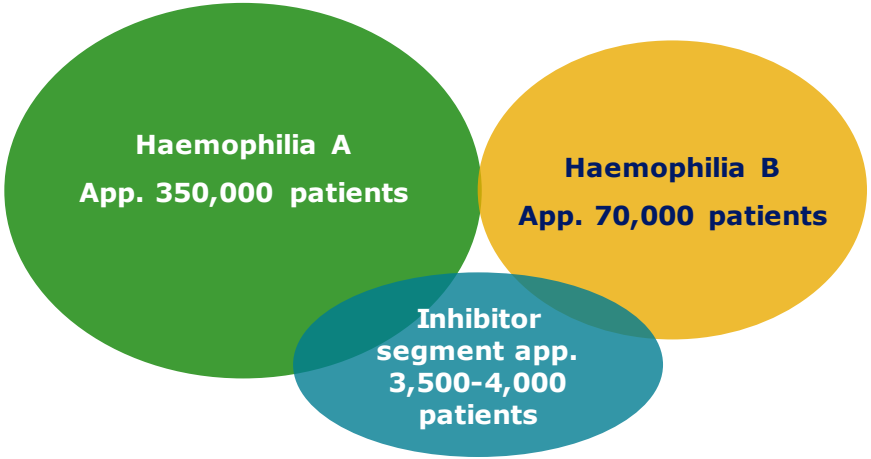


Consequences of bleedings

- Bleeding in the joint space causes a strong inflammatory reaction which predisposes to further bleeding
- Inadequate or delayed treatment of repeated joint bleeds results in a "target joint"
- The joint is tense, swollen and extremely painful and the mobility is restricted
- Eventually the cartilage erodes completely and permanent joint damage (arthropathy) occurs
- Treatment of arthropathy is orthopaedic surgery

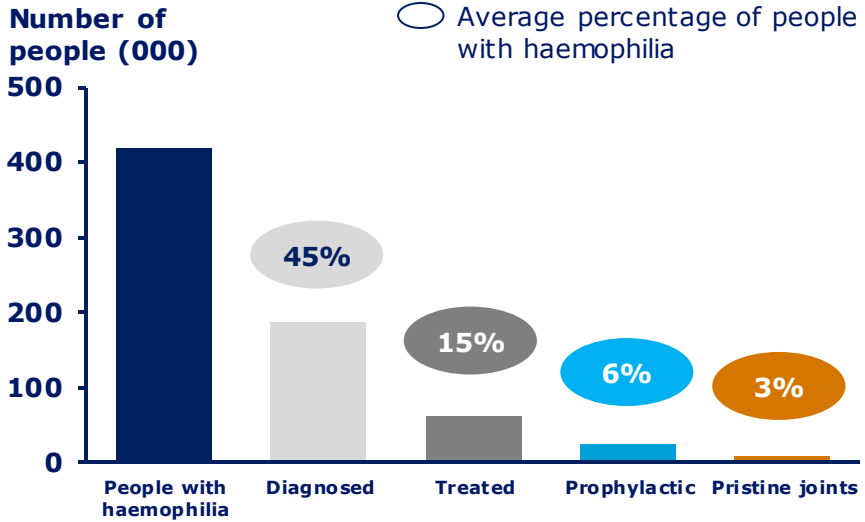
Haemophilia is a rare disease with severe unmet medical needs

Number of people with haemophilia A and B and haemophilia with inhibitors



Note: The inhibitor segment represents people with haemophilia and high titre inhibitors to their normal replacement treatment
Source: Estimates based on prevalence data in literature (Stonebraker JS et al. Haemophilia. 2010; 16: 20-32), World Federation of Haemophilia – Annual Global Survey 2012, UDC database in the US

Low diagnosis and treatment rates within haemophilia



Source: World Federation of Haemophilia – Annual Global Survey 2012

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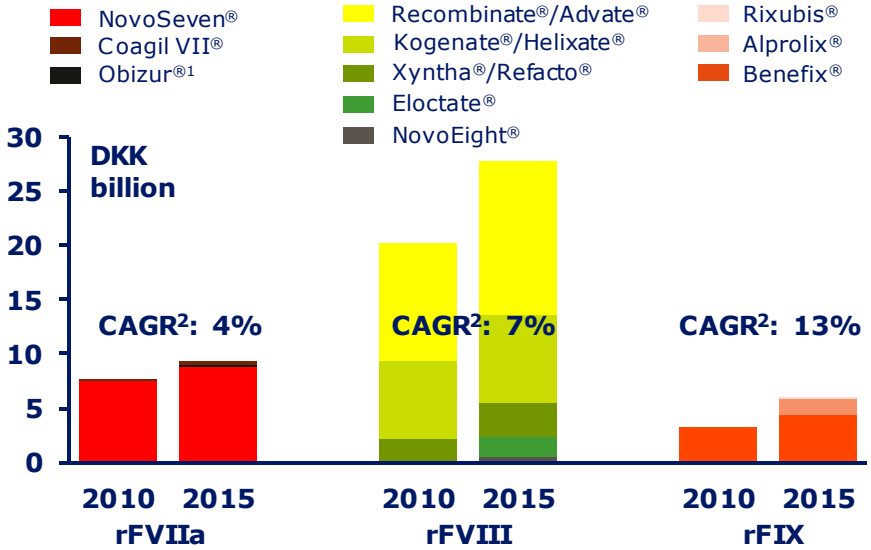
Global haemophilia market is growing by mid-single digit

Sales of recombinant coagulation factors



[1] Obizur® only indicated for acquired haemophilia
[2] CAGR for 5-year period
Source: Company reported sales for 2010 and 2015

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Strategic positioning of Novo Nordisk's haemophilia portfolio

Novo Nordisk compound	Status	Strategic position
NovoSeven®	Launched	Maintain market leadership
NovoEight®	Launched	Establish presence in a competitive market place
N8-GP	Phase 3[3]	Contribute to market conversion
N9-GP	Phase 3[4]	Establish new treatment paradigm
NovoThirteen®	Launched	Launch first recombinant product

[3] Submission of N8-GP expected 2017/2018 pending expansion of production capacity
[4] Submitted to the to the European Medicines Agency in January 2016; Submission with the US Food and Drug Administration in May 2016

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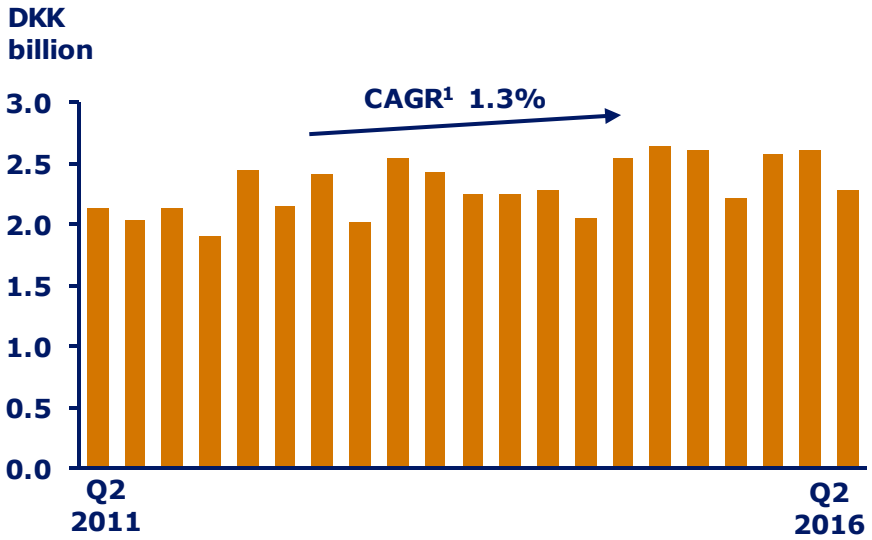
NovoSeven® – a unique biologic for the treatment of rare bleeding disorders

NovoSeven® reported sales



Key NovoSeven® properties

- **Product characteristics:** powder and solvent for solution for intravenous injection, available in multiple doses, stable at room temperature
- **MixPro®** administration system launched in 2013
- **Indications:** treatment of spontaneous and surgical bleedings in:
  - Haemophilia A or B patients with inhibitors
  - Acquired haemophilia
  - Congenital FVII deficiency
  - Glanzmann's thrombasthenia[2]

[1] CAGR for 5-year period

[2] Only indicated in Europe and the US

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NovoEight® is launched in the US, Europe and Japan for the treatment of people with haemophilia A

Example from NovoEight® promotional campaign[1]

[1] Picture is not intended for promotional purposes

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NovoEight® properties and launch performance

Indications:

- Treatment and prophylaxis of bleeding in patients with congenital factor VIII deficiency for all age groups[2]

Key product characteristics:

- Reliability: No inhibitor development in PTPs in one of the largest pivotal trial programmes of any approved rFVIII (n=213)[2,3]
- Purity and safety: First rFVIII to use a 20nm filter in its purification process[4]
- Portability: Room temperature stability with storage at 30 degrees celsius[2]

Launch status:

- NovoEight® is available in the US, Japan, India and 17 European countries

[2] NovoEight® Summary of Product Characteristics. [3] Iorio A et al., Blood 2012; 120(4): 720 – 727. [4] NovoEight® Prescribing Information
PTP: Previously treated patient

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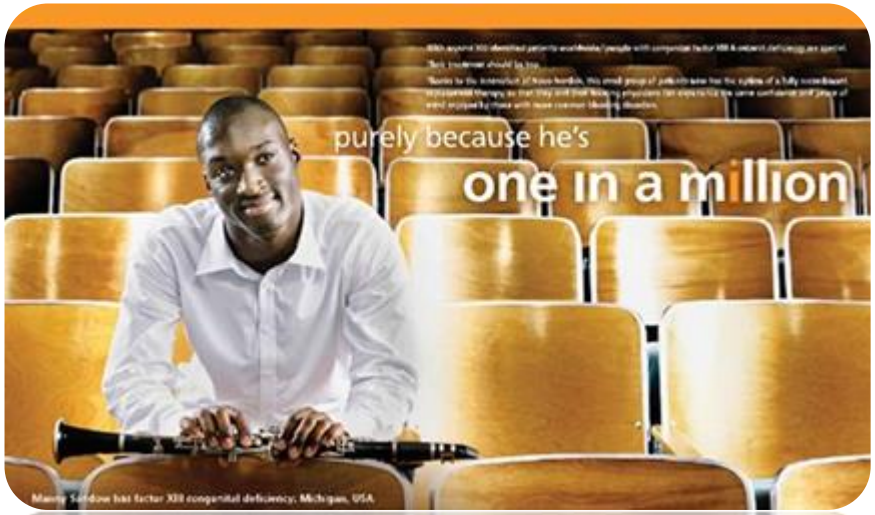
NovoThirteen®, a recombinant FXIII, provides efficacious and safe haemostatic coverage

Example from NovoThirteen® promotional campaign[1]



[1] Picture is not intended for promotional purposes

NovoThirteen® properties and launch performance

Indication:

- Long term prophylactic treatment of bleeding in adult and paediatric patients with congenital factor XIII A-subunit deficiency

Key product characteristics:

- NovoThirteen® is the only recombinant product for prophylaxis
- NovoThirteen® is well tolerated and has low volume dosing
- NovoThirteen® effectively prevents bleeds and provides a convenient once-monthly regimen

Launch status:

- NovoThirteen® is approved in Australia, Bahrain, Brazil, Canada, Colombia, EU, Iceland, Israel, Japan, Kuwait, Oman, Qatar, Saudi Arabia, Switzerland, and the US

Source: European Medicines Agency, summary of opinion (post-authorisation) 23 January 2014. NovoThirteen® Summary of product characteristics.

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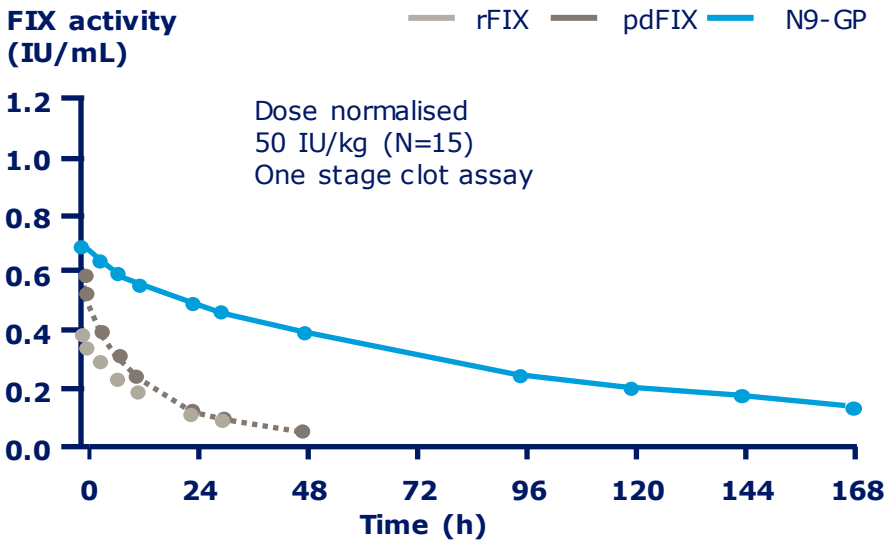
R&D pipeline: Haemophilia and growth disorders

Product/project	Type	Indication	Status (phase)				
			1	2	3	Filed	Appr.
N9-GP (NN7999)[1]	GlycoPEGylated long-acting rFIX	Haemophilia B					
N8-GP (NN7088)	GlycoPEGylated long-acting rFVIII	Haemophilia A					
Concizumab (NN7415)	Monoclonal anti-TFPI	Haemophilia A, B and with inhibitors					
Somapacitan (NN8640)[2]	Once-weekly human growth hormone	Growth disorder					

[1] Submitted to the to the European Medicines Agency in January 2016 and the US Food and Drug Administration in May 2016; [2] Phase 3 completed in Adult Growth Hormone Deficiency (AGHD)

N9-GP administered once weekly reduces median bleeding rate to 1.0 episode per year in phase 3 trial

N9-GP phase 1 pharmacokinetics



Source: Negrier et al. Blood. 2011;115:2693-2701

Paradigm 2 headline results (phase 3)

- Steady-state half-life of 110 hours
- Median bleeding rate for patients treated on demand was 15.6 episodes per year
- Patients on once-weekly prophylactic treatment had a median bleeding rate of 1.0 episode per year when treated with 40 IU/kg
- Among patients receiving 40 IU/kg:
  - 99% of bleeding episodes treated with only one infusion
  - Two thirds of patients experienced complete resolution of bleeding into target joints
- N9-GP appeared to have a safe and well tolerated profile with no patients developing inhibitors

Next steps

- N9-GP Submitted to the European Medicines Agency in January 2016 and to the US Food and Drug Administration in May 2016

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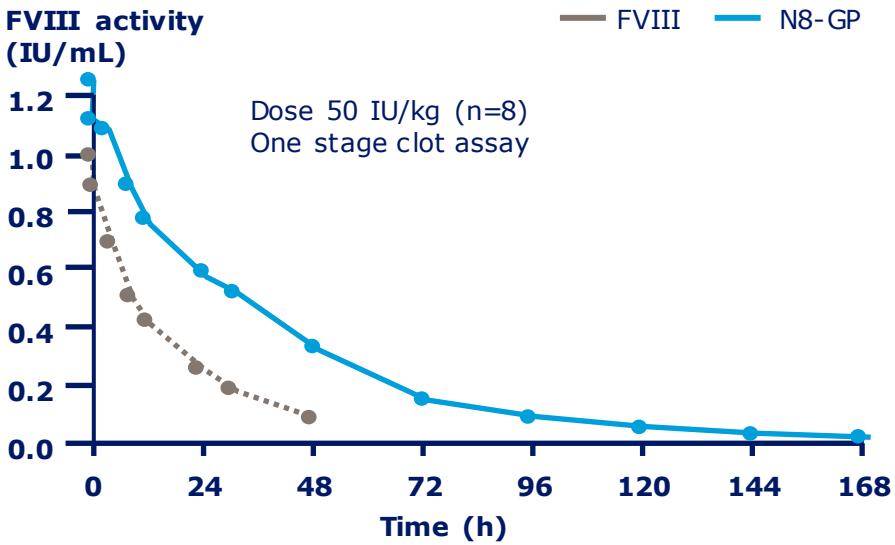
N8-GP administered every fourth day reduces median bleeding rate to 1.3 episode per year in phase 3 trial

N8-GP phase 1 pharmacokinetics



Source: Tiede et al. J Thromb Haemot. 2013;11:670-675

Pathfinder 2 headline results (phase 3)[1]

- PK documented single dose half-life of 18.4 hours and mean trough level before next dose of 8%
- Patients on every fourth day prophylaxis (50 IU/kg) had a median ABR of 1.3
- 95% of mild to moderate bleeds managed with 1-2 doses
- N8-GP appeared to have a safe and well tolerated profile
- One patient developed inhibitors, as expected in a population of previously treated haemophilia A patients

Pathfinder 2 extension trial results[2]

- 55 patients with ≤2 bleeds during 6 months in the main phase were randomised 2:1 to either once-weekly (75 IU/kg) or every fourth day (50 IU/kg) treatment for 180 days[3]
- Patients in both treatment arms had a median ABR of 0

Next steps

- Expansion of production capacity; US/EU submission 2018

PK: pharmacokinetic; ABR: annualised bleeding rate; IU: international unit
[1] Novo Nordisk Company Announcement, 19 March 2014; [2] Novo Nordisk Company Announcement, 18 November 2015. [3] prophylaxis 75 IU/kg every 7 days (n=38) or prophylaxis 50 IU/kg every 4 days (n=17)

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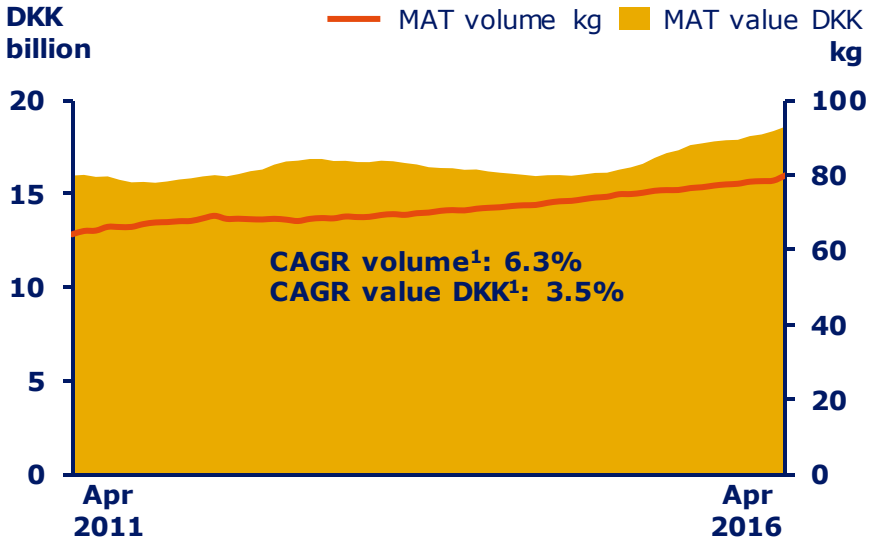
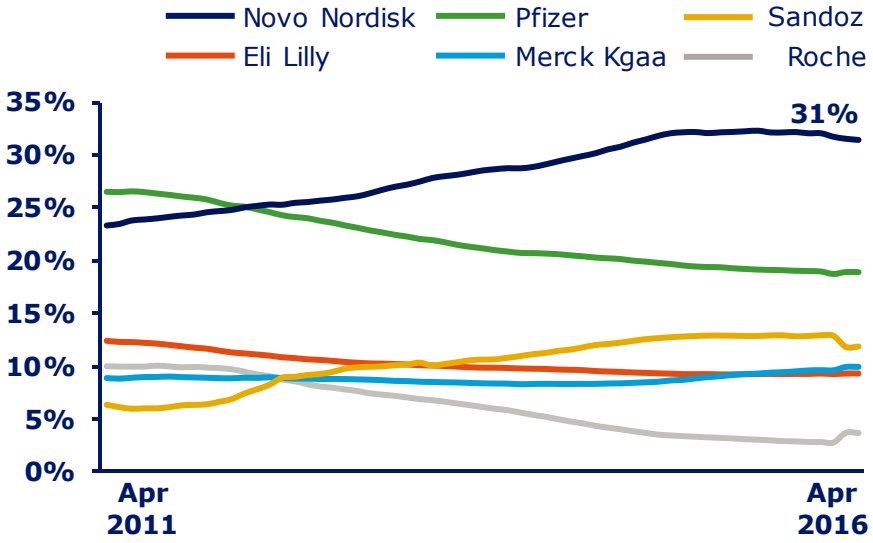
Novo Nordisk continues to expand leadership within human growth hormone (hGH) market

Development in global hGH market



Growth hormone volume market share



[1] CAGR for 5-year period
Source: IMS Monthly MAT Apr, 2016 volume figures and value (DKK) figures

Source: IMS Monthly MAT Apr, 2016 volume figures

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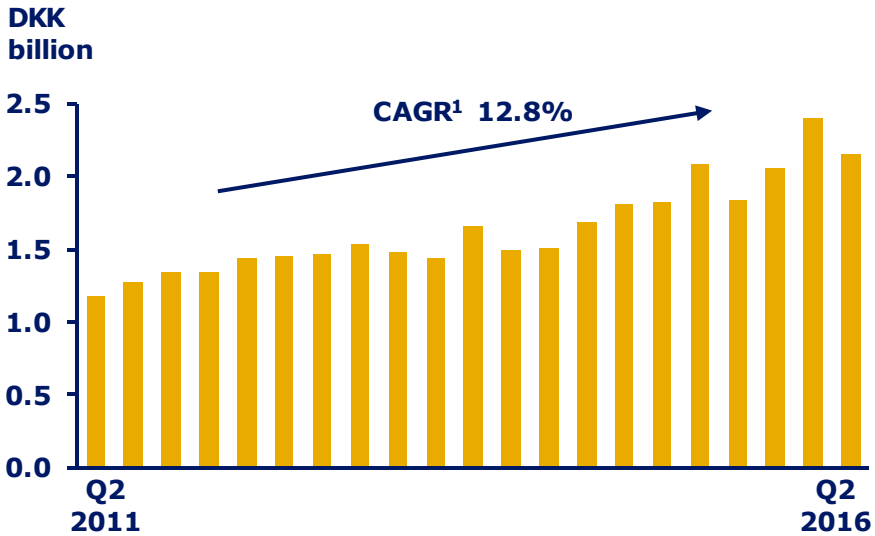
Solid Norditropin® sales growth

Norditropin® reported sales



Key Norditropin® properties

- **Product characteristics:** Premixed, prefilled multi-use delivery systems available in multiple strengths, and stable at room temperature
- **Expanded indications:** GHD, GHDA, Noonan Syndrome, Turner Syndrome, SGA indication, Idiopathic short stature
- **Easy to use FlexPro® device**
- **Medical and Clinical support programmes**
- **Patient support programmes**

[1] CAGR for 5-year period

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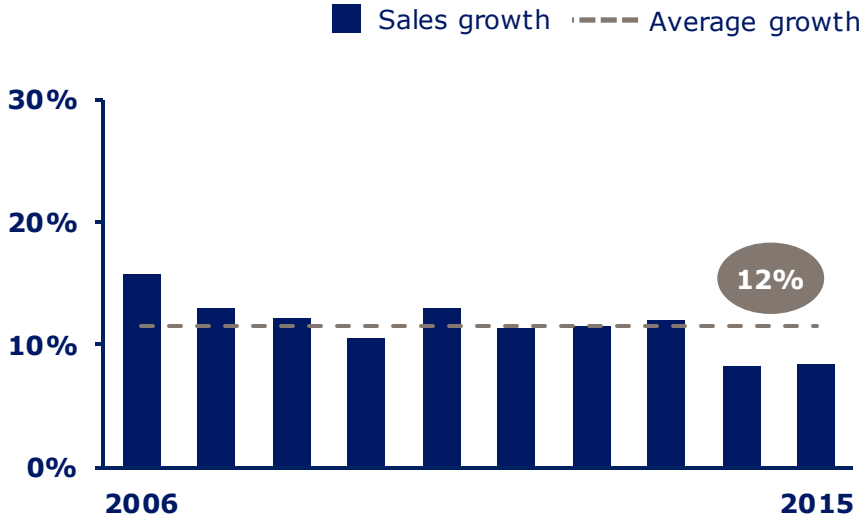
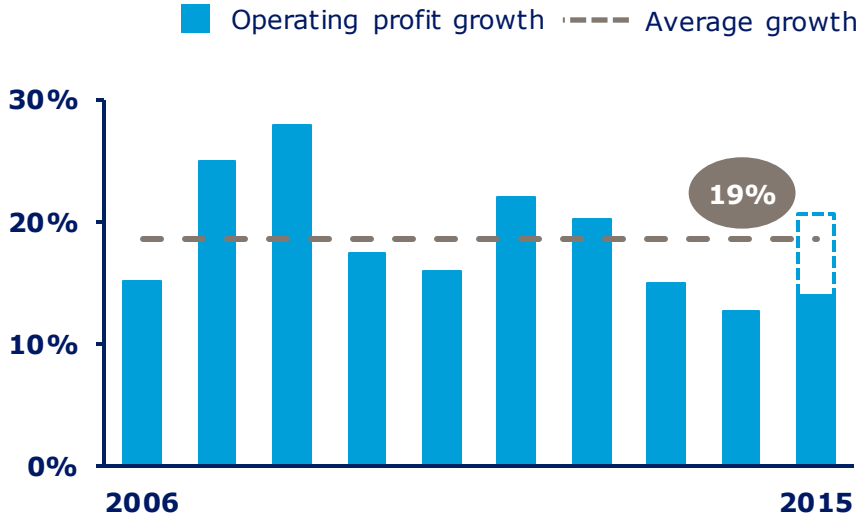
Financials

Novo Nordisk has delivered sustained double digit growth throughout the last decade

Sales growth in local currencies 2006–2015



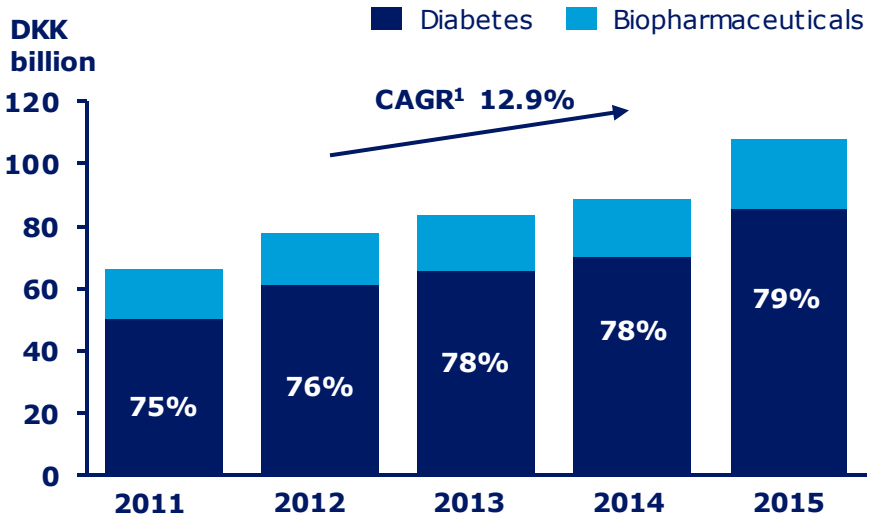
Operating profit growth in local currencies 2006–2015



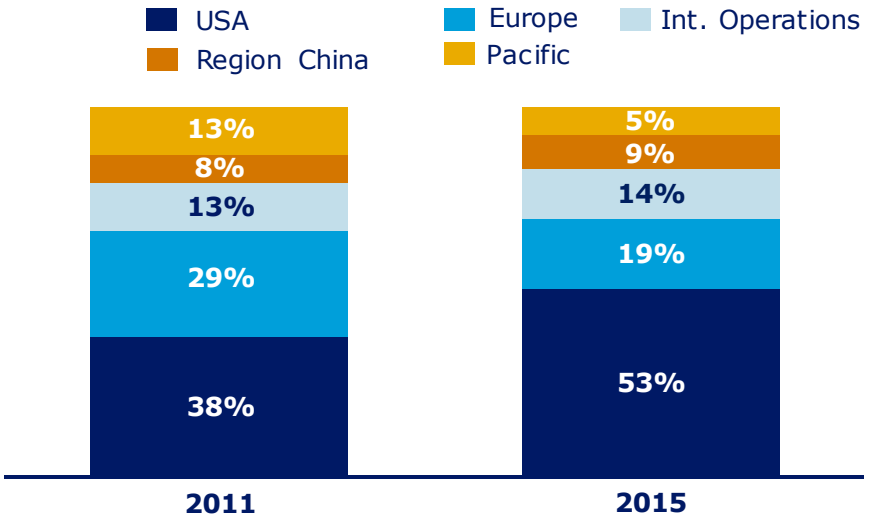
Note: Numbers for 2007 and 2008 are adjusted for the impact of the discontinuation of pulmonary insulin projects; Number for 2015 is adjusted for the non-recurring income related to the partial divestment of NNIT with the dotted component representing this income; average is calculated excluding the effect of the 2015 non-recurring income.

Solid sales growth driven by the US, International Operations and Region China

Reported annual sales



Reported annual sales split by region



¹ CAGR for 4-year period

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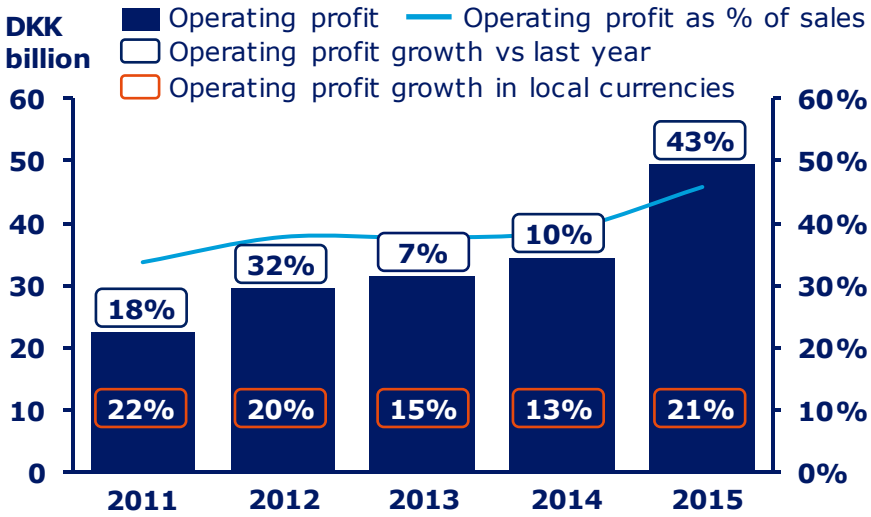
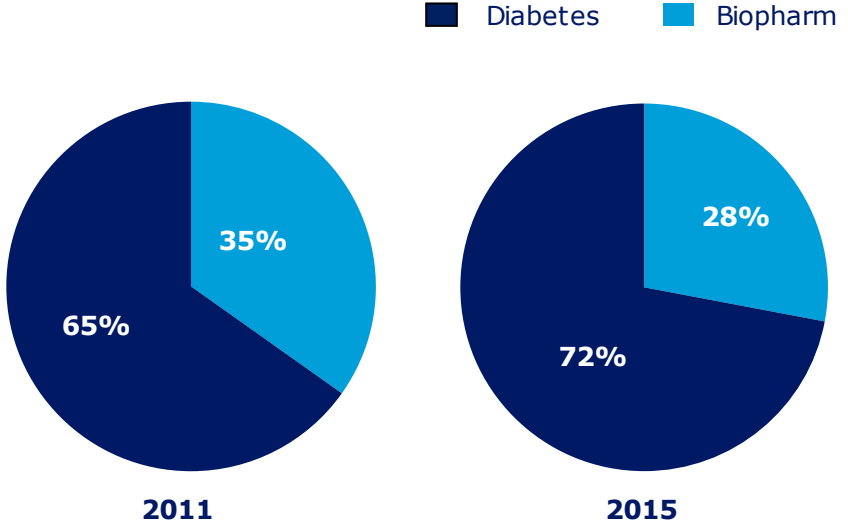
Solid operating profit growth driven by diabetes

Operating profit



Operating profit therapy split[1]



[1] 2015 numbers exclude the impact on operating profit resulting from the non-recurring income related to the partial divestment of NNIT

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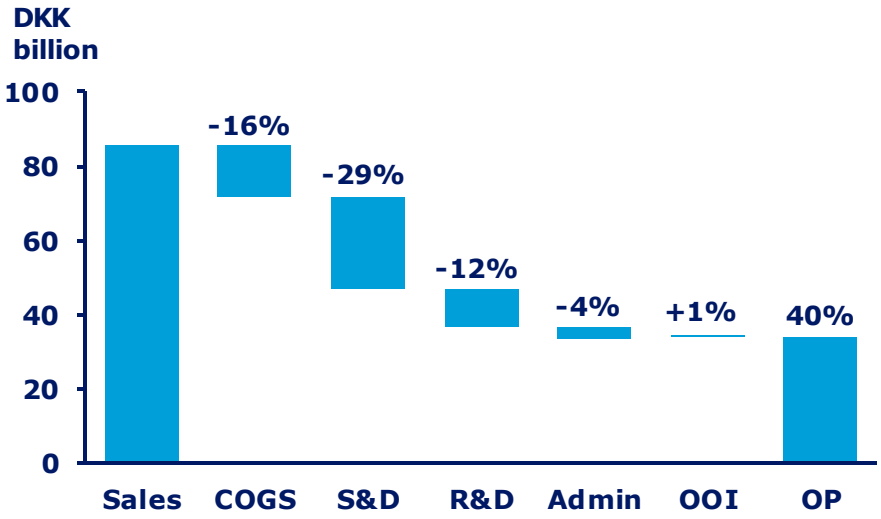
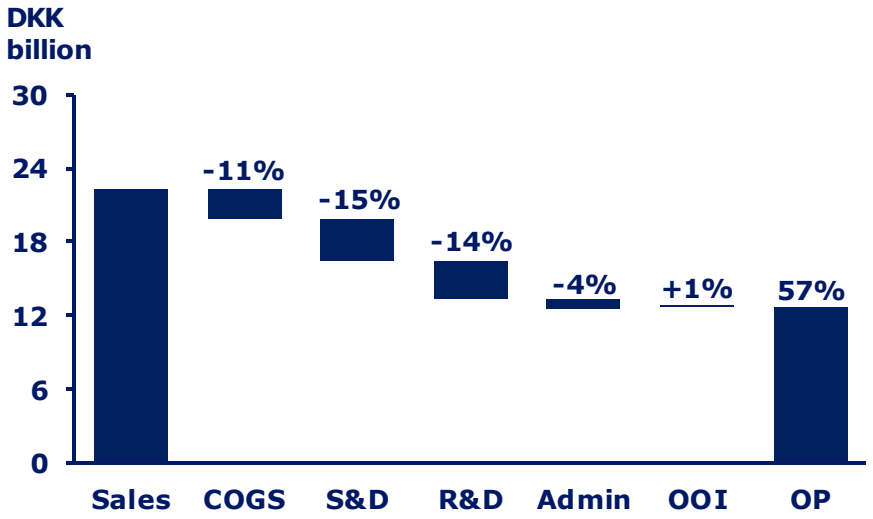
Profitability per segment

Diabetes P&L – full year 2015



Biopharmaceuticals[1] P&L – full year 2015



P&L: Profit and Loss; COGS: Cost of goods sold; OOI: Other operating income; OP: Operating profit

[1] Excluding inflammation

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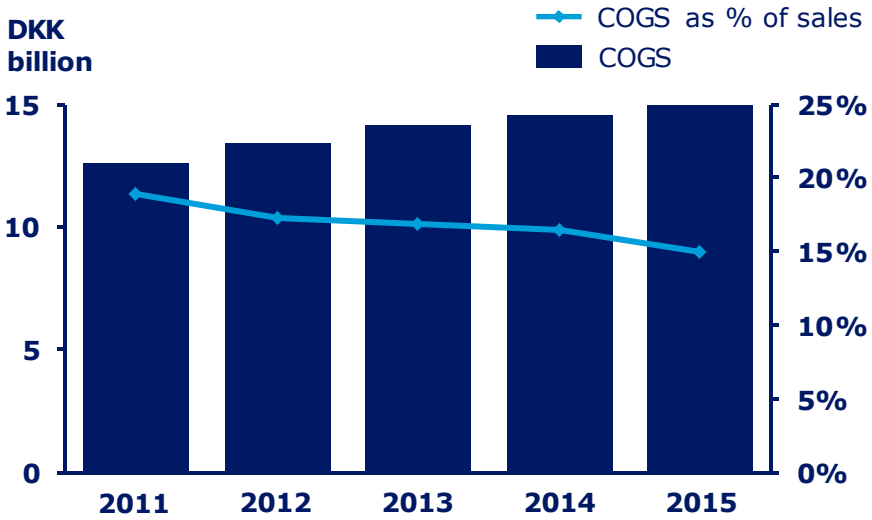
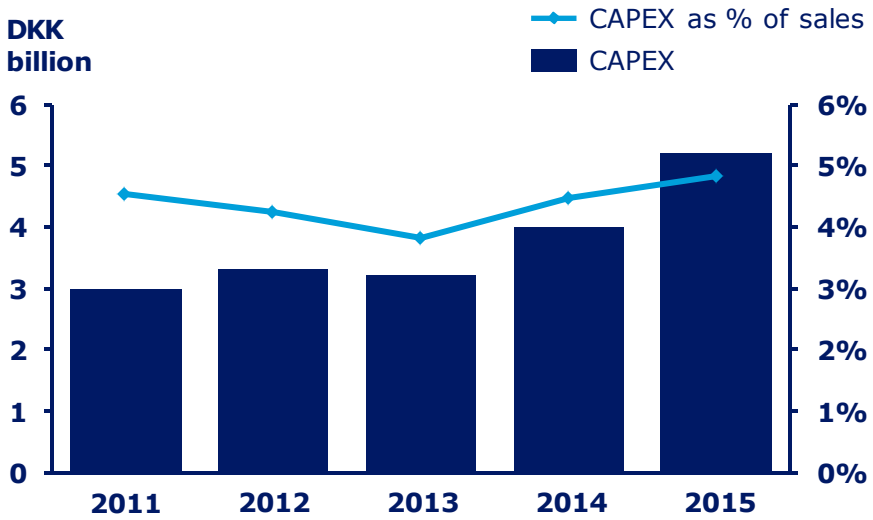
Decline in relative COGS level combined with stable investment level

Cost of Goods Sold (COGS)



Capital Expenditure (CAPEX)



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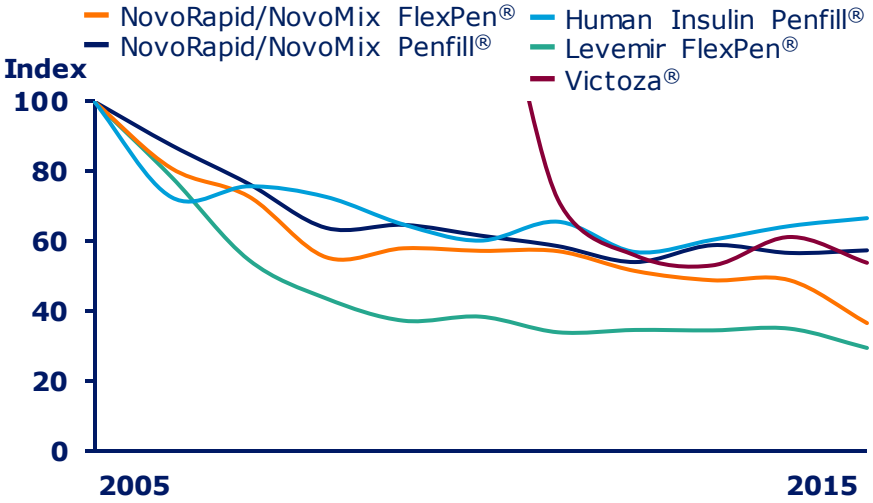
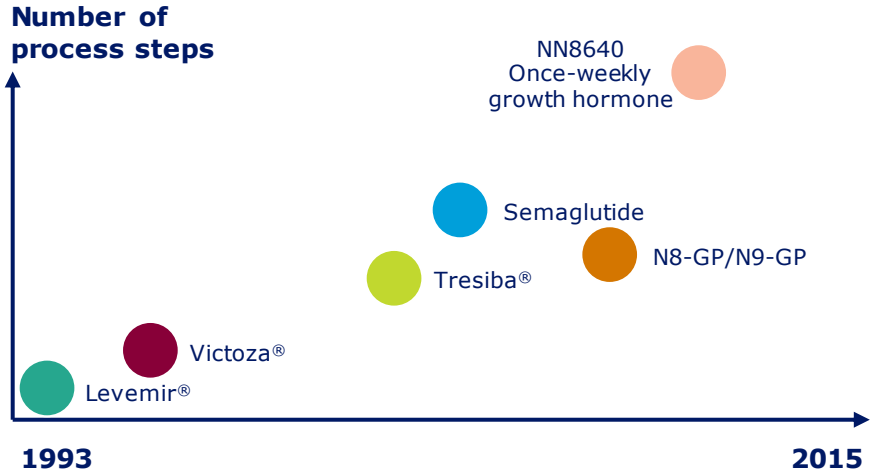
Limited future productivity gains expected, reflecting an increasing level of manufacturing complexity and maturity

After significant improvements, reductions in unit costs of mature products are declining



The complexity of molecules by number of API sidechain production steps is increasing



API: active pharmaceutical ingredient

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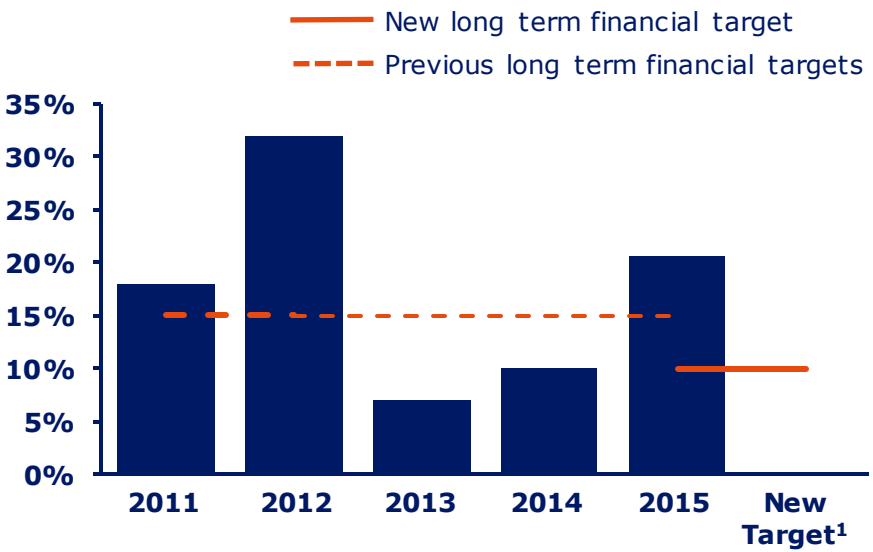
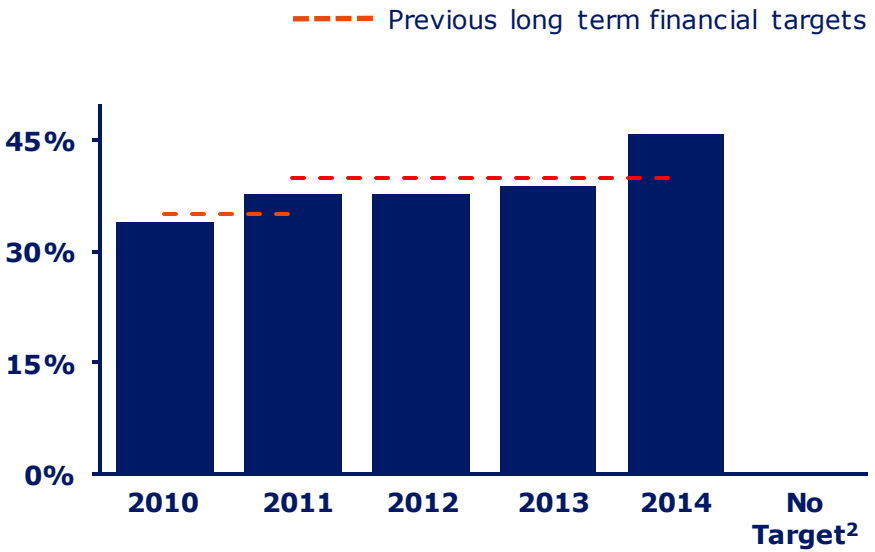
Long term financial targets:
Operating profit growth and operating margin

Operating profit growth



Operating margin



Note: The long term financial targets are based on an assumption of a continuation of the current business environment

[1] New long-term target established in connection with the full year 2015 report

[2] A new target for operating margin has not been established

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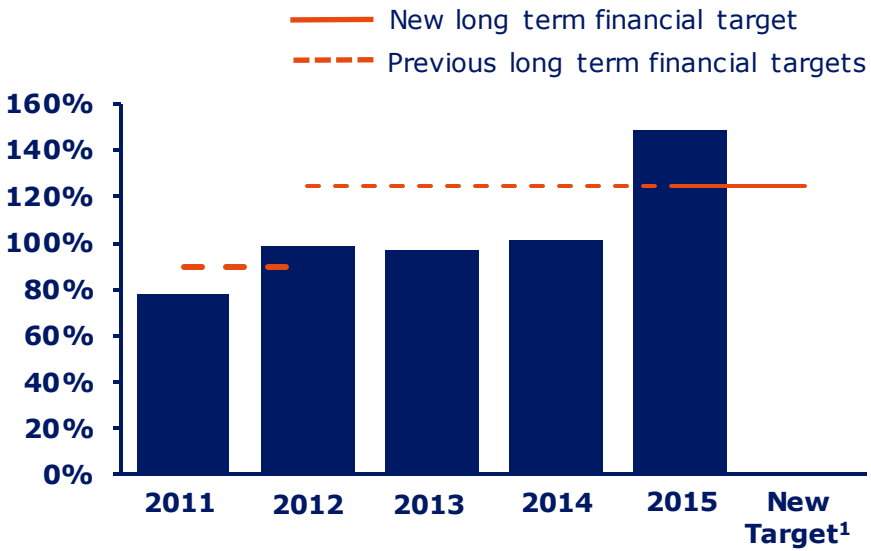
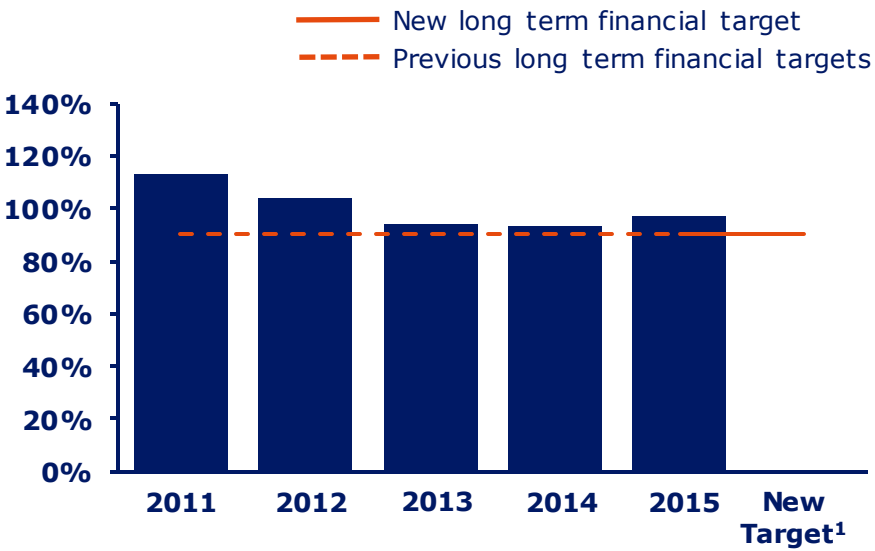
Long term financial targets:

Operating profit after tax to net operating assets and cash to earnings

Operating profit after tax to net operating assets



Cash to earnings (three year average)



Note: The long term financial targets are based on an assumption of a continuation of the current business environment

[1] New long-term target established in connection with the full year 2015 report

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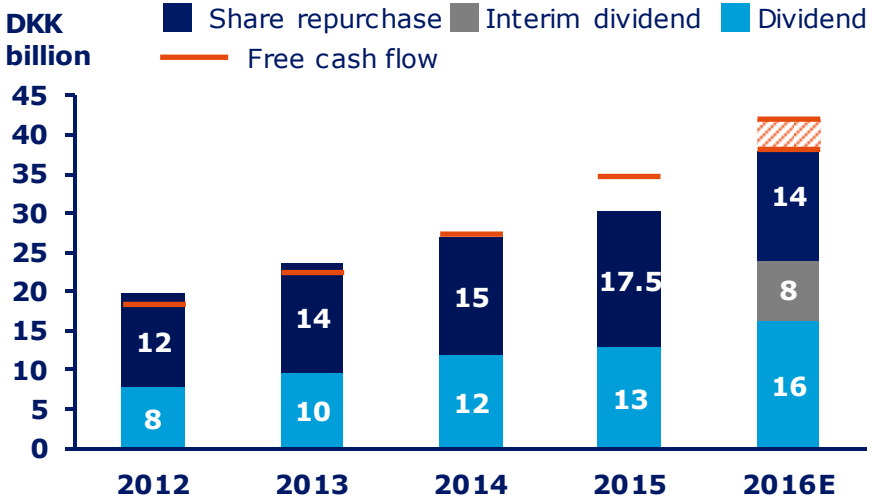
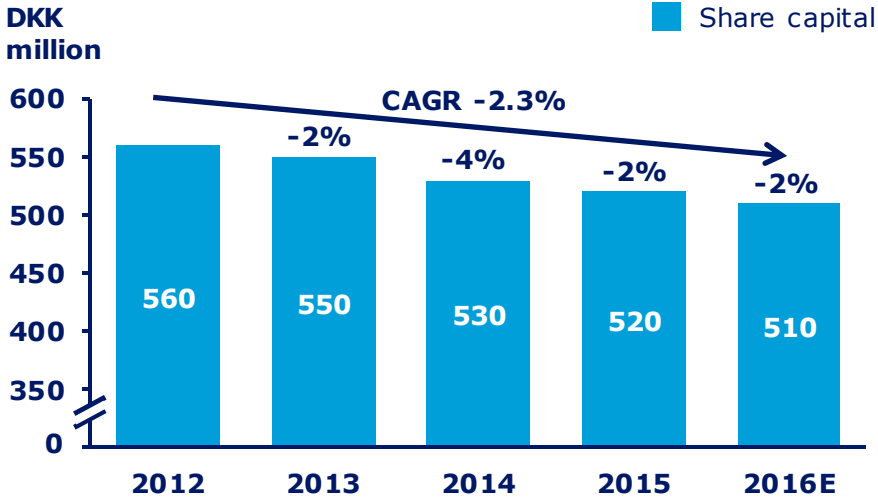
Organic growth enables steady cash return to shareholders via dividends and share repurchase programmes

Annual cash return to shareholders



Share repurchase programmes have enabled continued reduction in share capital



Note: Dividends are allocated to the year of dividend pay. For 2016 expected free cash flow is DKK 38-41 billion. Share repurchase programmes run for 12 months starting February until end January of the following year.

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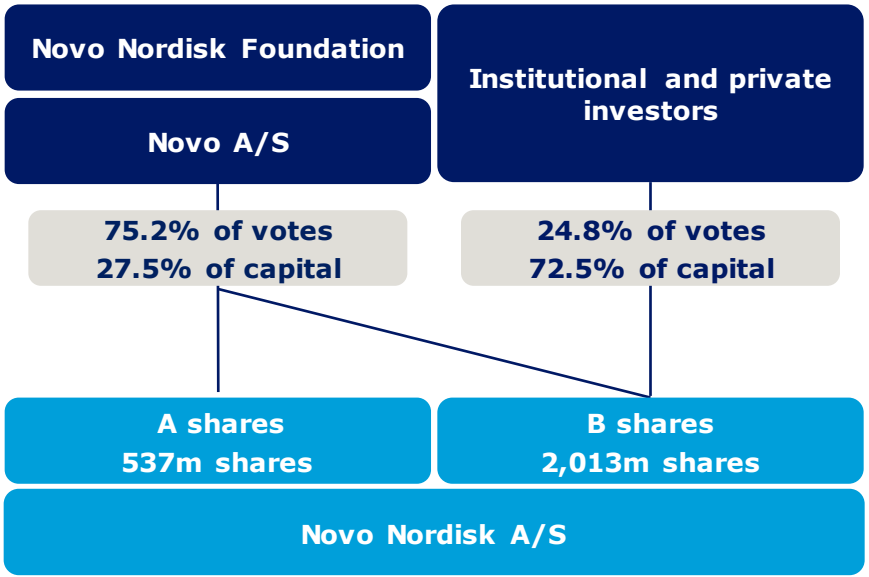
Stable ownership structure
- secured through A and B-share structure

Share structure



Note: Treasury shares are included in the capital but have no voting rights

The Novo Nordisk Foundation

- The Novo Nordisk Foundation is a self-governing institution that:
  - provides a stable basis for Novo Nordisk
  - supports scientific, humanitarian and social purposes
- All strategic and operational matters are governed by the board and management of Novo Nordisk
- Overlapping board memberships ensure that the Novo Nordisk Foundation and Novo Nordisk share vision and strategy

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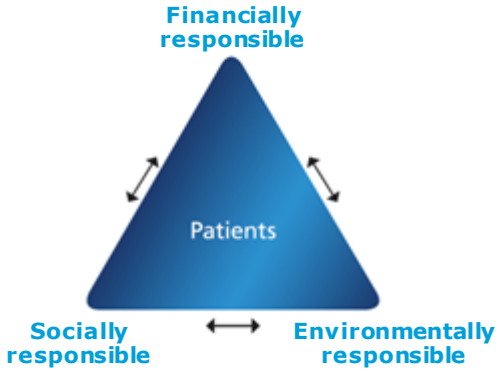
Sustainability

The Novo Nordisk Way

We build on the purpose set by our founders and live by their values: The **Novo Nordisk Way** sets the direction and unites us around a common purpose in the pursuit of our aspirations

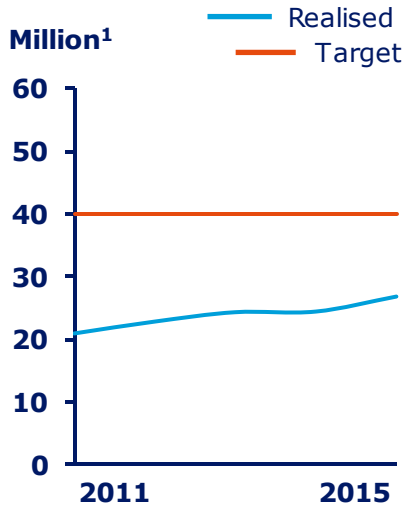
The Triple Bottom Line Business Principle



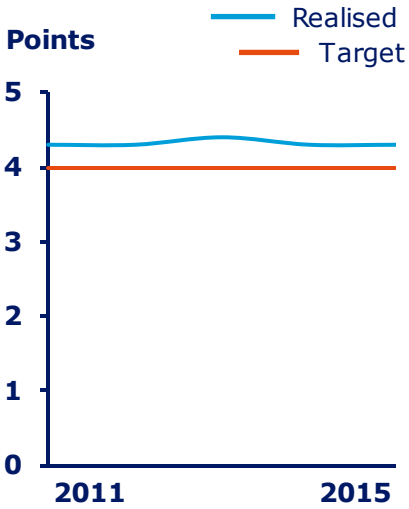
The **Triple Bottom Line Principle** guides how we do business responsibly and how we make decisions that consider the interests of stakeholders and the long-term interests of our shareholders

In 2015, good progress was made towards achieving the long-term sustainability goals

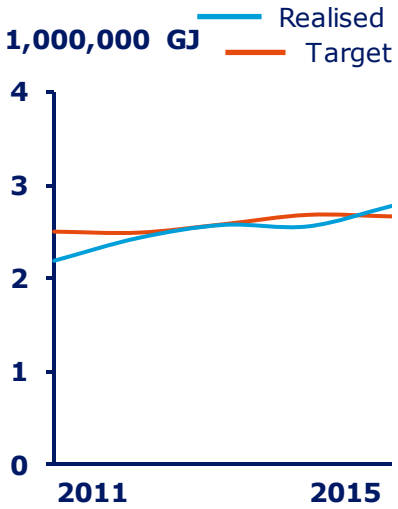
Patients reached with diabetes care products



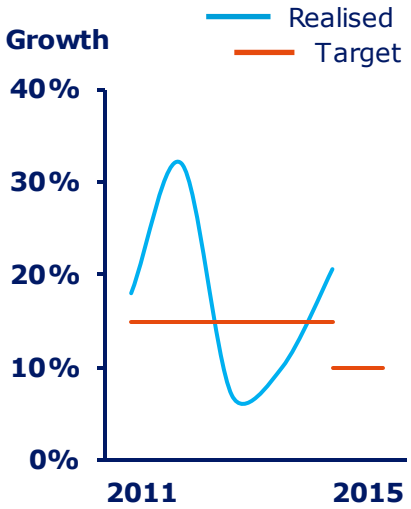
Working the Novo Nordisk Way[2]



Energy consumption[3]



Operating profit growth



[1] Novo Nordisk estimate; [2] Average score in annual employee survey (1-5); [3] Target not to exceed

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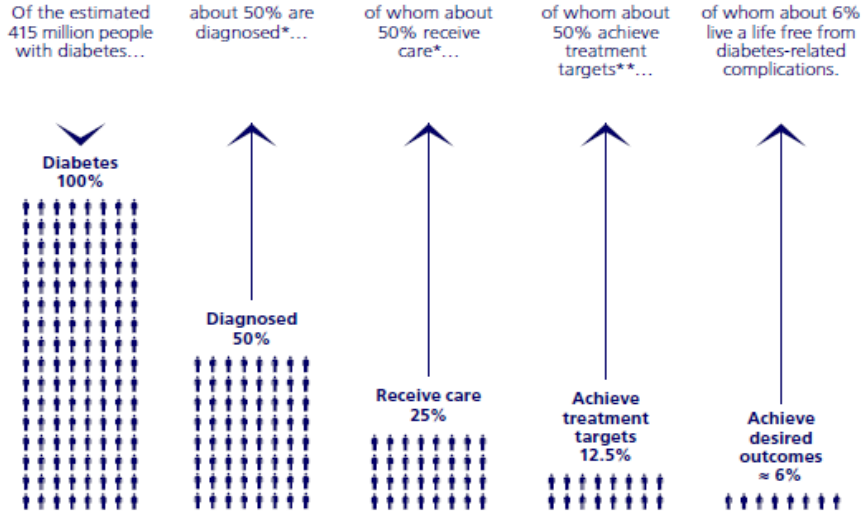
Changing Diabetes® encompasses multilevel projects that tackle the global diabetes pandemic

'Rule of Halves': only ~6% of people with diabetes achieve desirable outcomes



* Actual rates of diagnosis, treatment, targets and outcomes vary in different countries
** Recommended glucose levels

Changing Diabetes® addresses the largest potentials to overcome the 'Rule of Halves'

1. Early diagnosis:

- ~200 million people are left undiagnosed

2. Treatment to target:

- Over 30% will have at least one complication when diagnosed

3. Urban diabetes:

- Urban living can lead to 5 times higher risk of diabetes in emerging countries
- ~65% of people with diabetes live in urban areas globally

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Cities Changing Diabetes aims to break the 'Rule of Halves' and stop urban diabetes from ruining millions of lives

Global partnerships to develop an approach to fight urban diabetes

City Leaders

- Map the challenge in selected cities
- Share learning and best practices on how to break the 'Rule of Halves'
- Implement action plans with local partners

Seven partner cities are addressing the threat of urban diabetes

Urban diabetes: Type 2 diabetes in cities

Novo Nordisk is committed to the continued development of its employees

Employee health and safety and engagement are key focus areas for management

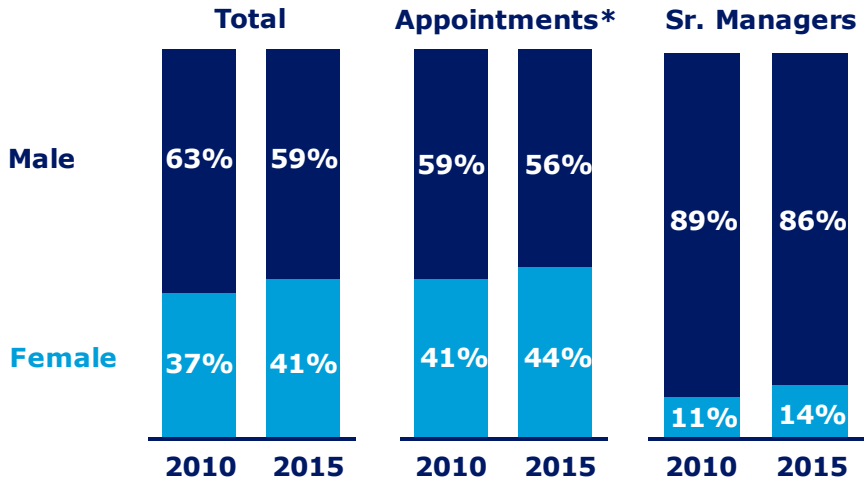
41,571 FTE employees and 6% growth vs LY[1]

4.3 engagement with the Novo Nordisk Way

90.9% retention rate

3.0 accidents per million working hours

Novo Nordisk is committed to building a diverse and inclusive organisation



Note: numbers refer to FY2015, except for FTEs
FTE: full-time employees
[1] Excluding employees in NNIT A/S, which was divested in 2015

* All appointments to management positions, incl. internal promotions and external hires, ex. NNIT

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