

# Novo Nordisk

Denmark/Pharmaceuticals

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UBS Research

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## Lilly Q1 shows supportive insulin and GLP-1 pricing dynamics

Novo competitor Lilly reports Q1 results that we care about for three reasons. Firstly Lilly reports US growth for its short-acting/mix insulin franchise of 24%. Whilst this is flattered by a rebate adjustment taken in 1Q16 the adjusted price/mix effect is positive confirming our view that the US short acting/mix market was distorted in 2016 by the United Health contract. Going into 2017 there doesn't seem to be an incremental negative pricing component for the likes of Humalog and Novolog. Our view remains that the market fails to take the micro-segmentation of the insulin market into consideration when evaluating Novo's pricing exposure ( here).

Secondly Lilly's Trulicity (weekly GLP-1), a Victoza competitor, delivered US growth of 148% which is in line with its prescription volume growth. There is hence no evidence of pricing pressure in the GLP-1 space which in turn validated Novo's assumption that Victoza will not see price erosion this year (and we would argue after).

Thirdly Basaglar (biosimilar Lantus) had Q1 US revenues of \$22m reflecting what we believe is a branded launch and not a generic switch strategy. Whilst this clearly comes with some price pressure, the price step-down for Novo's Tresiba and Levemir should be manageable in our view.

Our view remains that Novo is able to deliver premium growth, and that the market's fear of price and returns erosion is excessive.

12-month rating	<b>Buy</b>
12-month price target	<b>DKK350.00</b>
Price	<b>DKK250.00</b>

Contributing authors: Marcus A. Koch

### Trading data and key metrics

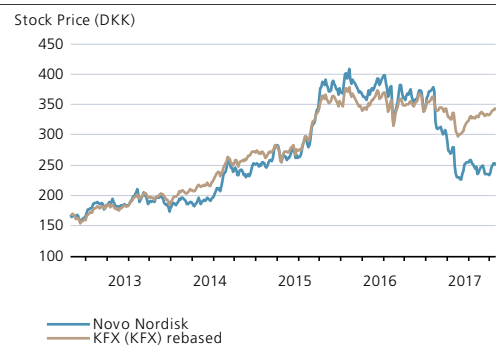
52-wk range	DKK381.20-220.70
Market cap.	DKK632bn/US\$92.3bn
Shares o/s	2,530m (ORD)
Free float	75%
Avg. daily volume ('000)	3,840
Avg. daily value (m)	DKK926.9
Common s/h equity (12/17E)	DKK47.3bn
P/BV (12/17E)	12.9x
Net debt / EBITDA (12/17E)	NM
RIC	NOVOb.CO
BBG	NOVOB DC

Sources: UBS, Bloomberg

### EPS (UBS, diluted) (DKr)

	UBS	Cons.
12/17E	15.37	15.22
12/18E	17.80	16.87
12/19E	19.88	18.33

### Performance



Sources: Bloomberg, UBS

Definitions of terms and abbreviations are available in the appendix section of this report, and more extensively on internet at [www.ubs.com/glossary](http://www.ubs.com/glossary)

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# Novo Nordisk

## Company Profile: Novo Nordisk

Novo Nordisk is a Danish pharmaceutical company specialising in diabetes (79% of 2015 sales), with a focus on insulins and other proteins, such as GLP-1 analogues. Other key disease areas are obesity, haemophilia and growth disorders. Novo's sales are weighted towards the US (51% of 2015 sales), Europe (19%) and China (9%). In January 2016, Novo launched Tresiba, a next-generation long-acting insulin. It also has semaglutide, a once-weekly subcutaneous GLP-1 analogue, in late-stage development. A Phase IIIa programme, PIONEER, has recently been launched to determine the safety and efficacy of oral semaglutide.

## Statement of Risk

Risks for the pharma industry in general relate to: continued lowered levels of R&D productivity, unexpected generic competition, government pressures on pricing, and various forms of litigation risk. Volume prescription growth in the US market has slowed in recent years, and newly approved drugs can show sluggish uptake. Key risks for Novo include: (1) progress on market share and particularly US pricing, for Novo's premium-priced insulin analogues such as Levemir/Tresiba, and in GLP1 (Victoza) in the face of increasing competition from brands and biosimilars; and (2) (unlikely) regulatory failure of Tresiba, (3) failure of semaglutide to meet high expectations. Valuation: We consider several methods when we set our price targets. We are most heavily influenced by DCF analysis. Our explicit forecasts run to 2025. From 2025, we assume 2% annual growth in (operating income x (1 - tax rate)) and a straight-line ROIC fade. ROIC fades to WACC over a 20 year period. This approach means that our DCF valuations are particularly sensitive to 2 parameters; WACC and our estimate of ROIC around 2025. Given these sensitivities, we sense-check our DCF valuation against PE multiples calculated on the basis of both adjusted ("core" or "non-GAAP" numbers) and IFRS or GAAP numbers, calibrated against the rest of the sector and considering the EPS growth profile.

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Highlights (DKrm)	12/14	12/15	12/16	12/17E	12/18E	12/19E	12/20E	12/21E
Revenues	88,806	107,927	111,780	116,161	122,644	130,159	136,738	141,670
EBIT (UBS)	34,492	49,444	48,432	50,507	54,341	59,046	62,913	65,346
Net earnings (UBS)	26,481	34,860	37,925	37,524	42,269	45,939	48,955	50,853
EPS (UBS, diluted) (DKr)	10.07	13.52	14.96	15.37	17.80	19.88	21.79	23.30
DPS (DKr)	5.00	6.40	7.60	8.00	9.00	10.00	10.50	11.00
Net (debt) / cash	15,185	19,392	20,470	21,094	19,234	19,258	21,978	28,022
Profitability/valuation	12/14	12/15	12/16	12/17E	12/18E	12/19E	12/20E	12/21E
EBIT margin %	38.8	45.8	43.3	43.5	44.3	45.4	46.0	46.1
ROIC (EBIT) %	125.1	182.8	181.4	193.2	176.7	153.1	135.7	123.0
EV/EBITDA (core) x	17.3	17.9	16.0	11.5	10.6	9.8	9.2	8.8
P/E (UBS, diluted) x	24.8	26.6	21.7	16.3	14.0	12.6	11.5	10.7
Equity FCF (UBS) yield %	4.2	3.4	4.8	5.7	5.5	6.0	6.5	7.1
Net dividend yield %	2.0	1.8	2.3	3.2	3.6	4.0	4.2	4.4

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied.

Valuations: based on an average share price that year, (E): based on a share price of DKr250.00 on 24 Apr 2017 21:32 BST

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UBS 12-Month Rating	Rating Category	Coverage <sup>1</sup>	IB Services <sup>2</sup>
Buy	Buy	45%	29%
Neutral	Hold/Neutral	39%	27%
Sell	Sell	15%	16%

1:Percentage of companies under coverage globally within the 12-month rating category.

2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

Source: UBS. Rating allocations are as of 31 December 2016.

UBS 12-Month Rating	Definition
Buy	FSR is > 6% above the MRA.
Neutral	FSR is between -6% and 6% of the MRA.
Sell	FSR is > 6% below the MRA.

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#### Global Equity 12-Month Rating Definitions

**Buy:** FSR is > 6% above the MRA. **Neutral:** FSR is between -6% and 6% of the MRA. **Sell:** FSR is > 6% below the MRA.

#### Key Definitions

**Forecast Stock Return (FSR)** is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months.

**Market Return Assumption (MRA)** is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium).

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#### Company Disclosures

Company Name	Reuters	12-mo rating	Price	Price date
Novo Nordisk	NOVOB DC	Buy	DKr250.00	24 Apr 2017
Lilly	LLY US	Neutral	US\$83.42	24 Apr 2017

Source: UBS. All prices as of local market close.

Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

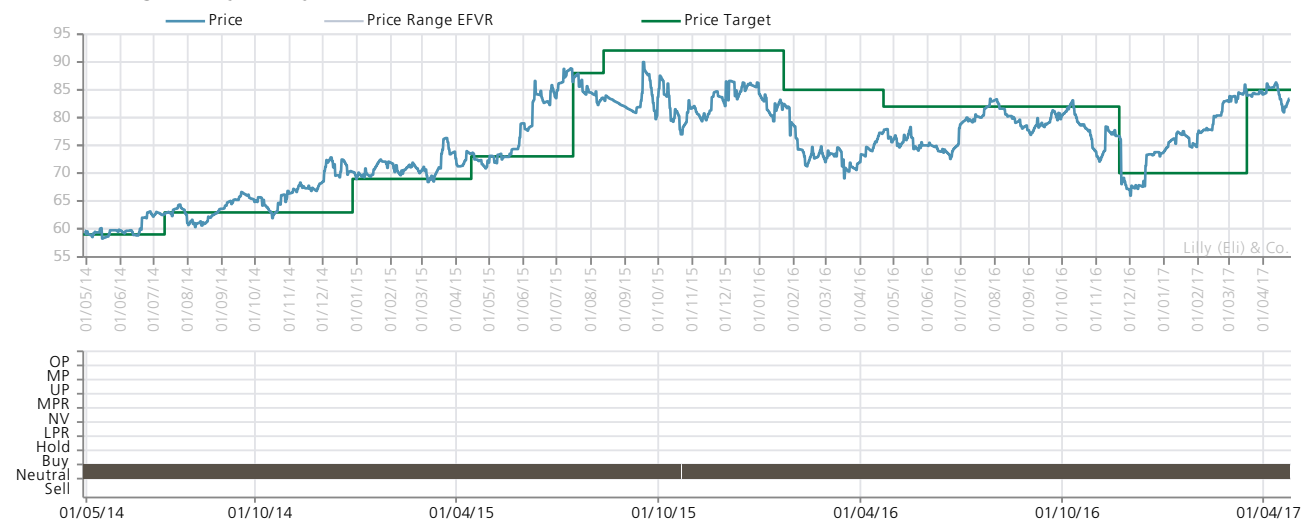
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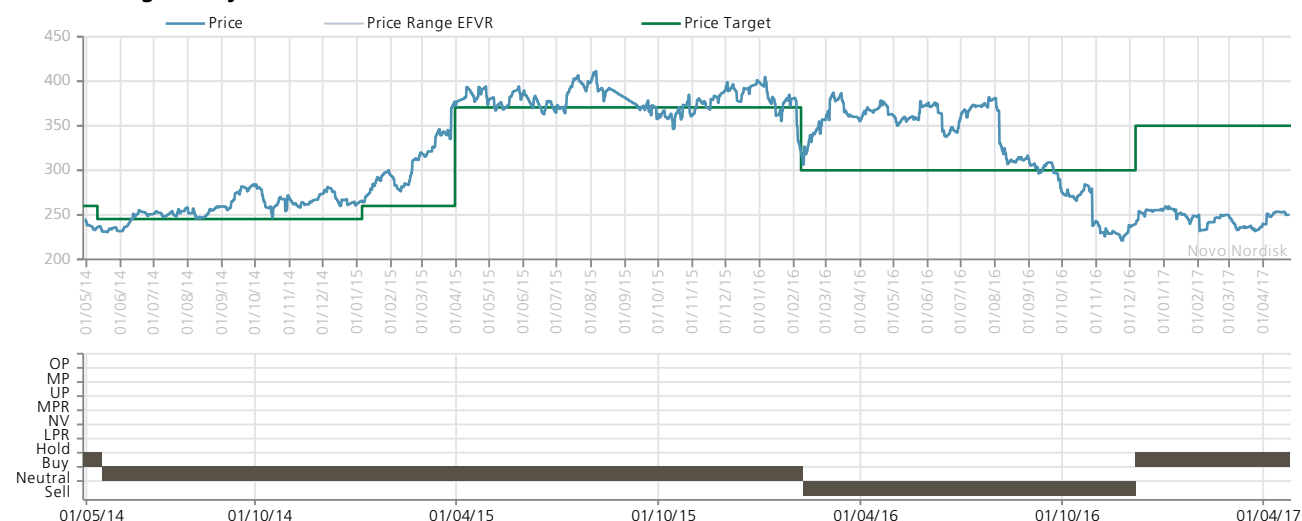
# Novo Nordisk

## Global rating history -- Lilly (Eli) & Co., LLY US



Source: UBS CIO as of 25 April 2017

## Global rating history -- Novo Nordisk, NOVOB DC



Source: UBS CIO as of 25 April 2017

### Terms and Abbreviations

Term / Abbreviation	Description / Definition	Term / Abbreviation	Description / Definition
1H, 2H, etc. or 1H11, 2H11, etc.	First half, second half, etc. or first half 2011, second half 2011, etc.	1Q, 2Q, etc. or 1Q11, 2Q11, etc.	First quarter, second quarter, etc. or first quarter 2011, second quarter 2011, etc.
2011E, 2012E, etc.	2011 estimate, 2012 estimate, etc.	A	actual i.e. 2010A
ADR	American depositary receipt	ARPU	Average Revenue Per User
AUM	Assets under management = total value of own and third-party assets managed	Avg.	average
bn	Billion	bp or bps	Basis point or basis points (100 bps = 1 percentage point)
BVPS	Book value per share = shareholders' equity divided by the number of shares	CAGR	Compound annual growth rate
Cant Inc/Capita	Cantonal income per capita (Switzerland only)	Capex	Capital expenditures
CF	Cash flow	CFO	1) Cash flow from operations, 2) Chief financial officer
COGS	Cost of goods sold	COM	Common shares
Cons.	Consensus	Core Tier 1 Ratio	Tier 1 capital minus tier 1 hybrid securities
Cost/Inc Ratio (%)	Costs as a percentage of income	CPI	Consumer price index
CR	Combined ratio = ratio of claims and expenses as a percentage of premiums (for insurance companies)	CY	Calendar year
DCF	Discounted cash flow	DDM	Dividend discount model
Dividend Yield (%)	Dividend per share divided by price per share	DPS	Dividend per share
E	expected i.e. 2011E	EBIT	Earnings before interest and taxes
EBIT Margin (%)	EBIT divided by revenues	EBITDA	Earnings before interest, taxes, depreciation and amortization

# Novo Nordisk

Term / Abbreviation	Description / Definition	Term / Abbreviation	Description / Definition
EBITDA Margin (%)	EBITDA divided by revenues	EBITDA/Net Interest	EBITDA divided by net interest expense
EBITDAR	Earnings before interest, taxes, depreciation, amortization and rental expense	EFVR	Estimated fair value range
EmV	Embedded value = net asset value + present value of forecasted future profits (for life insurers)	EPS	Earnings per share
Equity Ratio (%)	Shareholders' equity divided by total assets	EV	Enterprise value = market value of equity, preferred equity, outstanding net debt and minorities
FCF	Free cash flow = cash a company generates above outlays required to maintain/expand its asset base	FCF Yield (%)	Free cash flow divided by market capitalization
FFO	Funds from operations	FY	Fiscal year / financial year
GDP	Gross domestic product	Gross Margin (%)	Gross profit divided by revenues
H	half year	h/h	Half-year over half-year; half on half
hist av.	Historical average	Interbank Ratio	Interbank deposits due from banks divided by interbank deposits due to banks
Interest Coverage	Ratio that expresses the number of times interest expenses are covered by earnings	Interest exp	Interest expense
ISIN	International securities identification number	K	One thousand
LLP/Net Int Inc (%)	Loan loss provisions divided by net interest income	LLR/Gross Loans (%)	Loan loss reserves divided by gross loans
LPR	Least Preferred: The stock is expected to both underperform the relevant benchmark and depreciate in absolute terms.	Market cap	Number of all shares of a company (at the end of the quarter) times closing price
m/m	Month-over-month; month on month	mn or m	Million
M and A	Merger and Acquisition	MP	Marketperform: The stocks expected performance is in line with the sector benchmark
MPR	Most Preferred: The stock is expected to both outperform the relevant benchmark and appreciate in absolute terms.	n.a.	Not available or not applicable
NAV	Net asset value	Net Debt	Short- and long-term interest-bearing debt minus cash and cash equivalents
Net DPS	Net dividends per share	NIM or Net Int Margin (%)	Net interest income divided by average interest-bearing assets
Net Margin (%)	Net income dividend by revenues	NV	Neutral View: The stock is expected to neither outperform nor underperform the relevant benchmark nor significantly appreciate or depreciate in absolute terms.
n.m. or NM	Not meaningful	NPL	Non-performing loans
OP	Outperform: The stocks is expected to outperform the sector benchmark	Op Margin (%)	Operating income divided by revenues
p.a.	Per annum (per year)	P/BV	Price to book value
P/E or PE	Price to earnings / Price Earnings Ratio	P/E Relative	P/E relative to the market
P/EmV	Price to embedded value	PEG Ratio	P/E ratio divided by earnings growth
PPI	Producer price index	Prim Bal/Cur Rev (%)	Primary balance divided by current revenue (total revenue minus capital revenue)
Profit Margin (%)	Net income divided by revenues	q/q or QQQ	Quarter-over-quarter; quarter on quarter
R and D	Research and development	ROA (%)	Return on assets
ROAE (%)	Return on average equity	ROCE (%)	Return on capital employed = EBIT divided by difference between total assets & current liabilities
ROE (%)	Return on equity	ROIC (%) or ROI	Return on invested capital
Shares o/s	Shares outstanding	Solvency Ratio (%)	Ratio of shareholders' equity to net premiums written (for insurance companies)
sotp or SOTP	Sum of the parts	Tax Burden Index	Swiss tax index; 100 = average tax burden of all cantons
tgt	Target	Tier 1 Ratio (%)	Tier 1 capital divided by risk-weighted assets; describes a bank's capital adequacy
tn	Trillion	UP	Underperform: The stock is expected to underperform the sector benchmark
Valor	Swiss company identifier	WACC	Weighted average cost of capital
CIO	UBS WM Chief Investment Office	x	multiple / multiplier
y/y or YOY	Year-over-year; year on year	yr	Year
YTD	Year-to-date		

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