

Financial report for the period 1 January 2018 to 30 June 2018

8 August 2018

Novo Nordisk's operating profit decreased by 8% in Danish kroner and increased by 4% in local currencies in the first six months of 2018

Sales decreased by 5% in Danish kroner and increased by 4% in local currencies to DKK 54.3 billion.

- Sales of Victoza® increased by 2% to DKK 11.7 billion (12% in local currencies).
- Sales of Saxenda® increased by 35% to DKK 1.7 billion (50% in local currencies).
- Sales of Tresiba® were unchanged at DKK 3.7 billion (increased by 11% in local currencies).
- Sales of Xultophy® increased by 154% to DKK 720 million (165% in local currencies).
- Sales in North America Operations decreased by 10% (unchanged in local currencies).
- Sales in International Operations increased by 1% (8% in local currencies).

Sales within diabetes care and obesity decreased by 4% to DKK 45.6 billion (increased by 5% in local currencies).
Sales within biopharmaceuticals decreased by 9% to DKK 8.7 billion (decreased by 1% in local currencies).

Operating profit decreased by 8% in Danish kroner and increased by 4% in local currencies to DKK 24.7 billion, reflecting the significant depreciation of the US dollar and related currencies versus the Danish krone.

Net profit increased by 5% to DKK 21.1 billion. Diluted earnings per share increased by 7% to DKK 8.66.

In February 2018, Novo Nordisk launched Ozempic® in the USA, a new once-weekly GLP-1, and the initial feedback from prescribers and payers is positive and the formulary coverage for Ozempic® is progressing. The weekly new-to-brand prescription market share for Ozempic® has reached 14%.

During second quarter of 2018, Novo Nordisk announced the phase 3a results from four of the 10 clinical trials in the PIONEER programme with oral semaglutide, a new once-daily GLP-1 tablet for people with type 2 diabetes. The trials confirmed statistically significant reductions in both HbA_{1c} and weight for oral semaglutide compared to empagliflozin, sitagliptin and Victoza®.

The Board of Directors has approved an interim dividend for 2018 of DKK 3.00 per share of DKK 0.20 to be paid in August 2018.

For 2018, sales growth is still expected to be 3-5% and operating profit growth is still expected to be 2-5%, both measured in local currencies. Sales growth and operating profit growth reported in Danish kroner are now expected to be 5 and 7 percentage points lower than in local currencies, respectively.

For 2019, formulary negotiations with pharmacy benefit managers and managed care organisations in the USA are progressing. Subject to the final outcome of these negotiations, average prices after rebates are expected to be lower compared with the levels in 2018, predominantly due to basal insulin pricing and changed Medicare Part D coverage gap legislation. The market access for Novo Nordisk's key products is expected to remain broadly unchanged compared to 2018.

Lars Fruergaard Jørgensen, president and CEO: "Sales growth in the first half of 2018 was driven by solid performance of our key innovative products: Victoza®, Tresiba®, Xultophy® and Saxenda®, and the launch of Ozempic® is off to a good start in North America. We are encouraged about the clinical trial results for oral semaglutide and we are looking forward to making the first oral GLP-1 treatment available for people with type 2 diabetes."

About Novo Nordisk

Novo Nordisk is a global healthcare company with 95 years of innovation and leadership in diabetes care. This heritage has given us experience and capabilities that also enable us to help people defeat obesity, haemophilia, growth disorders and other serious chronic diseases. Headquartered in Denmark, Novo Nordisk employs approximately 43,100 people in 79 countries, and markets its products in more than 170 countries. Novo Nordisk's B shares are listed on Nasdaq Copenhagen (Novo-B). Its ADRs are listed on the New York Stock Exchange (NVO). For more information, visit novonordisk.com, Facebook, Twitter, LinkedIn, YouTube.

Conference call details

On 8 August 2018 at 13.00 CEST, corresponding to 7.00 am EDT, a conference call will be held. Investors will be able to listen in via a link on novonordisk.com, which can be found under 'Investors'. Presentation material for the conference call will be available approximately one hour before on the same page.

Webcast details

On 9 August 2018 at 13.30 CEST, corresponding to 7.30 am EDT, management will give a presentation to institutional investors and sell-side analysts in London. A webcast of the presentation can be followed via a link on novonordisk.com, which can be found under 'Investors'. Presentation material for the webcast will be made available on the same page.

Financial calendar

1 November 2018	Financial statement for first nine months of 2018
1 February 2019	Financial statement for 2018

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Further information about Novo Nordisk is available on novonordisk.com.

LIST OF CONTENTS

FINANCIAL PERFORMANCE	4
Consolidated financial statement for the first six months of 2018	4
Sales development	5
Diabetes care and obesity, sales development	6
Biopharmaceuticals, sales development	9
Development in costs and operating profit	10
Financial items (net)	10
Capital expenditure and free cash flow	11
OUTLOOK	12
RESEARCH & DEVELOPMENT UPDATE	14
SUSTAINABILITY UPDATE	17
EQUITY	18
LEGAL MATTERS	18
MANAGEMENT STATEMENT	20
FINANCIAL INFORMATION	21
Appendix 1: Quarterly numbers in DKK	21
Appendix 2: Income statement and statement of other comprehensive income	22
Appendix 3: Cash flow statement	23
Appendix 4: Balance sheet	24
Appendix 5: Equity statement	25
Appendix 6: Regional sales split	26
Appendix 7: Key currency assumptions	28
Appendix 8: New accounting standards in 2018	28
Appendix 9: Quarterly numbers in USD (additional information)	29
Appendix 10: Non-IFRS financial measures (additional information)	30

FINANCIAL PERFORMANCE

CONSOLIDATED FINANCIAL STATEMENT FOR THE FIRST SIX MONTHS OF 2018

These unaudited consolidated financial statements for the first six months of 2018 have been prepared in accordance with IAS 34 'Interim Financial Reporting'. The accounting policies adopted in the preparation are consistent with those applied in the *Annual Report 2017* of Novo Nordisk, except for the adoption of new, amended or revised standards and interpretations ('IFRSs') as published by the IASB that are endorsed by the EU and effective as of 1 January 2018. This includes IFRS 9 'Financial Instruments' applied prospectively and IFRS 15 'Revenue from Contracts with Customers' applied on a modified retrospective basis, see appendix 8. Furthermore, the financial report including the consolidated financial statements for the first six months of 2018 and Management's review have been prepared in accordance with additional Danish disclosure requirements for interim reports of listed companies.

Amounts are in DKK million, except for number of shares, earnings per share and full-time equivalent employees.

	H1 2018	H1 2017	% change H1 2017 to H1 2018
PROFIT AND LOSS			
DKK million			
Net sales	54,337	57,090	(5%)
Gross profit	45,788	48,430	(5%)
<i>Gross margin</i>	84.3%	84.8%	
Sales and distribution costs	13,541	13,548	0%
<i>Percentage of sales</i>	24.9%	23.7%	
Research and development costs	6,617	6,703	(1%)
<i>Percentage of sales</i>	12.2%	11.7%	
Administrative costs	1,715	1,770	(3%)
<i>Percentage of sales</i>	3.2%	3.1%	
Other operating income, net	737	467	58%
Operating profit	24,652	26,876	(8%)
<i>Operating margin</i>	45.4%	47.1%	
Financial items (net)	1,455	(1,229)	N/A
Profit before income taxes	26,107	25,647	2%
Income taxes	5,013	5,540	(10%)
Effective tax rate	19.2%	21.6%	
Net profit	21,094	20,107	5%
<i>Net profit margin</i>	38.8%	35.2%	
OTHER KEY NUMBERS			
Depreciation, amortisation and impairment losses	1,500	1,571	(5%)
Capital expenditure (tangible assets)	3,897	3,538	10%
Net cash generated from operating activities	25,585	22,215	15%
Free cash flow	20,468	18,792	9%
Total assets	103,248	97,825	6%
Equity	49,081	48,436	1%
<i>Equity ratio</i>	47.5%	49.5%	
Average number of diluted shares outstanding (million)	2,436.6	2,492.0	(2%)
Diluted earnings per share / ADR (in DKK)	8.66	8.07	7%
Full-time equivalent employees end of period	43,105	41,385	4%

SALES DEVELOPMENT

Sales decreased by 5% measured in Danish kroner and increased by 4% in local currencies in the first six months of 2018, reflecting a significant impact from the depreciation of the US dollar and related currencies versus the Danish krone. Sales growth in local currencies was realised within diabetes care and obesity with the majority of growth originating from Victoza[®], Tresiba[®], Xultophy[®] and Saxenda[®], partly offset by declining sales of Levemir[®]. Declining sales within biopharmaceuticals was driven by declining sales of NovoSeven[®] and 'Other biopharmaceuticals' partly offset by increased sales of NovoEight[®] and Norditropin[®].

Sales split per therapy	Sales H1 2018 DKK million	Sales H1 2017 DKK million	Growth as reported	Growth in local currencies	Share of growth in local currencies
The diabetes care and obesity segment					
Long-acting insulin	10,230	11,582	(12%)	(3%)	(17%)
- Tresiba [®]	3,707	3,689	0%	11%	19%
- Xultophy [®]	720	284	154%	165%	22%
- Levemir [®]	5,803	7,609	(24%)	(16%)	(58%)
Premix insulin	5,229	5,565	(6%)	1%	3%
- Ryzodeg [®]	320	196	63%	79%	7%
- NovoMix [®]	4,909	5,369	(9%)	(2%)	(4%)
Fast-acting insulin	9,714	10,419	(7%)	2%	9%
- Fiasp [®]	220	16	-	-	10%
- NovoRapid [®]	9,494	10,403	(9%)	0%	(1%)
Human insulin	4,701	4,971	(5%)	1%	4%
Total insulin	29,874	32,537	(8%)	0%	(1%)
Total GLP-1	11,982	11,525	4%	14%	77%
- Victoza [®]	11,718	11,525	2%	12%	63%
- Ozempic [®]	264	-	-	-	14%
Other diabetes care ¹⁾	2,132	2,244	(5%)	2%	2%
Total diabetes care	43,988	46,306	(5%)	4%	78%
Obesity (Saxenda [®])	1,653	1,225	35%	50%	29%
Diabetes care and obesity total	45,641	47,531	(4%)	5%	106%
The biopharmaceuticals segment					
Haemophilia ²⁾	4,797	5,315	(10%)	(2%)	(6%)
- NovoSeven [®]	4,040	4,663	(13%)	(6%)	(13%)
- NovoEight [®]	635	576	10%	16%	4%
Growth disorders (Norditropin [®])	3,184	3,325	(4%)	5%	7%
Other biopharmaceuticals ³⁾	715	919	(22%)	(18%)	(7%)
Biopharmaceuticals total	8,696	9,559	(9%)	(1%)	(6%)
Total sales	54,337	57,090	(5%)	4%	100%

¹⁾ Primarily NovoNorm[®], needles and GlucaGen[®] HypoKit[®].

²⁾ Comprises NovoSeven[®], NovoEight[®], NovoThirteen[®] and Refixia[®].

³⁾ Primarily Vagifem[®] and Activelle[®].

International Operations was the main driver of the sales growth, and the growth contributors were Region AAMEO (Africa, Asia, Middle East and Oceania), Region Latin America, Region China and Region Europe, partly offset by Region Japan & Korea. Sales growth in Region Latin America of 46% measured in local currencies was positively impacted by 7 percentage points due to inflationary price effects in countries with high inflation.

Sales split per region	Sales H1 2018 DKK million	Growth as reported	Growth in local currencies	Share of growth in local currencies
North America Operations	26,955	(10%)	0%	1%
- USA	25,830	(11%)	0%	(6%)
International Operations	27,382	1%	8%	99%
- Region Europe	10,693	1%	2%	8%
- Region AAMEO	6,093	1%	15%	42%
- Region China	5,780	2%	6%	16%
- Region Japan & Korea	2,741	(10%)	(3%)	(4%)
- Region Latin America	2,075	19%	46%	37%
Total sales	54,337	(5%)	4%	100%

Please refer to appendix 6 for further details on sales in the first six months of 2018.

In the following sections, unless otherwise noted, market data are based on moving annual total (MAT) from May 2018 and May 2017 provided by the independent data provider IQVIA.

DIABETES CARE AND OBESITY, SALES DEVELOPMENT

Sales of diabetes care and obesity products decreased by 4% measured in Danish kroner and increased by 5% in local currencies to DKK 45,641 million. Novo Nordisk is the world leader in diabetes care with a global value market share of 27%.

Insulin

Sales of insulin decreased by 8% to DKK 29,874 million measured in Danish kroner and remained unchanged in local currencies. Measured in local currencies, sales growth was driven by International Operations, where all five regions apart from Region Japan & Korea contributed to growth, offset by lower sales in North America Operations. Novo Nordisk is the global leader with 46% of the total insulin market and 45% of the market for modern insulin and new-generation insulin, both measured in volume.

Sales of long-acting insulin (Tresiba[®], Xultophy[®] and Levemir[®]) decreased by 12% measured in Danish kroner and 3% in local currencies to DKK 10,230 million.

Sales of Tresiba[®] (insulin degludec), the once-daily new-generation insulin, reached DKK 3,707 million compared with DKK 3,689 million in 2017. The roll-out of Tresiba[®] continues and the product has now been launched in 70 countries. Generally, Tresiba[®] has shown solid penetration in markets with reimbursement at a similar level to insulin glargine U100, whereas penetration remains modest in markets with restricted market access.

Sales of Xultophy[®], a once-daily combination of insulin degludec (Tresiba[®]) and liraglutide (Victoza[®]), reached DKK 720 million compared with DKK 284 million in 2017. Sales growth was driven by both International Operations, where predominantly Region Europe contributed to growth, and North America Operations. Xultophy[®] has been launched in 22 countries.

Sales of premix insulin (Ryzodeg[®] and NovoMix[®]) decreased by 6% measured in Danish kroner and increased by 1% in local currencies to DKK 5,229 million.

Sales of Ryzodeg[®], a soluble formulation of insulin degludec and insulin aspart, reached DKK 320 million compared with DKK 196 million in 2017. Ryzodeg[®] has been marketed in 20 countries, and feedback from patients and prescribers is encouraging.

Sales of fast-acting insulin (Fiasp[®] and NovoRapid[®]) decreased by 7% to DKK 9,714 million measured in Danish kroner and increased by 2% in local currencies.

Sales of Fiasp[®], the novel mealtime fast-acting insulin aspart, were DKK 220 million. Fiasp[®] has now been launched in 18 countries.

INSULIN MARKET SHARES (volume, MAT)	Novo Nordisk's share of the total insulin market		Novo Nordisk's share of the modern insulin and new-generation insulin market*	
	May 2018	May 2017	May 2018	May 2017
Global	46.1%	45.9%	45.1%	44.6%
North America Operations	39.6%	37.7%	40.4%	38.5%
- USA	39.9%	37.8%	41.1%	38.9%
International Operations	48.9%	49.4%	47.5%	47.9%
- Region Europe	43.8%	44.6%	43.5%	44.2%
- Region AAMEO**	56.0%	56.5%	50.8%	51.3%
- Region China***	51.9%	53.4%	60.7%	61.1%
- Region Japan & Korea	50.0%	49.3%	49.9%	48.6%
- Region Latin America****	43.4%	41.8%	38.6%	39.8%

Source: IQVIA, May 2018 data. * Modern insulin and new-generation insulin comprises the following Novo Nordisk products: Levemir®, NovoMix®, NovoRapid®, Tresiba®, Xultophy®, Ryzodeg® and Fiasp® ** Data available for 11 private markets representing approximately 70% of total Novo Nordisk's diabetes care sales in the region. *** Data for mainland China, excluding Hong Kong and Taiwan. **** Data available for three private markets representing approximately 70% of total Novo Nordisk's diabetes care sales in the region.

North America Operations

Sales of insulin in North America Operations decreased by 17% in Danish kroner and by 7% in local currencies. The decline in sales in the USA in the basal insulin segment was mainly driven by lower realised prices for Levemir® and phasing of rebates in 2017 for Tresiba® partly offset by higher sales of Tresiba® following a net market share gain of approximately 3 percentage points in the basal insulin segment, underlying volume growth as well as increased sales of Xultophy® 100/3.6. The decline in sales in the USA in the short-acting insulin segment was driven by lower realised prices due to phasing of rebates in 2017 for NovoLog® partly offset by underlying volume growth.

International Operations

Sales of insulin in International Operations remained unchanged in Danish kroner and increased by 7% in local currencies. Sales growth measured in local currencies was driven by modern and new-generation, long-acting, premix and fast-acting insulin, partly offset by declining human insulin sales.

Region Europe

Sales of insulin in Region Europe increased by 1% in Danish kroner and by 2% in local currencies. Sales were driven by the penetration of Xultophy®, Fiasp® and Tresiba® across the region, partly offset by contracting Levemir® sales reflecting the continued roll-out of Tresiba®, as well as declining NovoMix® and human insulin sales.

Region AAMEO

Sales of insulin in Region AAMEO increased by 2% in Danish kroner and by 16% in local currencies. The sales growth measured in local currencies was driven by growth of the overall diabetes care market and positive contribution from all three insulin segments: long-acting, premix and fast-acting as well as human insulin.

Region China

Sales of insulin in Region China increased by 1% in Danish kroner and by 5% in local currencies. The sales growth measured in local currencies was driven by continued growth in the three insulin segments: long-acting, premix and fast-acting, and Novo Nordisk has improved its market share in the long-acting insulin segment and broadly stabilised the modern insulin market share, partly offset by lower human insulin sales.

Region Japan & Korea

Sales of insulin in Region Japan & Korea decreased by 10% in Danish kroner and by 3% in local currencies. The decline in sales was driven by NovoMix® and NovoRapid®, as both products reached the 15-year price protection limit 1 April 2018 leading to significant mandatory price reductions, as well as lower human insulin sales, partly offset by positive contribution from market share gains for Ryzodeg® and Tresiba® in Japan.

Region Latin America

Sales of insulin in Region Latin America decreased by 3% in Danish kroner and increased by 22% in local currencies. The sales growth measured in local currencies was driven by growth of the overall diabetes care market, inflationary price effects and positive volume contribution from all three insulin segments: long-acting, premix and fast-acting as well as human insulin.

GLP-1 therapy for type 2 diabetes

Sales of GLP-1 therapy for type 2 diabetes (Victoza® and Ozempic®) increased by 4% in Danish kroner and by 14% in local currencies to DKK 11,982 million. Sales growth is predominantly driven by North America Operations comprising 77% share of the GLP-1 growth. The GLP-1 segment's value share of the total diabetes care market has increased to 13.0% compared with 10.7% 12 months ago. Victoza® continues to be the market leader in the GLP-1 segment with a 47% value market share.

GLP-1 MARKET SHARES (value, MAT)	GLP-1 share of total diabetes care market		Victoza® share of GLP-1 market	
	May 2018	May 2017	May 2018	May 2017
Global	13.0%	10.7%	47%	53%
North America Operations	15.4%	12.6%	46%	52%
- USA	15.5%	12.7%	45%	51%
International Operations	7.1%	6.1%	54%	61%
- Region Europe	11.1%	10.0%	56%	61%
- Region AAMEO*	2.9%	2.5%	46%	51%
- Region China**	1.0%	0.9%	78%	61%
- Region Japan & Korea	5.2%	4.0%	36%	50%
- Region Latin America***	5.7%	4.9%	70%	83%

Source: IQVIA, May 2018 data MAT. * Data for 11 selected private markets representing approximately 70% of Novo Nordisk's total diabetes care sales in the region. ** Data for mainland China, excluding Hong Kong and Taiwan. *** Data for three selected private markets representing approximately 70% of Novo Nordisk's total diabetes care sales in the region.

North America Operations

Sales of Novo Nordisk's GLP-1 diabetes products (Victoza® and Ozempic®) in North America Operations increased by 3% in Danish kroner and increased by 15% in local currencies. Sales growth is driven by an underlying prescription volume growth of the GLP-1 class of more than 20%, and Novo Nordisk is the market leader with a 46% value market share. The value share of the GLP-1 class of the total North American diabetes care market has increased to 15.4%.

In February 2018, Novo Nordisk launched Ozempic® in the USA, a new once-weekly GLP-1, and the initial feedback from prescribers and payers is positive and the formulary coverage for Ozempic® is progressing well. The weekly new-to-brand prescription market share for Ozempic® has reached 14%. Sales of Victoza® remained unchanged in Danish kroner and increased by 11% in local currencies. Sales growth of Victoza® is driven by the positive impact from the updated label for Victoza® reflecting cardiovascular benefits, partly offset by rebate adjustments related to prior periods and an impact from the launch of Ozempic®.

International Operations

Sales of Victoza® in International Operations increased by 8% in Danish kroner and by 13% in local currencies. Sales growth is driven by all regions. The value share of the GLP-1 class of the total International Operations diabetes care market has increased to 7.1% from 6.1% in 2017. Victoza® is the market leader with a 54% value market share.

Region Europe

Sales in Region Europe increased by 9% in both Danish kroner and in local currencies. The sales development reflects positive impact from the expanded CV label for Victoza® as well as competition from a once-weekly product. In Region Europe, the value share of the GLP-1 class of the total diabetes care market has increased to 11.1%. Victoza® remains the market leader in Region Europe with a 56% value market share.

Region AAMEO

Sales in Region AAMEO decreased by 5% in Danish kroner and increased by 8% in local currencies. Sales growth is primarily driven by a number of countries in the Middle East. The value share of the GLP-1 class of the total diabetes care market increased to 2.9%. Victoza[®] is the GLP-1 market leader across Region AAMEO with a value market share of 46%.

Region China

Sales in Region China increased by 50% in Danish kroner and by 57% in local currencies. The increase in sales reflects the inclusion of Victoza[®] in the Chinese National Reimbursement Drug List in July 2017. In China, Victoza[®] has increased its GLP-1 value market share to 78%, however, the GLP-1 class only represents 1.0% of the total diabetes care market measured in value.

Region Japan & Korea

Sales in Region Japan & Korea decreased by 1% in Danish kroner and increased by 6% in local currencies. The sales growth measured in local currencies reflects the continued expansion of the GLP-1 market in Japan, partly offset by intensified competition from a once-weekly product. In Region Japan & Korea, the GLP-1 class represents 5.2% of the total diabetes care market value compared with 4.0% in 2017. Victoza[®] holds a value market share of 36%.

Region Latin America

Sales in Region Latin America increased by 8% in Danish kroner and by 30% in local currencies. The sales growth reflects the continued expansion of the GLP-1 markets across the region. In Region Latin America, the GLP-1 class represents 5.7% of the total diabetes care market value compared with 4.9% in 2017. Victoza[®] remains the leader in the class with a value market share of 70%.

Other diabetes care

Sales of other diabetes care products, predominantly consisting of oral antidiabetic products, needles and GlucaGen[®]HypoKit[®], declined by 5% to DKK 2,132 million and increased by 2% in local currencies. Increasing sales measured in local currencies were both seen in North America Operations and in International Operations, where Region Latin America and Region China contributed to sales growth.

Saxenda[®] (obesity)

Sales of Saxenda[®], liraglutide 3 mg for weight management, increased by 35% in Danish kroner and by 50% in local currencies to DKK 1,653 million. Sales growth was driven by both North America Operations and International Operations, where Region AAMEO, Region Latin America and Region Europe contributed to growth. Saxenda[®] was launched in May 2015 in the USA and has obtained broad commercial formulary market access, but generally with prior authorisation requirements. Saxenda[®] has now been launched in 30 countries.

BIOPHARMACEUTICALS, SALES DEVELOPMENT

Sales of biopharmaceutical products decreased by 9% measured in Danish kroner and by 1% in local currencies to DKK 8,696 million. Decreasing sales were realised in North America Operations, partly offset by increased sales in International Operations.

Haemophilia

Sales of haemophilia products decreased by 10% measured in Danish kroner and by 2% in local currencies to DKK 4,797 million. The sales decrease was primarily driven by lower NovoSeven[®] sales in the USA and Region Europe reflecting increased competition from a recently introduced product as well as increased clinical trial activity from competing products, partly offset by increased NovoSeven[®] sales in Region Latin America due to timing of tender deliveries. Furthermore, sales of NovoEight[®] in Region Europe and Region AAMEO contributed positively to the sales development.

Growth disorders (Norditropin[®])

Sales of growth disorder products decreased by 4% to DKK 3,184 million measured in Danish kroner and increased by 5% in local currencies. The sales development measured in local currencies was driven by positive contribution from North America Operations driven by higher realised prices in the USA, offset by declining sales in International Operations predominantly Region Europe and Region Japan & Korea. Novo Nordisk is the leading company in the global human growth disorder market with a 27% market share measured in volume.

Other biopharmaceuticals

Sales of other products within biopharmaceuticals, which predominantly consist of hormone replacement therapy-related (HRT) products, declined by 22% measured in Danish kroner and by 18% in local currencies to DKK 715 million, primarily reflecting an effect from the launch of a generic version of Vagifem® in the USA.

DEVELOPMENT IN COSTS AND OPERATING PROFIT

The cost of goods sold declined by 1% at DKK 8,549 million, resulting in a gross margin of 84.3% measured in Danish kroner, compared with 84.8% in 2017. The decline in gross margin reflects a negative currency impact of 1.0 percentage point. The gross margin was positively impacted by improved productivity and positive contribution from product mix due to higher Victoza®, Tresiba® and Saxenda® sales, but partly countered by lower contribution from NovoSeven®. The gross margin was negatively impacted by lower prices primarily related to the basal insulin segment in the USA.

Sales and distribution costs remained unchanged in Danish kroner and increased by 8% in local currencies to DKK 13,541 million. The increase in sales and distribution costs reflects higher promotional activities in both North America Operations and International Operations to support Victoza® and Saxenda® as well as launch activities for Ozempic® in the USA, partly offset by lower costs for legal cases.

Research and development costs declined by 1% in Danish kroner and increased by 2% in local currencies to DKK 6,617 million, reflecting higher costs for both research and development. The increase in research costs was driven by increased costs for the diabetes care and obesity portfolio. The increase in development costs was predominantly driven by injectable semaglutide in obesity and the phase 3b SUSTAIN programme for Ozempic®.

Administration costs declined by 3% in Danish kroner and increased by 2% in local currencies to DKK 1,715 million.

Other operating income (net) was DKK 737 million compared with DKK 467 million in 2017. In the first six months of 2018, Novo Nordisk received a milestone payment from a partner related to an out-licensed clinical asset and Novo Nordisk recorded a net gain of DKK 122 million following the disposal of 2 million shares in NNIT to Novo Holdings A/S.

Operating profit decreased by 8% in Danish kroner and increased by 4% in local currencies to DKK 24,652 million.

FINANCIAL ITEMS (NET)

Financial items (net) showed a net gain of DKK 1,455 million compared with a net loss of DKK 1,229 million in 2017.

In line with Novo Nordisk's treasury policy, the most significant foreign exchange risks for the Group have been hedged, primarily through foreign exchange forward contracts. The foreign exchange result was a gain of DKK 1,495 million compared with a loss of DKK 1,161 million in 2017. This development reflects a gain on foreign exchange hedging involving especially the US dollar versus the Danish krone, partly offset by a net loss from non-hedged currencies.

A negative market value of financials contracts as per the end of June 2018 of approximately DKK 1.3 billion has been deferred for recognition later in 2018 and 2019.

CAPITAL EXPENDITURE AND FREE CASH FLOW

Net capital expenditure for property, plant and equipment was DKK 3.9 billion compared with DKK 3.5 billion in 2017. Net capital expenditure was primarily related to investments in a new production facility for a range of diabetes active pharmaceutical ingredients in Clayton, North Carolina, USA, a new diabetes care filling capacity in Hillerød, Denmark and an expansion of the manufacturing capacity for biopharmaceutical products in Kalundborg, Denmark.

Free cash flow was DKK 20.5 billion compared with DKK 18.8 billion in 2017. The increase of 9% compared with 2017 primarily reflects the timing of rebate payments in the USA and higher net profit partly offset by increased capital expenditure and increased investment in intangible assets reflecting an acquisition of a priority review voucher for Novo Nordisk diabetes care and obesity development portfolio.

KEY DEVELOPMENTS IN THE SECOND QUARTER OF 2018

Please refer to appendix 1 for an overview of the quarterly numbers in DKK and to appendix 6 for details on sales in the second quarter of 2018.

Sales in the second quarter of 2018 decreased by 4% in Danish kroner and increased by 2% in local currencies compared with the same period in 2017. The growth was driven by Victoza[®], Ozempic[®], Xultophy[®] and Saxenda[®], partly offset by Levemir[®] and NovoSeven[®]. From a geographic perspective, sales growth in local currencies was driven by International Operations growing 8%, partly offset by North America Operations declining 3%. The sales development in the USA was negatively impacted by rebate adjustments related to prior periods for Victoza[®] in second quarter of 2018 and rebate adjustments in 2017 for Tresiba[®] and NovoLog[®].

The gross margin was 84.1% in the second quarter of 2018 compared with 84.6% in the same period last year. The decline of 0.5 percentage point of the gross margin reflects a negative currency impact of 1.4 percentage points. The gross margin was positively impacted by improved productivity and positive contribution from product mix due to higher Victoza[®], Tresiba[®], Saxenda[®] and Ozempic[®] sales, partly countered by lower contribution from NovoSeven[®]. The gross margin was negatively impacted by lower prices primarily within the basal insulin segment in the USA.

Sales and distribution costs increased by 5% in Danish kroner and by 12% in local currencies compared with the same period in 2017 reflecting higher costs in both operating units. In North America Operations, the increase in costs reflected promotional activities for the launch of Ozempic[®] as well as Saxenda[®] promotion. In International Operations, growth in costs was mainly in Region AAMEO and in Region China.

Research and development costs decreased by 3% in Danish kroner and by 1% in local currencies compared with the same period in 2017. The decrease in research and development costs reflects the high level of research costs in second quarter of 2017 following impairment of early-stage diabetes and obesity assets. There was an underlying increase in development costs driven by injectable semaglutide in obesity and the preparation for the phase 2 initiation of once-weekly insulin LAI287, partly offset by lower costs for oral semaglutide due to the finalisation of the PIONEER trials.

Administrative costs decreased by 1% in Danish kroner and increased by 3% in local currencies compared with the same period in 2017 mainly related to higher spend across the regions.

Other operating income (net) was DKK 386 million in the second quarter of 2018 compared with DKK 189 million in the same period last year. In second quarter of 2018, Novo Nordisk received a milestone payment from a partner related to an out-licensed clinical asset.

Operating profit decreased by 9% in Danish kroner and increased by 2% in local currencies compared with the same period in 2017.

OUTLOOK

OUTLOOK 2018

The current expectations for 2018 are summarised in the table below:

Expectations are as reported, if not otherwise stated	Expectations 8 August 2018	Expectations 2 May 2018
Sales growth in local currencies as reported	3% to 5% Around 5 percentage points lower than in local currencies	3% to 5% Around 6 percentage points lower than in local currencies
Operating profit growth in local currencies as reported	2% to 5% Around 7 percentage points lower than in local currencies	2% to 5% Around 9 percentage points lower than in local currencies
Financial items (net)	Gain of around DKK 0.9 billion	Gain of around DKK 1.9 billion
Effective tax rate	19% to 20%	20% to 22%
Capital expenditure	Around DKK 9.5 billion	Around DKK 9.5 billion
Depreciation, amortisation and impairment losses	Around DKK 3 billion	Around DKK 3 billion
Free cash flow	DKK 27-32 billion	DKK 27-32 billion

For 2018, **sales growth** is expected to be 3% to 5%, measured in local currencies. This guidance reflects expectations for robust performance for the portfolio of new-generation insulin and the GLP-1-based products Victoza[®], Ozempic[®] and Saxenda[®]. Sales growth is expected to be partly countered by intensifying global competition both within diabetes care and biopharmaceuticals, especially within the haemophilia inhibitor segment, as well as continued pricing pressure within diabetes care, especially in the USA. Overall, the expectations are based on an assumption of a broadly unchanged global macroeconomic environment. Given the current exchange rates versus the Danish krone, growth reported in DKK is now expected to be around 5 percentage points lower than in local currencies.

For 2019, formulary negotiations with pharmacy benefit managers and managed care organisations in the USA are progressing. Subject to the final outcome of these negotiations, average prices after rebates are expected to be lower compared with the levels in 2018, predominantly due to basal insulin pricing and changed Medicare Part D coverage gap legislation. The market access for Novo Nordisk's key products is expected to remain broadly unchanged compared to 2018.

For 2018, **operating profit growth** is expected to be 2% to 5%, measured in local currencies. The expectation for operating profit growth primarily reflects the sales growth outlook and continued focus on cost control. The outlook also reflects a planned increase in the sales and distribution costs to support the commercialisation efforts for Ozempic[®]. Given the current exchange rates versus the Danish krone, growth reported in DKK is now expected to be around 7 percentage points lower than in local currencies.

For 2018, Novo Nordisk now expects **financial items (net)** to amount to a gain of around DKK 0.9 billion, partly offsetting the negative currency impact on operating profit. The current expectation for 2018 reflects gains associated with foreign exchange hedging contracts, mainly related to the US dollar and Japanese yen versus the Danish krone, partly offset by losses on non-hedged currencies. The expectation for financial items (net) reflects that net losses of DKK 0.7 billion in relation to foreign exchange hedging contracts as per 2 August 2018 are expected to be income recognised later in 2018.

The **effective tax rate** for 2018 is now expected to be in the range of 19-20%. The lower effective tax rate reflects a non-recurring change in tax provisions related to settlement of international tax cases covering multiple years. Furthermore, the effective tax rate in 2018 is positively impacted by the reduced federal corporate tax rate in the USA.

Capital expenditure is expected to be around DKK 9.5 billion in 2018, primarily related to investments in additional capacity for active pharmaceutical ingredient production within diabetes care and an expansion of the diabetes care filling capacity. **Depreciation, amortisation and impairment losses** are expected to be around DKK 3 billion. **Free cash flow** is expected to be DKK 27-32 billion.

All of the above expectations are based on assumptions that the global economic and political environment will not significantly change business conditions for Novo Nordisk during 2018, and that currency exchange rates, especially the US dollar, will remain at the current level versus the Danish krone. Please refer to appendix 7 for key currency assumptions.

Novo Nordisk has hedged expected net cash flows in a number of invoicing currencies and, all other things being equal, movements in key invoicing currencies will impact Novo Nordisk's operating profit as outlined in the table below.

Key invoicing currencies	Impact on Novo Nordisk's operating profit in the next 12 months of a 5% immediate movement in currency	Hedging period (months)
USD	DKK 2,000 million	11
CNY	DKK 330 million	6*
JPY	DKK 180 million	12
GBP	DKK 95 million	11
CAD	DKK 80 million	10

* Chinese yuan traded offshore (CNH) used as proxy when hedging Novo Nordisk's CNY currency exposure

The financial impact from foreign exchange hedging is included in Financial items (net).

RESEARCH & DEVELOPMENT UPDATE

DIABETES

Ozempic® (NN9535) label updated in the EU to reflect updated device offering

In May 2018, Novo Nordisk received an approval from the European Medicines Agency (EMA) to update the label for Ozempic® to reflect the updated device offering in the EU. Following the positive opinion, Ozempic® will be available in three pens; the titration dosage, 0.25 mg and the therapeutic dosages, 0.5 mg and 1 mg, and will be launched in the Ozempic® FlexTouch® pen, the latest generation of Novo Nordisk prefilled devices.

Approval of updated Xultophy® (NN9068) label in the EU based on LEADER and DEVOTE

In June 2018, the EU Commission approved the proposed update of the Xultophy® EU label to include data from the LEADER and DEVOTE trials. The LEADER trial was a multi-centre, international, randomised, double-blinded, placebo-controlled trial investigating the long-term (3.5-5 years) effects of Victoza® (liraglutide up to 1.8 mg) compared to placebo, both in addition to standard of care, in people with type 2 diabetes at high risk of major cardiovascular events. The DEVOTE trial, a long-term, randomised, double-blinded event-driven trial, was conducted to confirm the cardiovascular safety of Tresiba® (insulin degludec U100) compared to insulin glargine U100 when added to standard of care, in people with type 2 diabetes at high risk of cardiovascular events.

Additional four clinical trials successfully completed with oral semaglutide (NN9924) in the phase 3a programme PIONEER

In May and June 2018, Novo Nordisk announced the headline results from PIONEER 2, 3, 4 and 7, the phase 3a trials with oral semaglutide for treatment of adults with type 2 diabetes. Oral semaglutide is a new GLP-1 analogue taken once daily as a tablet.

Two distinct statistical approaches to evaluating the effects of oral semaglutide were applied in all the PIONEER trials; a primary statistical approach required by recent regulatory guidance, evaluating the effect regardless of discontinuation of treatment and use of rescue medication, and a secondary statistical approach describing the effect while on treatment and without use of rescue medication.

PIONEER 2: oral semaglutide compared with empagliflozin

PIONEER 2 was a 52-week, open label trial investigating the efficacy and safety of 14 mg oral semaglutide compared with 25 mg empagliflozin in 816 people with type 2 diabetes, inadequately controlled on metformin. The confirmatory endpoints were defined after 26 weeks of treatment.

The trial achieved its primary objective according to the primary statistical approach by demonstrating a statistically significant and superior improvement in HbA_{1c} with oral semaglutide compared to empagliflozin at 26 weeks. Difference in weight loss at 26 weeks between oral semaglutide and empagliflozin was not statistically significant when applying the primary statistical approach.

When applying the secondary statistical approach, people treated with 14 mg oral semaglutide achieved a statistically significant improvement in HbA_{1c} of 1.4% at 26 weeks and 1.3% at 52 weeks, compared to an improvement in HbA_{1c} of 0.9% and 0.8% with 25 mg empagliflozin at 26 and 52 weeks, respectively. The 14 mg dose of oral semaglutide demonstrated weight loss of 4.2 kg at 26 weeks and 4.7 kg at 52 weeks versus 3.8 kg with 25 mg empagliflozin at both 26 weeks and 52 weeks. The increased weight loss with oral semaglutide was statistically significant compared to empagliflozin at the 52-week time point.

In addition, applying the secondary statistical approach, the American Diabetes Association (ADA) treatment target of HbA_{1c} below 7.0% was achieved by 72% of people treated with 14 mg oral semaglutide compared with 47% of people treated with 25 mg empagliflozin at 52 weeks.

In the trial, oral semaglutide was well-tolerated and with a profile consistent with GLP-1-based therapy. The most common adverse event for oral semaglutide was mild to moderate nausea, which diminished over time. In PIONEER 2, 20% of people treated with oral semaglutide experienced nausea during the trial. The proportion of people who discontinued treatment due to adverse events was 11% for people treated with 14 mg oral semaglutide compared to 4% for people treated with 25 mg empagliflozin.

PIONEER 3: oral semaglutide compared with sitagliptin

PIONEER 3 was a 78-week trial investigating the efficacy and long-term safety of 3, 7 and 14 mg oral semaglutide compared with 100 mg sitagliptin in 1,864 people with type 2 diabetes inadequately controlled with metformin, with or without sulfonylurea. The confirmatory endpoints were assessed after 26 weeks of treatment.

The trial achieved its primary objective according to the primary statistical approach by demonstrating statistically significant and superior reductions in HbA_{1c} with oral semaglutide 7 and 14 mg compared to sitagliptin at week 26. Furthermore, people treated with oral semaglutide 7 and 14 mg achieved statistically significant and superior reductions in body weight compared to sitagliptin at week 26.

When applying the secondary statistical approach for week 26 and week 78, respectively, people treated with 7 and 14 mg oral semaglutide experienced statistically significantly greater reductions in HbA_{1c} of 1.1% and 0.7% with 7 mg oral semaglutide, 1.4% and 1.1% with 14 mg oral semaglutide compared to 0.8% and 0.4% with sitagliptin. Reductions in HbA_{1c} with 3 mg oral semaglutide at 26 and 78 weeks were 0.5% and 0.3%, respectively. The reduction was statistically significantly less than sitagliptin at week 26, but was not statistically different at week 78. Reductions in body weight from baseline were statistically significantly greater with 3, 7 and 14 mg oral semaglutide at week 26 and 78, respectively, with reductions of 1.2 and 1.9 kg for 3 mg oral semaglutide, 2.2 and 2.7 kg for 7 mg oral semaglutide and 3.3 and 3.5 kg for 14 mg oral semaglutide compared to 0.7 and 1.1 kg with sitagliptin.

In this 78-week trial, oral semaglutide was well-tolerated and with a profile consistent with GLP-1-based therapy. The most common adverse event for oral semaglutide was mild to moderate nausea, which diminished over time. In PIONEER 3, 7-15% of people treated with oral semaglutide experienced nausea, compared to 7% of people treated with sitagliptin. The proportion of people who discontinued treatment due to adverse events was 6-12% for people treated with oral semaglutide compared to 5% with sitagliptin.

PIONEER 4: oral semaglutide compared with Victoza[®]

PIONEER 4 was a 52-week double-blinded, double-dummy trial investigating the efficacy and safety of 14 mg oral semaglutide compared with Victoza[®] 1.8 mg and placebo in 711 people with type 2 diabetes inadequately controlled on metformin, with or without an SGLT-2 inhibitor.

PIONEER 4 achieved its primary objective according to the primary statistical approach by demonstrating a non-inferior reduction in HbA_{1c} and statistically significant and superior weight loss at 26 weeks with oral semaglutide compared to Victoza[®]. Furthermore, oral semaglutide provided statistically significant and superior reductions in HbA_{1c} and weight compared to placebo.

When applying the secondary statistical approach for week 26 and week 52, respectively, people treated with oral semaglutide experienced a reduction in HbA_{1c} of 1.3% and 1.2% compared to 1.1% and 0.9% with Victoza[®] whereas placebo declined by 0.1% and increased by 0.2%. Reductions in HbA_{1c} were statistically significantly greater with oral semaglutide compared to both Victoza[®] and placebo. Reduction in body weight from baseline was statistically significantly greater with oral semaglutide at 4.7 and 5.0 kg at 26 and 52 weeks, respectively, compared to 3.2 and 3.1 kg with Victoza[®], and 0.7 and 1.2 kg with placebo. The American Diabetes Association (ADA) treatment target of HbA_{1c} below 7.0% was achieved by 69% of people treated with oral semaglutide, 63% of people treated with Victoza[®] and 18% of people treated with placebo after 52 weeks; the difference between oral semaglutide and placebo was statistically significant.

In the trial, oral semaglutide was well-tolerated and with a profile consistent with GLP-1-based therapy. The most common adverse event for oral semaglutide was mild to moderate nausea which diminished over time. In PIONEER 4, 20% of people treated with oral semaglutide experienced nausea, compared to 18% of people treated with Victoza[®] and 4% of people treated with placebo. The proportion of people who discontinued treatment due to adverse events was 11% for people treated with oral semaglutide compared to 9% for people treated with Victoza[®] and 4% for people receiving placebo.

PIONEER 7: oral semaglutide compared with sitagliptin in a flexible dose setting

PIONEER 7 was a 52-week open-label trial investigating the efficacy and safety of oral semaglutide with dose adjustment based on clinical evaluation of glycaemic control and drug tolerability compared with the DPP-IV inhibitor 100 mg sitagliptin in 504 people with type 2 diabetes, inadequately controlled on 1-2 oral antidiabetics.

The trial achieved its primary objective according to the primary statistical principle by demonstrating that oral semaglutide was statistically significant and superior to sitagliptin 100 mg in the proportion of people achieving the American Diabetes Association (ADA) treatment target of HbA_{1c} below 7% at week 52. Oral semaglutide also demonstrated statistically significant and superior reductions in body weight versus sitagliptin.

When applying the secondary statistical approach, people treated with oral semaglutide experienced a statistically significant reduction in HbA_{1c} of 1.4% compared to 0.7% with sitagliptin at week 52. From a baseline HbA_{1c} of 8.3%, 63% of people treated with oral semaglutide achieved the target HbA_{1c} below 7% after 52 weeks of treatment compared to 28% of people treated with sitagliptin, and the difference was statistically significant. The reduction in body weight of 2.9 kg with oral semaglutide was statistically significantly greater at week 52 compared to 0.8 kg with sitagliptin. After 52 weeks of treatment, approximately 9% of the people receiving oral semaglutide treatment were receiving 3 mg oral semaglutide, while approximately 31% and 60% were receiving 7 mg and 14 mg oral semaglutide, respectively.

In the trial, oral semaglutide was well-tolerated and with a profile consistent with GLP-1-based therapy. The most common adverse event for oral semaglutide was mild to moderate nausea, which diminished over time. In PIONEER 7, 21% of people treated with oral semaglutide experienced nausea, compared to 2% of people treated with sitagliptin. The proportion of people who discontinued treatment due to adverse events was 9% for people treated with oral semaglutide compared to 3% for people treated with sitagliptin.

Novo Nordisk updates its CVOT plans for Ozempic® (NN9535) and oral semaglutide (NN9924) following dialogue with FDA

Following the US FDA's (Food and Drug Administration) approval of Ozempic® in December 2017, Novo Nordisk has engaged in a constructive dialogue with the FDA focusing on minimising the need for additional large cardiovascular outcomes trials (CVOTs) to obtain a cardiovascular (CV) indication for Ozempic®, as well as the overall number of large cardiovascular outcomes trials necessary for the semaglutide molecule in different formulations. At this point in time, Novo Nordisk has agreed with FDA that a bridging strategy between Ozempic® and oral semaglutide could be utilised to pursue a CV indication. The originally planned CVOT (SOUL) for Ozempic® is expected to be replaced by a new CVOT with oral semaglutide to pursue a CV indication for both products. This study is expected to be initiated in 2019. A potential alternative scenario that Novo Nordisk is evaluating is the possibility to obtain a CV indication for Ozempic® based on the already obtained clinical data from the CVOT SUSTAIN 6 in combination with the CVOT trial PIONEER 6 with oral semaglutide, which is expected to be reported before the end of 2018.

Phase 3b trial Ellipse with Victoza® (NN2211) in children and adolescents (10-17 years) successfully completed

In August 2018, Novo Nordisk completed the Ellipse trial with Victoza® in children and adolescents (10-17 years) with type 2 diabetes. This two-arm trial investigated the efficacy and safety of the maximum tolerated or required dose of Victoza® (0.6, 1.2 or 1.8 mg) compared to placebo when added to metformin, with or without basal insulin. The trial was randomised and double-blinded until week 26 and continued with an open-label extension until week 52.

The trial successfully met its primary objective of demonstrating superiority of Victoza® over placebo in lowering HbA_{1c} after 26 weeks. From a mean baseline HbA_{1c} of 7.8%, people treated with Victoza® experienced a reduction in HbA_{1c} of 0.6% while people treated with placebo experienced an increase of 0.4%. Reductions in HbA_{1c} were statistically significantly greater with Victoza® compared to placebo at week 26. The treatment difference in HbA_{1c} was 1.3% after 52 weeks and confirmed the sustained glycaemic control with Victoza®. The safety profile of Victoza® was comparable to that observed in the adult population treated with Victoza®.

Novo Nordisk plans to submit the results from the Ellipse trial to the FDA in the USA and the EMA in the EU in fourth quarter of 2018 to seek label expansion and six months patent extension related to the paediatric data in the USA and the EU.

Phase 3b trial LIRA-ADD2SGLT2i with Victoza® (NN2211) as add-on to any SGLT2 inhibitor successfully completed

In June 2018, Novo Nordisk completed the LIRA-ADD2SGLT2i trial with Victoza®. The trial investigated the effect of liraglutide 1.8 mg versus placebo as add-on to any SGLT2 inhibitor on glycaemic control in people with type 2 diabetes insufficiently controlled despite stable treatment with SGLT2 inhibitor with or without metformin for at least 90 days. The trial successfully met the primary endpoint and fulfilled its primary objective of demonstrating that treatment with liraglutide was superior with regards to lowering of HbA_{1c} with a treatment difference of -0.7%

versus placebo. Treatment with liraglutide resulted in a weight loss of 2.8 kg compared to a weight loss of 2.0 kg with placebo, with no statistically significant difference between groups. Liraglutide was well-tolerated and with a profile consistent with GLP-1-based therapy.

OBESITY

Four clinical phase 3a trials initiated with injectable semaglutide (NN9536) in people with obesity in the STEP programme

During second quarter of 2018 and in August 2018, Novo Nordisk initiated the STEP programme with injectable semaglutide 2.4 mg for people with obesity. Four trials were initiated under the STEP programme and approximately 4,500 people with obesity are expected to be enrolled. All four trials have a duration of 68 weeks and the STEP programme is expected to be completed in 2020.

Obesity portfolio review leads to discontinuation of FGF-21 (NN9499) and G530L (NN9030)

Novo Nordisk has conducted a review of its obesity portfolio and based on this review, it was concluded to discontinue two projects currently in phase 1 clinical development, FGF-21 and G530L. Novo Nordisk intends to pursue clinical development of FGF-21 in other serious chronic diseases. The decision to discontinue these projects was made in order to balance the investments in Novo Nordisk's obesity projects. The projects were not discontinued due to any major safety issues.

BIOPHARMACEUTICALS

Refixia® (NN7999) approved in Japan

In July 2018, Refixia® was approved in Japan for suppression of bleeding tendency in people with blood coagulation factor IX deficiency. The label includes use in all ages for routine prophylaxis, surgery and treatment of bleeds. As a next step, prior to commercial launch, the list price will be negotiated with the Japanese authorities.

Positive results from phase 2 trial with long-acting growth hormone somapacitan (NN8640) for treatment of Growth Hormone Deficiency (GHD).

In May 2018, Novo Nordisk completed the main phase of REAL 3, the phase 2 trial with long-acting recombinant growth hormone, somapacitan. REAL 3 was a multinational, randomised, parallel-group active-controlled trial with the primary endpoint to evaluate the efficacy of multiple dose regimens of once-weekly somapacitan after 26 weeks of treatment in 59 growth hormone treatment-naïve pre-pubertal children with growth hormone deficiency, compared to daily Norditropin® administration. The trial demonstrated dose dependency with no statistically significant difference in height velocity between somapacitan and daily growth hormone at the two upper doses of somapacitan. The mean annualised height velocity for the three dose levels of somapacitan was 8.0 cm, 10.9 cm and 12.9 cm, respectively, as compared to 11.4 cm for daily Norditropin®. The observed safety profile in the study was consistent with that known for Norditropin®. Novo Nordisk is now preparing for the pivotal phase 3 somapacitan programmes in GHD children as well as in children born small for gestational age (SGA), based on the dose direction obtained from the REAL 3 trial.

In July 2018, the Committee for Orphan Medicinal Products (COMP) Europe issued a positive opinion on the application for orphan drug designation for somapacitan for the treatment of growth hormone deficiency.

SUSTAINABILITY UPDATE

The number of employees in Novo Nordisk increased by 4%

The number of full-time employees at the end of the first six months of 2018 increased by 4% compared to 12 months ago. The total number of employees was 43,642, corresponding to 43,105 full-time positions. The growth in employees was mainly driven by the continued expansion of the global service centre in Bangalore, India, as well as increases in Region AAMEO, Product Supply and Research & Development.

Novo Nordisk secures renewable power for its production sites in Europe

In July 2018, Novo Nordisk signed a long-term power purchase agreement with the energy company Vattenfall, which will secure supplies of renewable power for all Novo Nordisk's production sites in Europe. With this agreement, Novo Nordisk has made an important step towards reaching its ambition that all Novo Nordisk production facilities worldwide will run on renewable power by 2020. Novo Nordisk will source power consumption

from the offshore wind farm Kriegers Flak in the Baltic Sea, which will be Denmark's largest wind farm. The agreement is effective as of 1 January 2020.

EQUITY

Total equity was DKK 49,081 million at the end of the first six months of 2018, equivalent to 47.5% of total assets, compared with 49.5% at the end of the first six months of 2017. Please refer to appendix 5 for further elaboration of changes in equity.

Interim dividend

The Board of Directors has decided to pay out interim dividend for 2018 of DKK 3.00 for each Novo Nordisk A and B share of DKK 0.20, which will be paid in August 2018. The ex-dividend date for the interim dividend will be 17 August 2018. The record date will be 20 August 2018 for the A and B shares as well as ADRs. The payment date for the A and B shares will be 21 August 2018, while the payment date for the ADRs will be 28 August 2018. No dividend will be paid on the company's holding of B shares.

2018 share repurchase programme

On 4 May 2018, Novo Nordisk announced a share repurchase programme of up to DKK 2.7 billion to be executed from 7 May to 6 August 2018, as part of an overall programme February 2018 to January 2019 of up to DKK 14 billion to be executed during a 12-month period. The purpose of the programme was to reduce the company's share capital and to meet obligations arising from share-based incentive programmes. Under the programme, Novo Nordisk has repurchased 8,855,013 B shares for an amount of DKK 2.7 billion in the period from 7 May to 6 August 2018. The programme was concluded on 6 August 2018. As of 6 August 2018, Novo Nordisk A/S has repurchased a total of 23,626,435 B shares equal to a transaction value of DKK 7.2 billion under the DKK 14 billion programme beginning 1 February 2018.

As of 6 August 2018, Novo Nordisk A/S and its wholly-owned affiliates owned 33,598,106 of its own B shares, corresponding to 1.4% of the total share capital.

Share repurchase under the overall programme of up to DKK 14 billion in the period February 2018 to January 2019 is expected to be resumed shortly. As announced in February 2018, Novo Nordisk's majority shareholder Novo Holdings A/S, a holding company fully owned by the Novo Nordisk Foundation, has informed Novo Nordisk that it intends to consider its participation in the Novo Nordisk share repurchase programme on a year-by-year basis. For 2018, Novo Holdings A/S has informed Novo Nordisk that it plans to participate in the share repurchase programme. Novo Holdings A/S has an ownership of 28.4% of the Novo Nordisk share capital after the implementation of the share capital decrease and Novo Holdings A/S currently intends to maintain its ownership of the Novo Nordisk share capital around 28%.

LEGAL MATTERS

Product liability lawsuits related to Victoza®

Novo Nordisk, along with the majority of incretin-based product manufacturers in the USA, is a defendant in product liability lawsuits related to use of incretin-based medications. As of 6 August 2018, 267 plaintiffs have named Novo Nordisk in product liability lawsuits, predominantly claiming damages for pancreatic cancer that allegedly developed as a result of using Victoza® and other GLP-1/DPP-IV (incretin-based) products. 172 of the Novo Nordisk plaintiffs have also named other defendants in their lawsuits. Most Novo Nordisk plaintiffs have filed suit in California federal and state courts.

In November 2015, all cases pending in the California federal and state courts were dismissed on Federal pre-emption grounds. Plaintiffs subsequently appealed these rulings to the Federal and California state appeals courts. In November 2017, the U.S. Court of Appeals for the Ninth Circuit reversed and vacated the Federal District Court Judge's ruling, thereby reinstating the dismissed federal lawsuits and sending them back to the Federal District Court in California for further proceedings. The ruling by the U.S. Court of Appeals does not bind the California State Appeals Court, which is currently reviewing the State Court judge's pre-emption ruling. Currently, Novo Nordisk does not have any individual trials scheduled in 2018. Novo Nordisk does not expect the pending claims to have a material impact on its financial position, operating profit or cash flow.

Forward-looking statements

Novo Nordisk's reports filed with or furnished to the US Securities and Exchange Commission (SEC), including this document as well as the company's statutory *Annual Report 2017* and Form 20-F, both filed with the SEC in February 2018, and written information released, or oral statements made, to the public in the future by or on behalf of Novo Nordisk, may contain forward-looking statements. Words such as 'believe', 'expect', 'may', 'will', 'plan', 'strategy', 'prospect', 'foresee', 'estimate', 'project', 'anticipate', 'can', 'intend', 'target' and other words and terms of similar meaning in connection with any discussion of future operating or financial performance identify forward-looking statements. Examples of such forward-looking statements include, but are not limited to:

- statements of targets, plans, objectives or goals for future operations, including those related to Novo Nordisk's products, product research, product development, product introductions and product approvals as well as cooperation in relation thereto
- statements containing projections of or targets for revenues, costs, income (or loss), earnings per share, capital expenditures, dividends, capital structure, net financials and other financial measures
- statements regarding future economic performance, future actions and outcome of contingencies such as legal proceedings, and
- statements regarding the assumptions underlying or relating to such statements.

In this document, examples of forward-looking statements can be found under the headings 'Outlook', 'Research and Development update' and 'Equity'.

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 document, could cause actual results to differ materially from those contemplated in any forward-looking statements.

Factors that may affect future results include, but are not limited to, global as well as local political and economic conditions, including interest rate and currency exchange rate fluctuations, delay or failure of projects related to research and/or development, unplanned loss of patents, interruptions of supplies and production, product recalls, unexpected contract breaches or terminations, government-mandated or market-driven price decreases for Novo Nordisk's products, introduction of competing products, reliance on information technology, Novo Nordisk's ability to successfully market current and new products, exposure to product liability and legal proceedings and investigations, changes in governmental laws and related interpretation thereof, including on reimbursement, intellectual property protection and regulatory controls on testing, approval, manufacturing and marketing, perceived or actual failure to adhere to ethical marketing practices, investments in and divestitures of domestic and foreign companies, unexpected growth in costs and expenses, failure to recruit and retain the right employees, and failure to maintain a culture of compliance.

For an overview of some, but not all, of the risks that could adversely affect Novo Nordisk's results or the accuracy of forward-looking statements in this document, reference is made to the overview of risk factors in 'The Risks of Doing Business' on pp 40-43 of the *Annual Report 2017*.

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

MANAGEMENT STATEMENT

The Board of Directors and Executive Management have reviewed and approved the financial report of Novo Nordisk A/S for the first six months of 2018. The financial report has not been audited or reviewed by the company's independent auditors.

The financial report for the first six months of 2018 has been prepared in accordance with IAS 34 'Interim Financial Reporting'. The accounting policies adopted in the preparation are consistent with those applied in the **Annual Report 2017** of Novo Nordisk, except for the adoption of new, amended or revised standards and interpretations (IFRSs) as published by the IASB that are endorsed by the EU effective as of 1 January 2018. This includes IFRS 9 'Financial Instruments' applied prospectively and IFRS 15 'Revenue from Contracts with Customers' applied modified retrospectively. Furthermore, the financial report for the first six months of 2018 and Management's Review are prepared in accordance with additional Danish disclosure requirements for interim reports of listed companies.

In our opinion, the accounting policies used are appropriate and the overall presentation of the financial report for the first six months of 2018 is adequate. Furthermore, in our opinion, Management's Review includes a true and fair account of the development in the operations and financial circumstances, of the results for the period and of the financial position of the Group as well as a description of the most significant risks and elements of uncertainty facing the Group in accordance with Danish disclosure requirements for listed companies.

Besides what has been disclosed in the quarterly financial report, no changes in the Group's most significant risks and uncertainties have occurred relative to what was disclosed in the consolidated annual report for 2017.

Bagsværd, 8 August 2018

Executive Management:

Lars Fruergaard Jørgensen
President and CEO

Karsten Munk Knudsen
CFO

Jesper Brandgaard

Lars Green

Camilla Sylvest

Mads Krogsgaard Thomsen

Henrik Wulff

Board of Directors:

Helge Lund
Chairman

Jeppe Christiansen
Vice chairman

Brian Daniels

Andreas Fibig

Sylvie Grégoire

Liz Hewitt

Mette Bøjer Jensen

Kasim Kutay

Anne Marie Kverneland

Martin Mackay

Thomas Rantzau

Stig Strøbæk

APPENDIX 1: QUARTERLY NUMBERS IN DKK

(Amounts in DKK million, except number of full-time equivalent employees, earnings per share and number of shares outstanding).

	2018		2017				% change Q2 2018 vs Q2 2017
	Q2	Q1	Q4	Q3	Q2	Q1	
Net sales	27,407	26,930	27,992	26,614	28,638	28,452	(4%)
Gross profit	23,055	22,733	23,292	22,342	24,229	24,201	(5%)
Gross margin	84.1%	84.4%	83.2%	83.9%	84.6%	85.1%	
Sales and distribution costs	7,090	6,451	8,295	6,497	6,761	6,787	5%
Percentage of sales	25.9%	24.0%	29.6%	24.4%	23.6%	23.9%	
Research and development costs	3,296	3,321	3,983	3,328	3,414	3,289	(3%)
Percentage of sales	12.0%	12.3%	14.2%	12.5%	11.9%	11.6%	
Administrative costs	851	864	1,118	896	857	913	(1%)
Percentage of sales	3.1%	3.2%	4.0%	3.4%	3.0%	3.2%	
Other operating income, net	386	351	151	423	189	278	104%
Operating profit	12,204	12,448	10,047	12,044	13,386	13,490	(9%)
Operating margin	44.5%	46.2%	35.9%	45.3%	46.7%	47.4%	
Financial income	1,039	1,198	175	392	421	258	147%
Financial expenses	745	37	(349)	(26)	1,164	744	(36%)
Financial items (net)	294	1,161	524	418	(743)	(486)	(140%)
Profit before income taxes	12,498	13,609	10,571	12,462	12,643	13,004	(1%)
Income taxes	2,155	2,858	2,318	2,692	2,692	2,848	(20%)
Net profit	10,343	10,751	8,253	9,770	9,951	10,156	4%
Depreciation, amortisation and impairment losses	768	732	905	706	863	708	(11%)
Capital expenditure (net)	1,587	2,310	3,043	2,098	1,934	1,604	(18%)
Net cash generated from operating activities	15,770	9,815	6,032	12,921	10,117	12,098	56%
Free cash flow	13,227	7,241	2,866	10,930	8,392	10,400	58%
Total assets	103,248	93,558	102,355	97,891	97,825	94,213	6%
Total equity	49,081	44,238	49,815	46,946	48,436	40,301	1%
Equity ratio	47.5%	47.3%	48.7%	48.0%	49.5%	42.8%	
Full-time equivalent employees end of period	43,105	42,688	42,076	41,656	41,385	41,636	4%
Basic earnings per share/ADR (in DKK)	4.27	4.41	3.38	3.96	4.01	4.07	6%
Diluted earnings per share/ADR (in DKK)	4.26	4.40	3.36	3.96	4.01	4.06	6%
Average number of shares outstanding (million)	2,425.8	2,437.3	2,451.2	2,465.6	2,480.2	2,495.8	(2%)
Average number of diluted shares outstanding (million)	2,430.9	2,442.3	2,456.1	2,469.4	2,484.1	2,500.0	(2%)
Sales by business segment:							
Long-acting insulin	5,357	4,873	5,494	5,098	5,976	5,606	(10%)
Premix insulin	2,587	2,642	2,622	2,562	2,704	2,861	(4%)
Fast-acting insulin	4,936	4,778	4,618	5,087	5,102	5,317	(3%)
Human insulin ¹⁾	2,335	2,366	2,393	2,429	2,455	2,516	(5%)
Total insulin	15,215	14,659	15,127	15,176	16,237	16,300	(6%)
Total GLP-1	5,924	6,058	6,305	5,343	5,775	5,750	3%
Other diabetes care ¹⁾	1,011	1,121	1,014	1,044	1,072	1,172	(6%)
Total diabetes care	22,150	21,838	22,446	21,563	23,084	23,222	(4%)
Obesity (Saxenda [®])	883	770	697	640	686	539	29%
Diabetes care and obesity total	23,033	22,608	23,143	22,203	23,770	23,761	(3%)
Haemophilia	2,294	2,503	2,750	2,404	2,739	2,576	(16%)
Growth disorders (Norditropin [®])	1,703	1,481	1,709	1,621	1,679	1,646	1%
Other biopharmaceuticals	377	338	390	386	450	469	(16%)
Biopharmaceuticals total	4,374	4,322	4,849	4,411	4,868	4,691	(10%)
Sales by geographic segment:							
North America Operations	13,589	13,366	14,434	13,532	15,103	14,940	(10%)
- USA	12,952	12,878	13,879	12,967	14,583	14,402	(11%)
International Operations	13,818	13,564	13,558	13,082	13,535	13,512	2%
- Region Europe	5,460	5,233	5,418	5,190	5,355	5,226	2%
- Region AAMEO	3,194	2,899	3,068	2,929	3,057	2,964	4%
- Region China	2,751	3,029	2,510	2,531	2,608	3,060	5%
- Region Japan & Korea	1,484	1,257	1,570	1,462	1,573	1,467	(6%)
- Region Latin America	929	1,146	992	970	942	795	(1%)
Segment operating profit:							
Diabetes care and obesity	9,760	9,934	7,689	9,298	10,735	10,631	(9%)
Biopharmaceuticals	2,444	2,514	2,358	2,746	2,651	2,859	(8%)

¹⁾ Comparative figures have been restated as sales of bulk insulin are now disclosed as part of other diabetes care.

APPENDIX 2: INCOME STATEMENT AND STATEMENT OF COMPREHENSIVE INCOME

DKK million	H1 2018	H1 2017	Q2 2018	Q2 2017
Income statement				
Net sales	54,337	57,090	27,407	28,638
Cost of goods sold	8,549	8,660	4,352	4,409
Gross profit	45,788	48,430	23,055	24,229
Sales and distribution costs	13,541	13,548	7,090	6,761
Research and development costs	6,617	6,703	3,296	3,414
Administrative costs	1,715	1,770	851	857
Other operating income, net	737	467	386	189
Operating profit	24,652	26,876	12,204	13,386
Financial income	2,237	679	1,039	421
Financial expenses	782	1,908	745	1,164
Profit before income taxes	26,107	25,647	12,498	12,643
Income taxes	5,013	5,540	2,155	2,692
NET PROFIT	21,094	20,107	10,343	9,951
Basic earnings per share (DKK)	8.68	8.08	4.27	4.01
Diluted earnings per share (DKK)	8.66	8.07	4.26	4.01

Segment Information

Segment sales:				
Diabetes care and obesity	45,641	47,531	23,033	23,770
Biopharmaceuticals	8,696	9,559	4,374	4,868
Segment operating profit:				
Diabetes care and obesity	19,694	21,366	9,760	10,735
<i>Operating margin</i>	<i>43.1%</i>	<i>45.0%</i>	<i>42.4%</i>	<i>45.2%</i>
Biopharmaceuticals	4,958	5,510	2,444	2,651
<i>Operating margin</i>	<i>57.0%</i>	<i>57.6%</i>	<i>55.9%</i>	<i>54.5%</i>
Total segment operating profit	24,652	26,876	12,204	13,386

Statement of comprehensive income

Net profit for the Period	21,094	20,107	10,343	9,951
Other comprehensive income				
<i>Items that will not subsequently be reclassified to the Income statement</i>				
Remeasurements on defined benefit plans	68	85	(8)	—
<i>Items that will be reclassified subsequently to the Income statement</i>				
Exchange rate adjustments of investments in subsidiaries	125	(357)	92	(301)
Cash flow hedges, realisation of previously deferred (gains)/losses	(1,758)	1,236	(674)	647
Cash flow hedges, deferred gains/(losses) incurred during the period	(1,574)	2,276	(2,211)	2,282
Other items	(10)	(152)	(23)	(14)
Tax on other comprehensive income, income/(expense)	704	(733)	642	(752)
Other comprehensive income for the Period, net of tax	(2,445)	2,355	(2,182)	1,862
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	18,649	22,462	8,161	11,813

APPENDIX 3: CASH FLOW STATEMENT

DKK million	H1 2018	H1 2017
Net profit	21,094	20,107
Adjustment for non-cash items:		
Income taxes in the Income Statement	5,013	5,540
Depreciation, amortisation and impairment losses	1,500	1,571
NNIT non-recurring income included in 'other operating income'	(122)	—
Other non-cash items	3,557	1,463
Change in working capital	27	(1,683)
Interest received	22	69
Interest paid	(45)	(41)
Income taxes paid	(5,461)	(4,811)
Net cash generated from operating activities	25,585	22,215
Proceeds from the partial divestment NNIT A/S	368	—
Purchase of intangible assets	(1,059)	(255)
Proceeds from sale of property, plant and equipment	1	6
Purchase of property, plant and equipment	(4,458)	(3,159)
Proceeds from other financial assets	21	11
Purchase of other financial assets	—	(40)
Sale of marketable securities	—	2,006
Dividend received from associated company	10	14
Net cash used in investing activities	(5,117)	(1,417)
Purchase of treasury shares, net	(7,750)	(8,005)
Dividends paid	(11,810)	(11,448)
Net cash used in financing activities	(19,560)	(19,453)
NET CASH GENERATED FROM ACTIVITIES	908	1,345
Cash and cash equivalents at the beginning of the year	17,158	18,461
Exchange gain/(loss) on cash and cash equivalents	81	(162)
Cash and cash equivalents at the end of the period	18,147	19,644

APPENDIX 4: BALANCE SHEET

DKK million	30 Jun 2018	31 Dec 2017
ASSETS		
Intangible assets	4,197	3,325
Property, plant and equipment	37,971	35,247
Investment in associated company	533	784
Deferred income tax assets	2,057	1,941
Other financial assets	988	978
TOTAL NON-CURRENT ASSETS	45,746	42,275
Inventories	16,134	15,373
Trade receivables	18,973	20,165
Tax receivables	724	958
Other receivables and prepayments	2,635	2,428
Derivative financial instruments	643	2,304
Cash at bank	18,393	18,852
TOTAL CURRENT ASSETS	57,502	60,080
TOTAL ASSETS	103,248	102,355
EQUITY AND LIABILITIES		
Share capital	490	500
Treasury shares	(6)	(11)
Retained earnings	50,671	48,977
Other reserves	(2,074)	349
TOTAL EQUITY	49,081	49,815
Deferred income tax liabilities	476	846
Retirement benefit obligations	1,247	1,336
Provisions	3,265	3,302
Total non-current liabilities	4,988	5,484
Current debt	247	1,694
Trade payables	5,830	5,610
Tax payables	3,383	4,242
Other liabilities	13,451	14,446
Derivative financial instruments	1,523	309
Provisions	24,745	20,755
Total current liabilities	49,179	47,056
TOTAL LIABILITIES	54,167	52,540
TOTAL EQUITY AND LIABILITIES	103,248	102,355

APPENDIX 5: EQUITY STATEMENT

DKK million	Share capital	Treasury shares	Retained earnings	Other reserves				Total
				Exchange rate adjustments	Cash flow hedges	Tax and other adjustments	Total other reserves	
H1 2018								
Balance at the beginning of the period	500	(11)	48,977	(1,556)	2,027	(122)	349	49,815
Change in accounting policy, IFRS 9			(90)			90	90	—
Net profit for the period			21,094					21,094
Other comprehensive income for the period			68	125	(3,332)	694	(2,513)	(2,445)
Total comprehensive income for the period			21,072	125	(3,332)	784	(2,423)	18,649
<i>Transactions with owners:</i>								
Dividends			(11,810)					(11,810)
Share-based payments			194					194
Tax credit related to restricted stock units			(17)					(17)
Purchase of treasury shares		(5)	(7,745)					(7,750)
Reduction of the B share capital	(10)	10						—
Balance at the end of the period	490	(6)	50,671	(1,431)	(1,305)	662	(2,074)	49,081

DKK million	Share capital	Treasury shares	Retained earnings	Other reserves				Total
				Exchange rate adjustments	Cash flow hedges	Tax and other adjustments	Total other reserves	
H1 2017								
Balance at the beginning of the period	510	(9)	46,111	(924)	(1,915)	1,496	(1,343)	45,269
Net profit for the period			20,107					20,107
Other comprehensive income for the period			85	(357)	3,512	(885)	2,270	2,355
Total comprehensive income for the period			20,192	(357)	3,512	(885)	2,270	22,462
<i>Transactions with owners:</i>								
Dividends			(11,448)					(11,448)
Share-based payments			158					158
Tax credit related to restricted stock units			—					—
Purchase of treasury shares		(6)	(7,999)					(8,005)
Reduction of the B share capital	(10)	10						—
Balance at the end of the period	500	(5)	47,014	(1,281)	1,597	611	927	48,436

APPENDIX 6: REGIONAL SALES SPLIT

Q2 2018 sales split per region

DKK million	Total	North America Operations	USA	Inter-national Operations	Region Europe	Region AAMEO	Region China	Region Japan & Korea	Region Latin America
The diabetes care and obesity segment									
Long-acting insulin	5,357	3,330	3,252	2,027	1,078	334	205	228	182
% change in local currencies	(4%)	(12%)	(13%)	15%	10%	24%	20%	7%	29%
Tresiba®	1,952	1,247	1,228	705	316	82	2	199	106
% change in local currencies	(4%)	(16%)	(17%)	27%	27%	48%	200%	13%	39%
Levemir®	3,023	1,955	1,896	1,068	522	241	203	29	73
% change in local currencies	(10%)	(14%)	(14%)	0%	(11%)	14%	19%	(21%)	14%
Premix insulin	2,587	295	286	2,292	428	713	949	170	32
% change in local currencies	2%	(27%)	(27%)	7%	(11%)	18%	9%	(3%)	20%
NovoMix®	2,408	295	286	2,113	412	646	949	82	24
% change in local currencies	(2%)	(27%)	(27%)	3%	(13%)	11%	9%	(30%)	22%
Fast-acting insulin	4,936	2,512	2,413	2,424	1,151	631	360	198	84
% change in local currencies	4%	(2%)	(3%)	11%	7%	23%	17%	(14%)	34%
NovoRapid®	4,799	2,456	2,362	2,343	1,070	631	360	198	84
% change in local currencies	1%	(4%)	(5%)	8%	0%	23%	17%	(14%)	34%
Human insulin	2,335	532	495	1,803	399	508	664	51	181
% change in local currencies	0%	14%	17%	(3%)	(10%)	8%	(7%)	(13%)	(3%)
Total insulin	15,215	6,669	6,446	8,546	3,056	2,186	2,178	647	479
% change in local currencies	0%	(8%)	(8%)	7%	3%	18%	6%	(5%)	16%
Victoza®	5,729	4,135	3,994	1,594	962	212	132	159	129
% change in local currencies	6%	3%	3%	14%	12%	0%	61%	9%	37%
Other diabetes care ¹⁾	1,206	399	341	807	154	156	384	98	15
% change in local currencies	19%	98%	109%	(2%)	5%	(10%)	(2%)	(3%)	59%
Total diabetes care	22,150	11,203	10,781	10,947	4,172	2,554	2,694	904	623
% change in local currencies	2%	(2%)	(2%)	8%	5%	14%	6%	(2%)	20%
Obesity (Saxenda®)	883	603	551	280	52	122	—	14	92
% change in local currencies	40%	13%	12%	181%	130%	340%	—	—	91%
Diabetes care and obesity total	23,033	11,806	11,332	11,227	4,224	2,676	2,694	918	715
% change in local currencies	4%	(1%)	(2%)	9%	5%	18%	6%	(1%)	26%
The biopharmaceuticals segment									
Haemophilia	2,294	976	880	1,318	666	292	52	156	152
% change in local currencies	(11%)	(24%)	(30%)	2%	(8%)	29%	(4%)	0%	13%
NovoSeven®	1,886	846	780	1,040	458	268	50	116	148
% change in local currencies	(14%)	(25%)	(30%)	(3%)	(19%)	27%	(5%)	3%	10%
NovoEight®	339	77	68	262	201	19	2	36	4
% change in local currencies	1%	(40%)	(47%)	29%	33%	100%	100%	(11%)	200%
Growth disorders (Norditropin®)	1,703	680	676	1,023	388	184	4	387	60
% change in local currencies	9%	20%	20%	3%	(6%)	22%	0%	5%	8%
Other biopharmaceuticals	377	127	64	250	182	42	1	23	2
% change in local currencies	(12%)	(25%)	(44%)	(3%)	4%	(19%)	—	(23%)	100%
Biopharmaceuticals total	4,374	1,783	1,620	2,591	1,236	518	57	566	214
% change in local currencies	(4%)	(12%)	(16%)	2%	(6%)	21%	(2%)	2%	12%
Total sales	27,407	13,589	12,952	13,818	5,460	3,194	2,751	1,484	929
% change in local currencies	2%	(3%)	(4%)	8%	3%	18%	6%	0%	22%
% change as reported	(4%)	(10%)	(11%)	2%	2%	4%	5%	(6%)	(1%)
Share of growth	100%	(65%)	(88%)	165%	21%	86%	25%	1%	32%

¹⁾ Primarily NovoNorm®, Ozempic® and needles.

APPENDIX 6: REGIONAL SALES SPLIT (CONTINUED)

H1 2018 sales split per region

DKK million	Total	North America Operations	USA	International Operations	Region Europe	Region AAMEO	Region China	Region Japan & Korea	Region Latin America
The diabetes care and obesity segment									
Long-acting insulin	10,230	6,311	6,169	3,919	2,083	644	409	425	358
<i>% change in local currencies</i>	(3%)	(11%)	(11%)	14%	7%	27%	21%	7%	35%
<i>Tresiba®</i>	3,707	2,366	2,338	1,341	590	172	4	371	204
<i>% change in local currencies</i>	11%	3%	2%	29%	26%	64%	150%	11%	49%
<i>Levemir®</i>	5,803	3,723	3,609	2,080	1,032	443	405	54	146
<i>% change in local currencies</i>	(16%)	(22%)	(22%)	(3%)	(16%)	11%	20%	(18%)	14%
Premix insulin	5,229	706	688	4,523	856	1,348	1,938	317	64
<i>% change in local currencies</i>	1%	(21%)	(21%)	6%	(10%)	16%	8%	0%	21%
<i>NovoMix®</i>	4,909	706	688	4,203	831	1,223	1,938	162	49
<i>% change in local currencies</i>	(2%)	(21%)	(21%)	3%	(12%)	11%	8%	(26%)	20%
Fast-acting insulin	9,714	5,054	4,867	4,660	2,247	1,129	729	388	167
<i>% change in local currencies</i>	2%	(5%)	(5%)	10%	7%	19%	17%	(11%)	40%
<i>NovoRapid®</i>	9,494	4,978	4,800	4,516	2,103	1,129	729	388	167
<i>% change in local currencies</i>	0%	(6%)	(6%)	8%	0%	19%	17%	(11%)	40%
Human insulin	4,701	1,017	948	3,684	803	982	1,463	93	343
<i>% change in local currencies</i>	1%	22%	26%	(3%)	(9%)	8%	(8%)	(16%)	4%
Total insulin	29,874	13,088	12,672	16,786	5,989	4,103	4,539	1,223	932
<i>% change in local currencies</i>	0%	(7%)	(7%)	7%	2%	16%	5%	(3%)	22%
<i>Victoza®</i>	11,718	8,653	8,384	3,065	1,833	449	242	285	256
<i>% change in local currencies</i>	12%	11%	11%	13%	9%	8%	57%	6%	30%
Other diabetes care ¹⁾	2,396	688	590	1,708	292	316	886	181	33
<i>% change in local currencies</i>	15%	68%	76%	1%	(2%)	(8%)	5%	(1%)	51%
Total diabetes care	43,988	22,429	21,646	21,559	8,114	4,868	5,667	1,689	1,221
<i>% change in local currencies</i>	4%	1%	0%	7%	3%	13%	6%	(2%)	24%
Obesity (Saxenda®)	1,653	1,153	1,055	500	90	214	—	14	182
<i>% change in local currencies</i>	50%	30%	30%	133%	133%	222%	—	—	69%
Diabetes care and obesity total	45,641	23,582	22,701	22,059	8,204	5,082	5,667	1,703	1,403
<i>% change in local currencies</i>	5%	2%	1%	9%	4%	17%	6%	(1%)	28%
The biopharmaceuticals segment									
Haemophilia	4,797	1,904	1,780	2,893	1,374	579	103	289	548
<i>% change in local currencies</i>	(2%)	(18%)	(21%)	13%	(7%)	15%	(2%)	(5%)	157%
<i>NovoSeven®</i>	4,040	1,664	1,572	2,376	992	531	101	212	540
<i>% change in local currencies</i>	(6%)	(21%)	(23%)	10%	(16%)	10%	(3%)	(4%)	157%
<i>NovoEight®</i>	635	153	144	482	368	35	2	69	8
<i>% change in local currencies</i>	16%	(15%)	(20%)	32%	35%	171%	100%	(10%)	175%
Growth disorders (Norditropin®)	3,184	1,230	1,223	1,954	766	339	8	719	122
<i>% change in local currencies</i>	5%	16%	16%	(2%)	(5%)	3%	0%	(4%)	14%
Other biopharmaceuticals	715	239	126	476	349	93	2	30	2
<i>% change in local currencies</i>	(18%)	(30%)	(46%)	(10%)	(2%)	(14%)	(33%)	(49%)	100%
Biopharmaceuticals total	8,696	3,373	3,129	5,323	2,489	1,011	113	1,038	672
<i>% change in local currencies</i>	(1%)	(10%)	(12%)	5%	(5%)	7%	(2%)	(6%)	106%
Total sales	54,337	26,955	25,830	27,382	10,693	6,093	5,780	2,741	2,075
<i>% change in local currencies</i>	4%	0%	0%	8%	2%	15%	6%	(3%)	46%
<i>% change as reported</i>	(5%)	(10%)	(11%)	1%	1%	1%	2%	(10%)	19%
<i>Share of growth</i>	100%	1%	(6%)	99%	8%	42%	16%	(4%)	37%

¹⁾ Primarily NovoNorm®, Ozempic® and needles.

APPENDIX 7: KEY CURRENCY ASSUMPTIONS

FX	FY 2017	Q2 2017	Q2 2018	% change	H1 2017	H1 2018	% change	Spot rate 2 August 2018
USD	660.0	675.6	625.2	(7%)	687.6	615.3	(11%)	641.5
CNY	98.0	98.5	98.0	0%	100.0	96.6	(3%)	94.0
JPY	5.9	6.1	5.7	(6%)	6.1	5.7	(7%)	5.8
GBP	849.0	864.4	850.2	(2%)	864.5	846.5	(2%)	836.5
CAD	508.0	502.3	484.2	(4%)	515.6	481.8	(7%)	492.3

APPENDIX 8: NEW ACCOUNTING STANDARDS IN 2018

As of 1 January 2018 Novo Nordisk applies, for the first time, IFRS 9 'Financial Instruments' and IFRS 15 'Revenue from Contracts with Customers'. As required by IAS 34, the effect of the implementation are disclosed below.

The impact of the implementation of IFRS 9 and IFRS 15 has been immaterial in relation to recognition and measurement.

Effect from IFRS 9

The implementation of IFRS 9 'Financial instruments' that replaces IAS 39 'Financial Instruments: Recognition and Measurement', has had the effect that the changes to the fair value of minor shareholdings are now, on an investment-by-investment basis, either recognised in the Income statement or Other comprehensive income. Changes in the fair value of current minor shareholdings are recognised in the Income statement. Previously fair value changes were recognised in Other comprehensive income. Furthermore hedge accounting is applied for the time value of currency options (open at closing date).

Novo Nordisk has implemented these changes using the prospective approach. The effect on the financial statements is specified in the table below.

30 June 2018			
DKK million	Previous accounting practice	Effect from change of practice	New accounting practice
Income statement	—	2	2
Statement of other comprehensive income	2	(2)	—
Equity statement ¹⁾	—	—	—

¹⁾ As a result of changed accounting practice DKK 90 million is moved from other reserves to retained earnings within equity as an adjustment to opening equity 1 January 2018.

Effect from IFRS 15

The group has implemented IFRS 15 'Revenue from Contracts with Customers' using the modified retrospective approach. IFRS 15 replaces the current standards on revenue (IAS 11 'Construction Contracts' and IAS 18 'Revenue').

There is no significant effect on the financial statements.

APPENDIX 9: QUARTERLY NUMBERS IN USD (ADDITIONAL INFORMATION)

Key figures are translated into USD as additional information - the translation is based on the average exchange rate for income statement and the exchange rate at the balance sheet date for balance sheet items. The specified percent changes in DKK are based on the changes in the 'Quarterly numbers in DKK', see appendix 1. The specified percentage change in USD is calculated as a development in USD numbers in this appendix.

(Amounts in USD million, except number of full-time equivalent employees, earnings per share and number of shares outstanding).

	2018		2017				% change Q2 2018 vs Q2 2017 in USD	% change Q2 2018 vs Q2 2017 in DKK
	Q2	Q1	Q4	Q3	Q2	Q1		
Net sales	4,384	4,446	4,418	4,198	4,230	4,073	4%	(4%)
Gross profit	3,688	3,753	3,678	3,526	3,579	3,465	3%	(5%)
Gross margin	84.1%	84.4%	83.2%	83.9%	84.6%	85.1%		
Sales and distribution costs	1,136	1,065	1,299	1,023	999	972	14%	5%
Percentage of sales	25.9%	24.0%	29.6%	24.4%	23.6%	23.9%		
Research and development costs	527	548	625	523	504	471	5%	(3%)
Percentage of sales	12.0%	12.3%	14.2%	12.5%	11.9%	11.6%		
Administrative costs	136	143	175	141	126	131	8%	(1%)
Percentage of sales	3.1%	3.2%	4.0%	3.4%	3.0%	3.2%		
Other operating income, net	62	58	25	65	28	40	121%	104%
Operating profit	1,951	2,055	1,604	1,904	1,978	1,931	(1%)	(9%)
Operating margin	44.5%	46.2%	35.9%	45.3%	46.7%	47.4%		
Financial income	166	198	29	61	62	37	168%	147%
Financial expenses	121	6	(49)	3	172	106	(30%)	(36%)
Financial items (net)	45	192	78	58	(110)	(69)	(141%)	(140%)
Profit before income taxes	1,996	2,247	1,682	1,962	1,868	1,862	7%	(1%)
Income taxes	343	472	368	424	398	408	(14%)	(20%)
Net profit	1,653	1,775	1,314	1,538	1,470	1,454	12%	4%
Depreciation, amortisation and impairment losses	123	121	142	112	127	101	(3%)	(11%)
Capital expenditure (net)	252	381	473	327	285	230	(12%)	(18%)
Net cash generated from operating activities	2,538	1,620	988	2,017	1,499	1,732	69%	56%
Free cash flow	2,131	1,195	497	1,706	1,244	1,489	71%	58%
Total assets	16,143	15,577	16,491	15,540	15,004	13,532	8%	6%
Total equity	7,674	7,365	8,026	7,452	7,429	5,789	3%	1%
Equity ratio	47.5%	47.3%	48.7%	48.0%	49.5%	42.8%		
Full-time equivalent employees end of period	43,105	42,688	42,076	41,656	41,385	41,636	4%	4%
Basic earnings per share/ADR (in USD)	0.68	0.73	0.54	0.62	0.60	0.58	13%	6%
Diluted earnings per share/ADR (in USD)	0.68	0.73	0.53	0.63	0.59	0.58	15%	6%
Average number of shares outstanding (million)	2,425.8	2,437.3	2,451.2	2,465.6	2,480.2	2,495.8	(2%)	(2%)
Average number of diluted shares outstanding (million)	2,430.9	2,442.3	2,456.1	2,469.4	2,484.1	2,500.0	(2%)	(2%)
Sales by business segment:								
Long-acting insulin	857	805	868	806	883	802	(3%)	(10%)
Premix insulin	414	436	414	405	399	410	4%	(4%)
Fast-acting insulin	790	789	732	800	755	761	5%	(3%)
Human insulin ¹⁾	373	391	378	382	363	360	3%	(5%)
Total insulin	2,434	2,421	2,392	2,393	2,400	2,333	1%	(6%)
Total GLP-1	947	1,000	991	843	853	823	11%	3%
Other diabetes care ¹⁾	161	185	161	165	158	168	2%	(6%)
Total diabetes care	3,542	3,606	3,544	3,401	3,411	3,324	4%	(4%)
Obesity (Saxenda [®])	142	127	109	101	101	77	41%	29%
Diabetes care and obesity total	3,684	3,733	3,653	3,502	3,512	3,401	5%	(3%)
Haemophilia	367	413	434	380	403	369	(9%)	(16%)
Growth disorders (Norditropin [®])	273	244	269	255	248	236	10%	1%
Other biopharmaceuticals	60	56	62	61	67	67	(10%)	(16%)
Biopharmaceuticals total	700	713	765	696	718	672	(3%)	(10%)
Sales by geographic segment:								
North America Operations	2,174	2,206	2,279	2,139	2,230	2,139	(3%)	(10%)
- USA	2,072	2,126	2,191	2,050	2,154	2,062	(4%)	(11%)
International Operations	2,210	2,240	2,139	2,059	2,000	1,934	11%	2%
- Region Europe	875	864	855	816	791	748	11%	2%
- Region AAMEO	511	479	483	461	452	424	13%	4%
- Region China	439	500	397	401	386	438	14%	5%
- Region Japan & Korea	237	208	248	230	232	210	2%	(6%)
- Region Latin America	148	189	156	151	139	114	6%	(1%)
Segment operating profit:								
Diabetes care and obesity	1,560	1,640	1,229	1,472	1,586	1,522	(2%)	(9%)
Biopharmaceuticals	391	415	375	432	392	409	0%	(8%)

¹⁾ Comparative figures have been restated as sales of bulk insulin are now disclosed as part of other diabetes care.

APPENDIX 10: NON-IFRS FINANCIAL MEASURES (ADDITIONAL INFORMATION)

In this Company Announcement, Novo Nordisk discloses certain financial measures of the Group's financial performance, financial position and cash flows that reflect adjustments to the directly comparable measures calculated and presented in accordance with IFRS. These non-IFRS financial measures may not be defined and calculated by other companies in the same manner and may thus not be comparable with such measures.

The non-IFRS financial measures presented in the Company Announcement are:

- Sales growth in local currencies
- Operating profit growth in local currencies
- Free cash flow

Sales and operating profit growth in local currencies

Growth in local currencies' means that the effect of changes in exchange rates is excluded. It is defined as sales/operating profit for the period measured at the average exchange rates for the same period prior year compared with realised sales/operating profit for the same period prior year. Countries with hyperinflation as defined in IAS 29 'Financial reporting in hyperinflation economies' are excluded from the calculation to avoid that growth in local currencies are artificially inflated. Management believes that growth in local currencies is relevant information for investors in order to understand the underlying development in sales and operating profit by adjusting for the impact of currency fluctuations.

Sales in local currencies

DKK million	H1 2018	H1 2017	Q2 2018	Q2 2017
Net sales	54,337	57,090	27,407	28,638
Effect of exchange rate	4,882	(692)	1,876	(242)
Sales in local currencies	59,219	56,398	29,283	28,396

Operating profit in local currencies

DKK million	H1 2018	H1 2017	Q2 2018	Q2 2017
Operating profit	24,652	26,876	12,204	13,386
Effect of exchange rate	3,293	(562)	1,412	(104)
Operating profit in local currencies	27,945	26,314	13,616	13,282

Free cash flow

Novo Nordisk defines free cash flow as 'net cash generated from operating activities' less 'net cash used in investing activities' excluding net change of marketable securities. A positive free cash flow shows that the Group is able to finance its activities and that external financing is thus not necessary for the Group's operating activities. Therefore, management believes that this non-IFRS liquidity measure provides useful information to investors in addition to the most directly comparable IFRS financial measure 'Net cash generated from operating activities'.

Free cash flow

DKK million	H1 2018	H1 2017	Q2 2018	Q2 2017
Net cash generated from operating activities	25,585	22,215	15,770	10,117
Net cash used in investing activities	(5,117)	(1,417)	(2,543)	(725)
Net purchase of marketable securities	—	(2,006)	—	(1,000)
Free cash flow	20,468	18,792	13,227	8,392