



PERFORMANCE AMID HEADWINDS

Merck FY 2017 results

Stefan Oschmann, CEO
Marcus Kuhnert, CFO

March 8, 2018

MERCK

Disclaimer

Cautionary Note Regarding Forward-Looking Statements and financial indicators

This communication may include “forward-looking statements.” Statements that include words such as “anticipate,” “expect,” “should,” “would,” “intend,” “plan,” “project,” “seek,” “believe,” “will,” and other words of similar meaning in connection with future events or future operating or financial performance are often used to identify forward-looking statements. All statements in this communication, other than those relating to historical information or current conditions, are forward-looking statements. We intend these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements in the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to a number of risks and uncertainties, many of which are beyond control of Merck KGaA, Darmstadt, Germany, which could cause actual results to differ materially from such statements.

Risks and uncertainties include, but are not limited to: the risks of more restrictive regulatory requirements regarding drug pricing, reimbursement and approval; the risk of stricter regulations for the manufacture, testing and marketing of products; the risk of destabilization of political systems and the establishment of trade barriers; the risk of a changing marketing environment for multiple sclerosis products in the European Union; the risk of greater competitive pressure due to biosimilars; the risks of research and development; the risks of discontinuing development projects and regulatory approval of developed medicines; the risk of a temporary ban on products/production facilities or of non-registration of products due to non-compliance with quality standards; the risk of an import ban on products to the United States due to an FDA warning letter; the risks of dependency on suppliers; risks due to product-related crime and espionage; risks in relation to the use of financial instruments; liquidity risks; counterparty risks; market risks; risks of impairment on balance sheet items; risks from pension obligations; risks from product-related and patent law disputes; risks from antitrust law proceedings; risks from drug pricing by the divested Generics Group; risks in human resources; risks from e-crime and cyber attacks; risks due to failure of business-critical information technology applications or to failure of data center capacity; environmental and safety risks; unanticipated contract or regulatory issues; a potential downgrade in the rating of the indebtedness of Merck KGaA, Darmstadt, Germany; downward pressure on the common stock price of Merck KGaA, Darmstadt, Germany and its impact on goodwill impairment evaluations as well as the impact of future regulatory or legislative actions.

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included elsewhere, including the Report on Risks and Opportunities Section of the most recent annual report and quarterly report of Merck KGaA, Darmstadt, Germany. Any forward-looking statements made in this communication are qualified in their entirety by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, us or our business or operations. Except to the extent required by applicable law, we undertake no obligation to update publicly or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

This presentation contains certain financial indicators such as EBITDA pre exceptionals, net financial debt and earnings per share pre exceptionals, which are not defined by International Financial Reporting Standards (IFRS). These financial indicators should not be taken into account in order to assess the performance of Merck in isolation or used as an alternative to the financial indicators presented in the consolidated financial statements and determined in accordance with IFRS. The figures presented in this statement have been rounded. This may lead to individual values not adding up to the totals presented.

Agenda

- 01** Executive summary
- 02** Strategic review
- 03** Financial overview
- 04** Outlook and guidance



01

EXECUTIVE SUMMARY

Highlights 2017




Execution on strategy

- ▶ Healthcare – sound core business; successful launches of Mavenclad & Bavencio
- ▶ Life Science – strong performance above the market amid ongoing integration
- ▶ Performance Materials – softness in Liquid Crystals; growth in ICM, Pigments & OLED

Delivery of financials

- ▶ Organic sales growth of 3.8%; EBITDA pre almost stable despite FX headwinds
- ▶ Deleveraging remains focus and well on track; Net debt reduction of €1.4 bn
- ▶ Delivered on Guidance

2017 financial targets met through stringent business execution

	2017 Guidance	FY 2017 Results	
Net sales	€15.3 – 15.7 bn	€15,327 m	
EBITDA pre	€4,400 – 4,600 m	€4,414 m	
EPS pre	€6.15 – 6.50	€6.16	

Merck leveraged its capabilities to overcome headwinds

Went the extra mile...



Business discipline



Operational Measures



Hedging gains

Headwinds to overcome...

Liquid Crystal performance



FX Headwinds

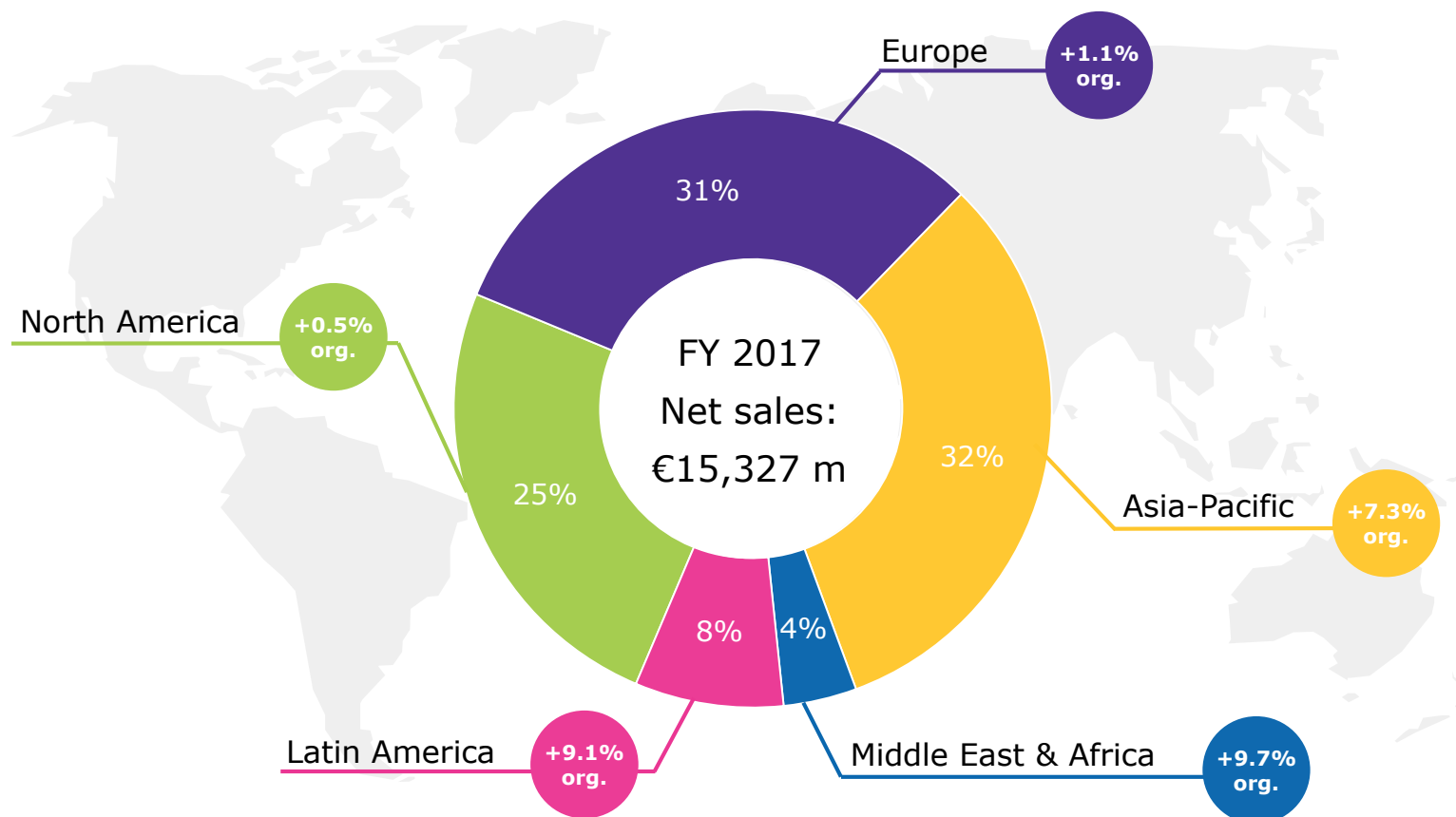


COMMENTS

- Stringent execution of core activities in all three businesses
- Reduction in travel spend
- Increased focus on hiring activity during second half of the year
- Liquid Crystal performance burdens profitability within PM
- FX Headwinds increased significantly from mid of the year
- Hedging Gains driven by conservative 36 month rolling hedging approach

Organic growth in all regions

Regional breakdown of net sales [€ m]



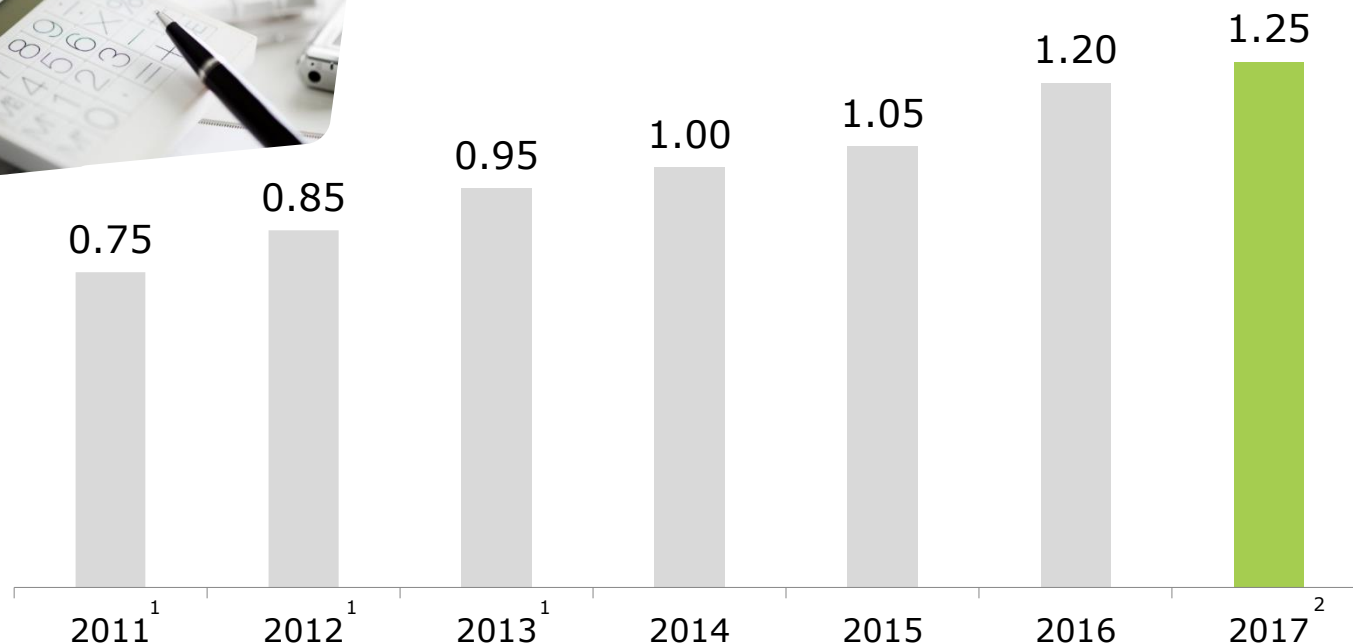
Regional organic development

- Organic growth in Europe driven by solid demand in Life Science and CH outweighing decline in Rebif
- Growth in North America from Life Science more than offsets Rebif decline
- Asia-Pacific shows strong organic growth fueled by Healthcare, especially due to Glucophage repatriation, and Life Science outweighing LC decline
- Very strong organic sales development in LatAm and MEA driven across all major businesses, especially GM, CH, and Life Science

Totals may not add up due to rounding;
LC=Liquid Crystals; GM=General Medicine (includes CardioMetabolic Care & General Medicine and Others); CH=Consumer Health

Dividend growth sustained

Dividend¹ development 2011-2017



2017 dividend

- Dividend of €1.25 (+4% YoY) per share proposed² for 2017
- 20.3% of EPS pre
- Sustainable dividend growth
- Dividend yield³ of 1.4%

¹Adjusted for share split, which has been effective since June 30, 2014; ²Final decision is subject to Annual General Meeting approval;

³Calculated with 2017 year-end share price of 89.75€ per share



02

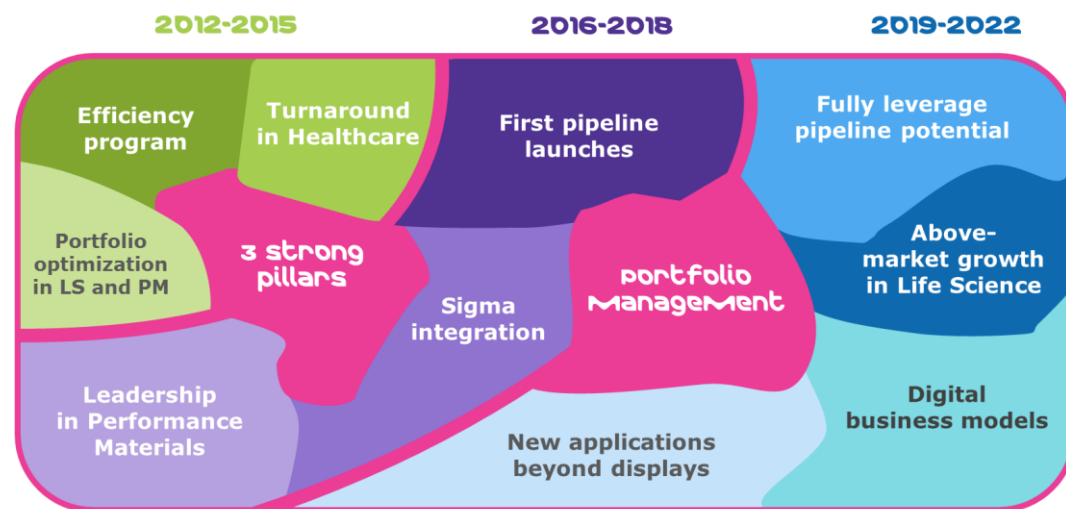
STRATEGIC REVIEW

Strategic roadmap is clearly defined

future
improvements

innovative
portfolio

Leading
positions



financial situation
solid as a rock

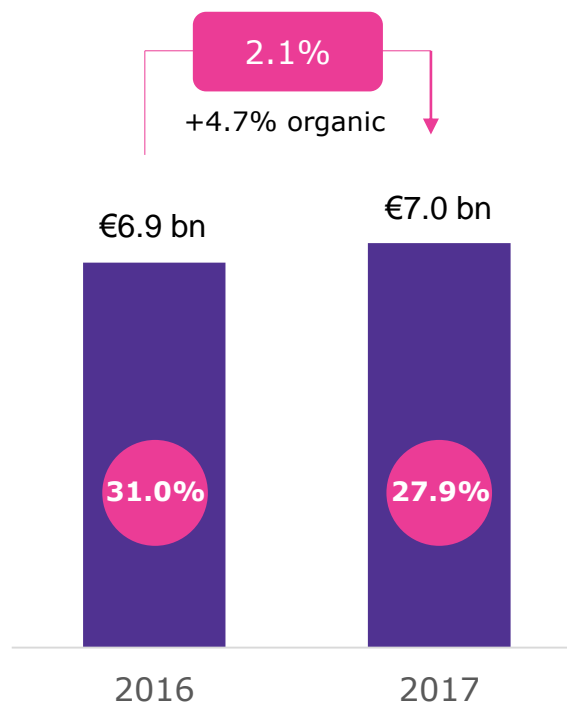
future growth

Healthcare: Solid core business and first new product launches

Business performance

- Safeguarding Rebif and Erbitux in a competitive environment
- Expanding Fertility and General Medicine portfolio in growth markets
- Successful product repatriations in major markets (e.g. China)
- Operational excellence in Consumer Health

Sales and EBITDA pre Margin



Pipeline

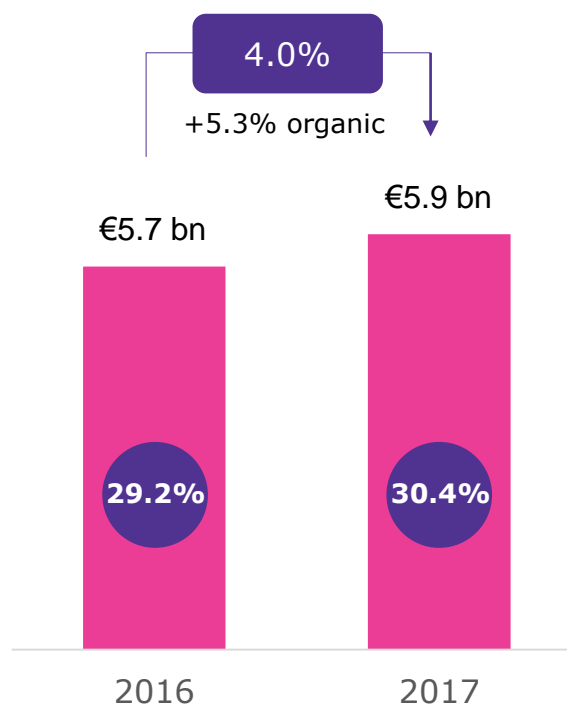
- Mavenclad approved in EU; first countries successfully launched
- Bavencio launched for MCC in the U.S., Europe and Japan; UC launched in the U.S.
- First avelumab Phase III readouts – major indications expected end of 2018
- Progressing with three Phase II studies for BTK-i (RA, SLE and MS)

Life Science: Profitable growth amid ongoing Sigma integration

Business performance

- Above-market quality growth
- All businesses contributing
- Strong performance of eCommerce platform
- Stringent synergy realization drives margin progression
- Execution of three bolt-on deals

Sales and EBITDA pre Margin



Innovation

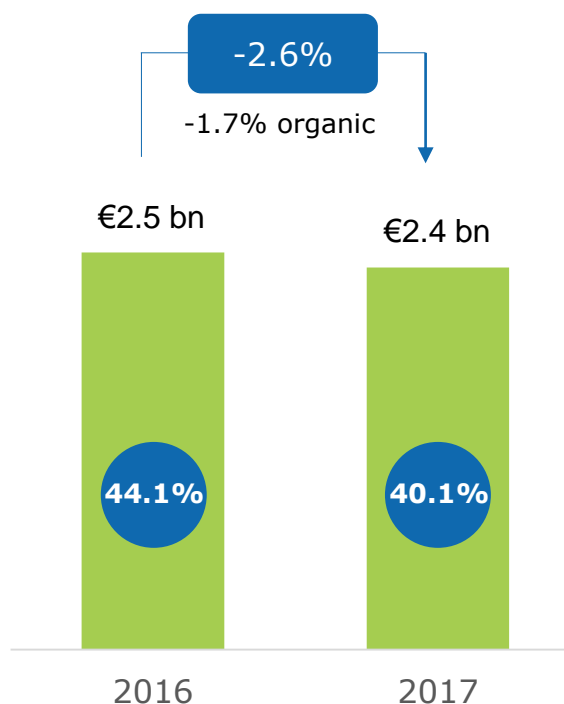
- Patent approval for CRISPR technology in Australia, Canada and Singapore
- SMCxPRO™ highly sensitive protein detection in Research Solutions
- Opening BioReliance End-to-End Biodevelopment Center in China
- MC-Media Pads for rapid food testing in Applied Solutions
- Inauguration of demonstration Life Science center in Boston

Performance Materials: Foster innovation amid a challenging display market

Business performance

- Leadership position in LC maintained, but at lower profitability
- UB-FFS only LC technology showing growth in 2017
- First SA-VA commercial batches for 2018 trial runs delivered
- Above-market growth of Integrated Circuits
- Pigments with healthy growth

Sales and EBITDA pre Margin



Innovation

- LC Windows – opening of Eindhoven production facility
- Frost & Sullivan Technology Innovation Award for Liquid Crystal Windows
- Advanced material technologies for 3D-NAND chips in SSDs and EUV applications
- Xirallic® NXT, next generation of special effect pigments for the automotive industry
- Inauguration of China OLED application lab fostering customer proximity



03

FINANCIAL OVERVIEW

FY 2017 Financials: A year well managed

Key figures

[€m]	FY 2016	FY 2017	Δ
Net sales	15,024	15,327	2.0%
EBITDA pre	4,490	4,414	-1.7%
Margin (in % of net sales)	29.9%	28.8%	
EPS pre	6.21	6.16	-0.8%
Operating cash flow	2,518	2,696	7.1%

[€m]	Dec. 31, 2016	Dec. 31, 2017	Δ
Net financial debt	11,513	10,144	-11.9%
Working capital	3,488	3,387	-2.9%
Employees	50,414	52,941	5.0%

Comments

- Net sales growth driven by solid organic performance of Life Science and Healthcare despite FX headwinds
- EBITDA pre & margin decrease driven by LC market share decline, investments in Healthcare and FX
- Slight decline in EPS pre due to lower EBITDA pre
- Healthy operating cash flow reflects business performance and better working capital management
- Net financial debt reduction from strong focus on deleveraging, supported by FX
- Higher headcount related to growth initiatives in HC and shift in LS from temporary to permanent

Solid organic growth and Life Science synergies offset by HC investments and softness in LC

FY 2017 YoY net sales

	Organic	Currency	Portfolio	Total
Healthcare	4.7%	-1.6%	-1.0%	2.1%
Life Science	5.3%	-1.7%	0.4%	4.0%
Performance Materials	-1.7%	-0.9%	0.0%	-2.6%
Merck Group	3.8%	-1.5%	-0.3%	2.0%

FY 2017 YoY EBITDA pre contributors [€ m]



Totals may not add up due to rounding;
¹LTIP = Long Term Incentive Plan;

- Solid organic growth in Healthcare fueled by strong GM, CH, Fertility as well as Bavencio
- Life Science achieves above market organic growth
- Organic growth of ICM, Pigments and OLED mitigates ongoing LC market share decline
- Strong H2 2017 FX headwinds drive negative FY 2017 currency effect (- €228 m)
- HC solid organic growth, milestone payments for Bavencio and royalty swap, outweighed by investments in R&D and M&S
- LS driven by strong organic growth and synergy realization
- PM burdened by LC sales decline despite strength in ICM, Pigments and OLED
- Corporate EBITDA pre contains positive FX hedging and lower LTIP¹ costs



Reported figures reflect solid business performance & U.S. tax reform effects

Reported results

[€m]	FY 2016	FY 2017	Δ
EBIT	2,481	2,525	1.8%
Financial result	-326	-300	-8.0%
Profit before tax	2,154	2,224	3.2%
Income tax	-521	386	n.m.
<i>Effective tax rate (%)</i>	24.2%	-17.4%¹	
Net income	1,629	2,600	59.7%
EPS (€)	3.75	5.98	59.5%

Comments

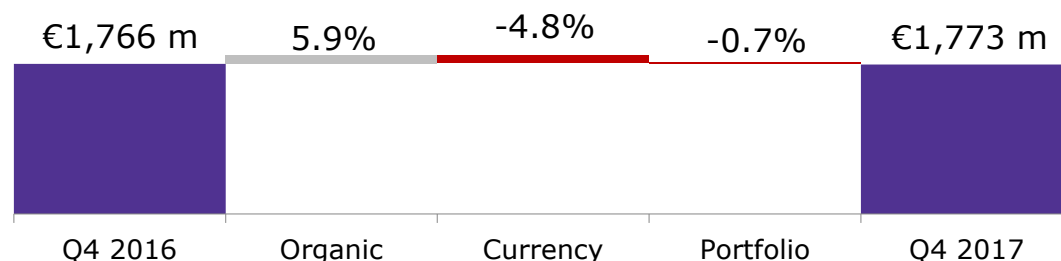
- EBIT increases mainly due to Biosimilars divestment despite lower EBITDA pre and high EBIT LY related to Kuvan disposal gain
- Financial result improvement driven by deleveraging, FX and valuation effects
- Effective tax rate reflects revaluation of deferred tax liabilities due to U.S. tax reform

Healthcare: Solid org. growth of core business and investments in future growth

Healthcare P&L

[€m]	Q4 2016	Q4 2017
Net sales	1,766	1,773
Marketing and selling	-709	-689
Administration	-68	-73
Research and development	-418	-443
EBIT	279	73
EBITDA	478	308
EBITDA pre	497	384
Margin (in % of net sales)	28.2%	21.6%

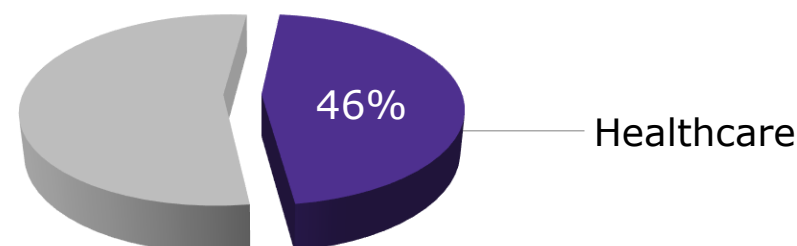
Net sales bridge



Comments

- Solid organic growth driven by Glucophage China repatriation and double digit growth for Consumer Health across all major regions
- Bavencio and Mavenclad successfully launched
- Rebif organic decline driven by volume decline in EU and U.S. partially offset by U.S. pricing
- Erbitux facing competition and price pressure in major markets
- Marketing & Selling slightly lower due to improved cost control and FX
- Profitability impacted by product mix and back-end loaded R&D investments

Q4 2017 share of group net sales

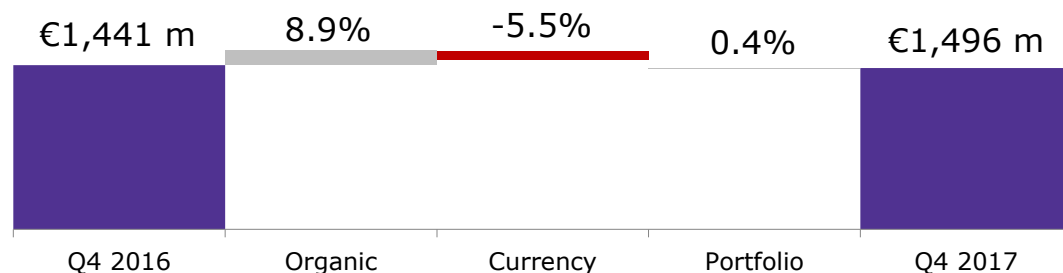


Life Science: Strong sales quarter amid synergy realization

Life Science P&L

[€m]	Q4 2016	Q4 2017
Net sales	1,441	1,496
Marketing and selling	-458	-431
Administration	-71	-67
Research and development	-70	-52
EBIT	70	156
EBITDA	352	338
EBITDA pre	419	461
Margin (in % of net sales)	29.1%	30.8%

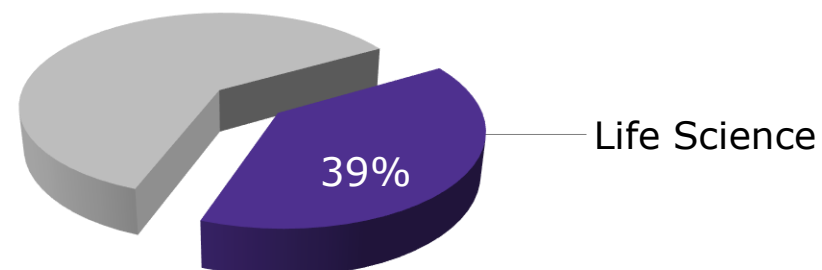
Net sales bridge



Comments

- Process Solutions shows double digit organic growth due to strong demand in single-use & services globally
- Applied Solutions with strong organic growth, benefits from good demand in all regions and all businesses
- Research Solutions growth driven by strong eCommerce
- Q4 LY EBIT contains D&A effects from final purchase price allocation for Sigma-Aldrich
- Higher profitability from organic growth and synergy ramp-up outweighing FX headwinds

Q4 2017 share of group net sales

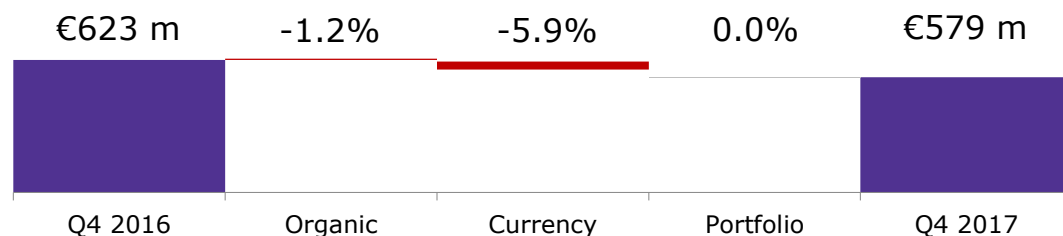


Performance Materials: Profitability burdened by LC market share decline

Performance Materials P&L

[€m]	Q4 2016	Q4 2017
Net sales	623	579
Marketing and selling	-57	-61
Administration	-16	-18
Research and development	-56	-52
EBIT	210	136
EBITDA	269	213
EBITDA pre	278	228
Margin (in % of net sales)	44.6%	39.4%

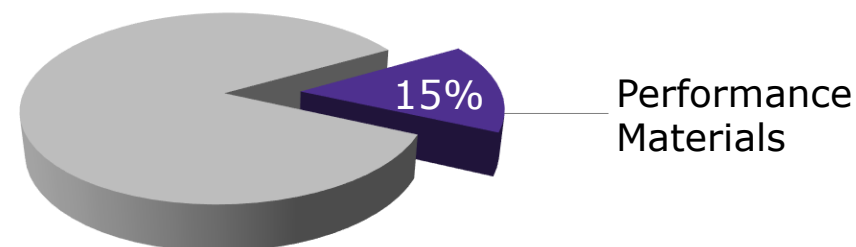
Net sales bridge



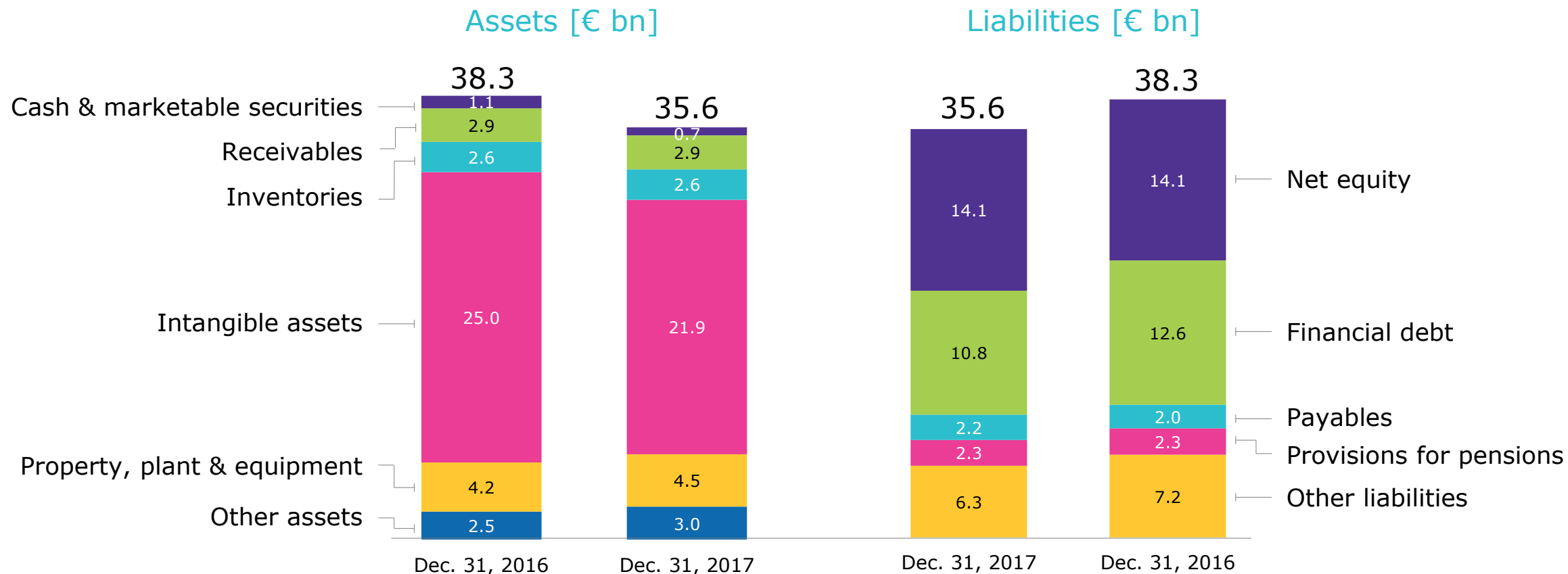
Comments

- Organic growth of Integrated Circuit Materials, Pigments and OLED outweighed by Liquid Crystals market share decline
- Innovative UB-FFS technology continues to see strong demand
- Strong growth of Integrated Circuit Materials driven by all major material classes, esp. strong demand of dielectrics and process materials
- Healthy growth of Pigments & Functional Materials due to demand for specialty coating pigments for the automotive industry
- Lower profitability reflects business mix, usual Liquid Crystals price decline and FX headwinds

Q4 2017 share of group net sales



Balance sheet – continued focus on rapid deleveraging



- Total assets decrease, while equity ratio increases to 39.5%
- Reduction in intangible assets mainly reflects scheduled amortization and FX (-€2.2 bn)

- Net financial debt reduced by €1.4 bn due to healthy operating cash flow and favorable FX translation
- Other liabilities down as U.S. tax reform reduces deferred tax liabilities

Jump in profit after tax driven by U.S. tax reform

Q4 2017 – cash flow statement

[€m]	Q4 2016	Q4 2017	Δ
Profit after tax	265	1,016	751
D&A	548	511	-37
Changes in provisions	-9	81	90
Changes in other assets/liabilities	-191	-1,155	-964
Other operating activities	-17	0	17
Changes in net working capital	191	189	-2
Operating cash flow	787	642	-145
Investing cash flow	-450	-353	97
thereof Capex on PPE	-260	-350	-90
Financing cash flow	-277	-551	-274

Cash flow drivers

- Profit after tax reflects one time U.S. tax reform effect of ~€900 m
- D&A down due to FX effects on asset base
- Changes in other assets/liabilities reflect neutralizing of non-cash relevant U.S. tax gain
- Higher Capex from investments in additional capacities and innovation center
- Financing cash flow reflects repayment of debt



04

OUTLOOK AND GUIDANCE

Merck's qualitative full-year 2018 guidance

Net sales: **Moderate organic growth; moderate FX headwinds***

EBITDA pre: **Slight organic decline; -4 to -6% YoY headwinds from FX**



EBITDA-supporting factors

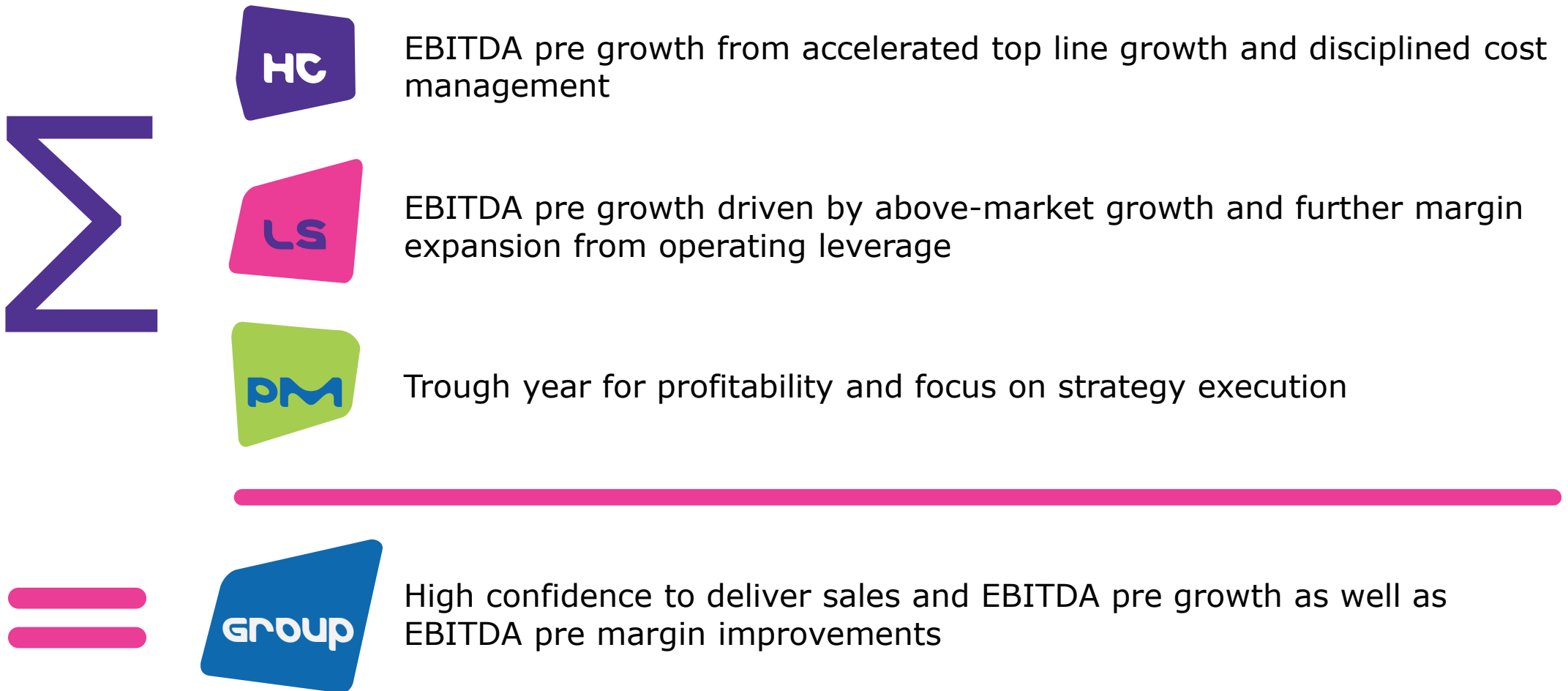
- Organic net sales growth by Healthcare and Life Science
- Sigma-Aldrich incremental cost and revenue synergies
~+€95 m YoY
- Biosimilars divestment frees up R&D budget
(2017: mid to high double-digit million R&D costs)
- First full-year sales contribution from newly launched pipeline products Mavenclad® and Bavencio®



EBITDA-reducing factors

- Underlying R&D costs in Healthcare are budgeted above 2017, but actual development will be subject to clinical data outcome of priority projects and prioritization decisions
- Healthcare margins negatively impacted by product mix (esp. Rebif)
- 2017 special gains of ~€200 m will not recur
- Performance Materials sales and earnings continuously affected by decline in Liquid Crystals
- First launch preparations for Mavenclad® U.S., driving M&S costs
- At current rates, FX remains a strong headwind, esp. in H1 2018

Merck to return to profitable growth track from 2019 onwards



Strong confidence and commitment for future growth

1

Merck offers a unique and promising portfolio with leading market positions and high innovation potential

2

Merck is highly profitable, invests strongly in its future potential and will generate sustainable profitable growth from 2019 onwards

3

Merck is financially rock solid and therefore able to finance its future organic growth

4

Merck will continue to deliver on its promises and communicate transparently



APPENDIX

2018 business sector guidance (including Consumer Health)



Healthcare

Net sales

- Moderate organic growth: ongoing organic Rebif decline offset by growth in other franchises
- Full-year contributions from 2017 launches

EBITDA pre

- Slight organic % YoY decline
- Adverse FX impact
- Higher R&D, subject to pipeline decisions
- Higher M&S investments, for launch preparations



Life Science

Net sales

- Organic growth slightly above market; driven by Process Solutions

EBITDA pre

- Organic % YoY growth with similar dynamics as in prior year (2017)
- Adverse FX impact
- Full realization of expected synergies



Performance Materials

Net sales

- Slight to moderate organic decline
- Volume increases in all businesses
- Ongoing Liquid Crystals market share decline

EBITDA pre

- Organic % YoY decline in the mid teens
- Adverse FX impact
- Decline from LC cannot be compensated by ICM and Pigments

Additional financial guidance 2018

Further financial details

Corporate & Other EBITDA pre	~ -€320 – -360 m
Interest result	~ -€230 – -240 m
Effective tax rate	~ 24% to 26%
Capex on PPE	~ €900 – 950 m
Hedging/USD assumption	2018 hedge ratio ~50-60% at EUR/USD ~ 1.19 to 1.20
2018 Ø EUR/USD assumption	~ 1.18 – 1.22 ¹

FX sensitivity per business sector



Sales

- Global presence
- ~35% of sales in Europe

Costs

- High Swiss franc cost base due to manufacturing sites
- R&D hub and notable sales force in U.S.

Net Sales currency exposure¹



FX impact on EBITDA pre²



Sales

- Balanced regional sales split between EU, NA and RoW

Costs

- Extensive manufacturing and research footprint in the U.S.
- Global customer proximity requires broad-based sales force

Net Sales currency exposure¹



FX impact on EBITDA pre²



Sales

- ~80% of sales in Asia-Pacific
- Industry is USD-driven

Costs

- Main production sites in Germany
- Several R&D and mixing facilities in Asia

Net Sales currency exposure¹



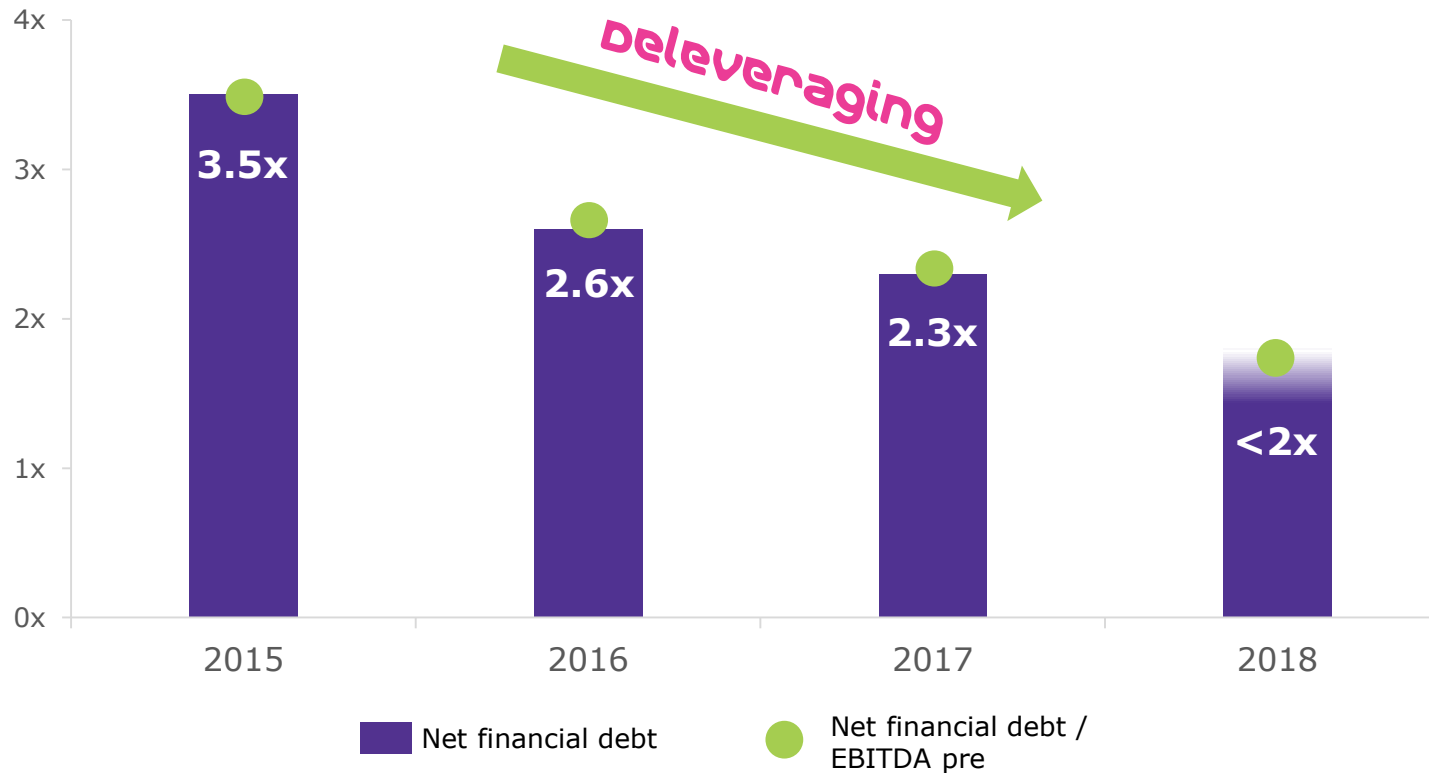
FX impact on EBITDA pre²



Strong focus on cash generation to ensure swift deleveraging

Net financial debt* and leverage development

[Net financial debt/
EBITDA pre]

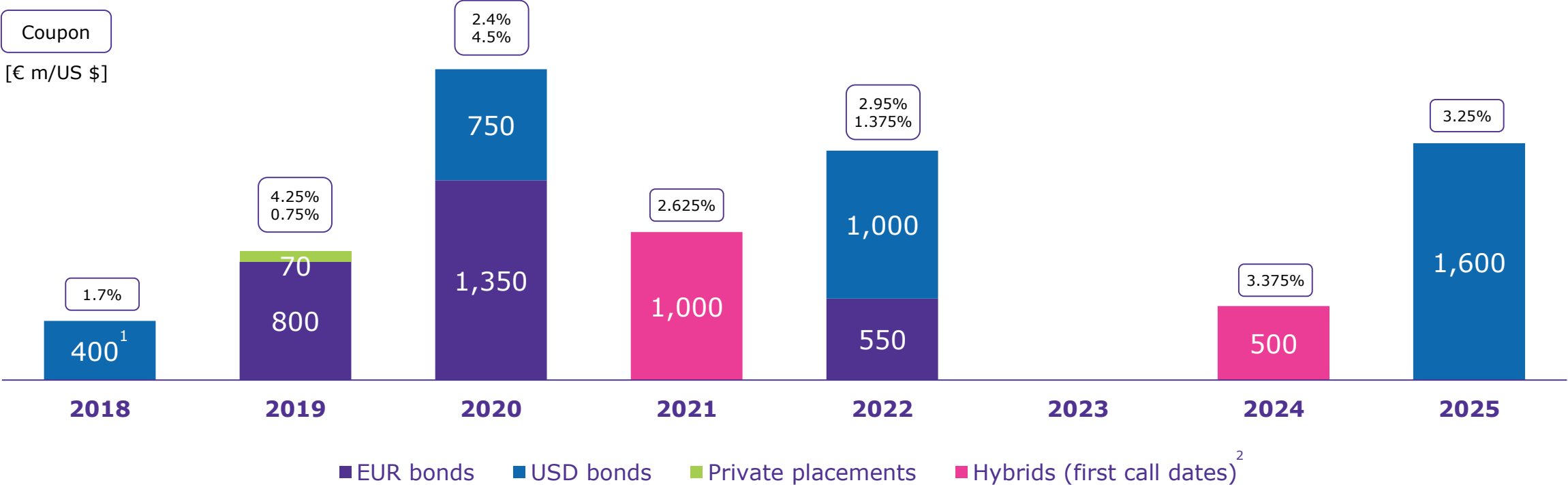


Focus on deleveraging

- Commitment to swift deleveraging to ensure a strong investment grade credit rating and financial flexibility
- Strong cash flow will be used to drive down leverage to expected <2x net debt/EBITDA pre in 2018
- Larger acquisitions (>€500 m) ruled out for 2018 (or financed by divestments)

Well-balanced maturity profile reflects Sigma-Aldrich financing transactions

Maturity profile as of Dec. 31, 2017



Financing structure enables flexible and swift deleveraging

Q4 2017: Overview

Key figures

[€m]	Q4 2016	Q4 2017	Δ
Net sales	3,830	3,848	0.5%
EBITDA pre	1,075	1,005	-6.5%
Margin (in % of net sales)	28.1%	26.1%	
EPS pre	1.43	1.31	-8.4%
Operating cash flow	787	642	-18.5%

[€m]	Dec. 31, 2016	Dec. 31, 2017	Δ
Net financial debt	11,513	10,144	-11.9%
Working capital	3,488	3,387	-2.9%
Employees	50,414	52,941	5.0%

Comments

- EBITDA pre & margin decrease reflects LC market share decline, investments in HC and FX headwinds
- EPS pre down due to EBITDA pre decrease
- Lower operating cash flow reflects softer EBIT also driven by HC investments, LC decline and FX
- Net financial debt reduction due to strong focus on deleveraging and FX
- Higher headcount related to growth initiatives in HC and shift in LS from temporary to permanent

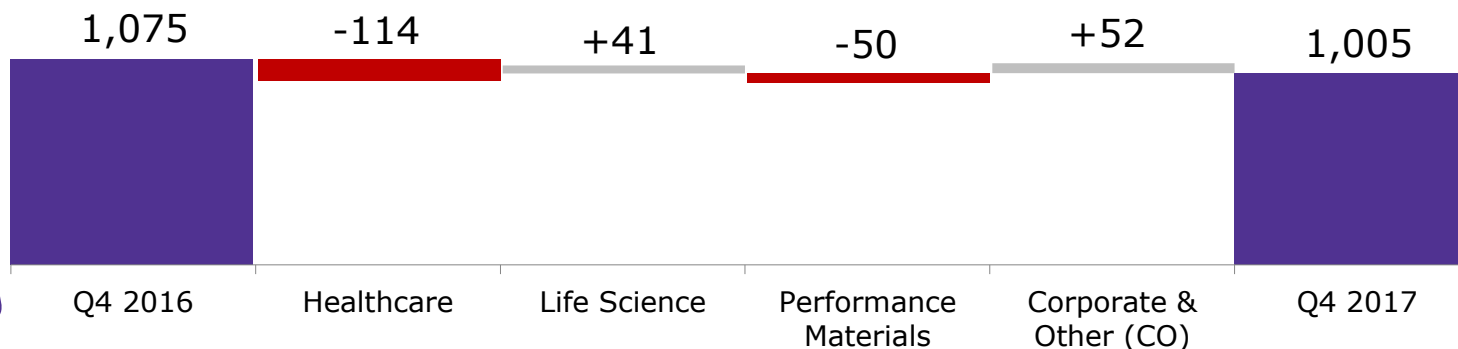
EBITDA pre reflects investments in HC & LC market share decline

Q4 2017 YoY net sales

	Organic	Currency	Portfolio	Total
Healthcare	5.9%	-4.8%	-0.7%	0.4%
Life Science	8.9%	-5.5%	0.4%	3.8%
Performance Materials	-1.2%	-5.9%	0.0%	-7.1%
Merck Group	5.9%	-5.2%	-0.2%	0.5%

- Strong organic growth of Healthcare driven by sound Fertility, GM repatriation in China, CH and Bavencio offsetting Rebif decline
- Life Science strong organic growth driven by all businesses, esp. Process Solutions
- Growth of ICM, Pigments & Functionals mitigate LC market share decline
- Strong FX headwinds in all businesses

Q4 YoY EBITDA pre contributors [€ m]



- Healthcare reflects higher R&D investments offsetting organic growth
- LS driven by strong organic growth and synergies outweighing FX headwinds
- Performance Materials reflects LC market share decline and FX
- Corporate EBITDA pre contains FX hedging gains and LTIP¹

Totals may not add up due to rounding;
¹LTIP = Long Term Incentive Plan;

Reported figures reflect US tax reform effect

Reported results

[€m]	Q4 2016	Q4 2017	Δ
EBIT	405	241	-40.5%
Financial result	-70	-93	33.4%
Profit before tax	335	148	-55.9%
Income tax	-70	868	n.m.
<i>Effective tax rate (%)</i>	<i>21.0%</i>	<i>n.m.</i>	
Net income	269	1,013	276.8%
EPS (€)	0.62	2.33	275.8%

Comments

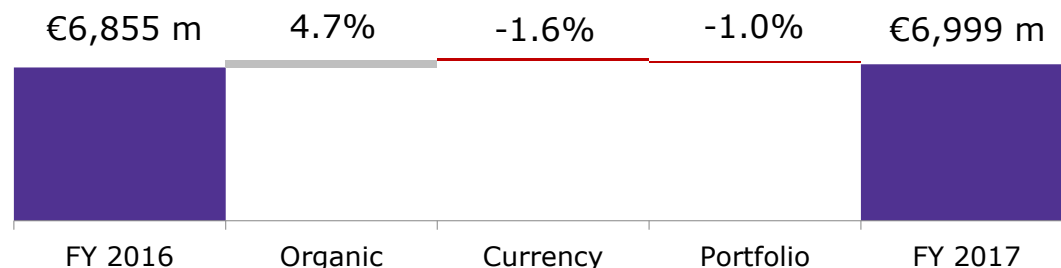
- EBIT reflects decreased EBITDA pre due to investments in HC, LC market share decline and FX
- Financial result contains adverse LTIP and negative valuation effects
- Effective tax rate is impacted by one time tax gain due to U.S. tax reform
- Net income and EPS reflect one time tax gain

Healthcare: Good organic growth and product mix drive profitability

Healthcare P&L

[€m]	FY 2016	FY 2017
Net sales	6,855	6,999
Marketing and selling	-2,587	-2,722
Administration	-270	-299
Research and development	-1,496	-1,632
EBIT	1,593	1,447
EBITDA	2,425	2,155
EBITDA pre	2,128	1,949
Margin (in % of net sales)	31.0%	27.9%

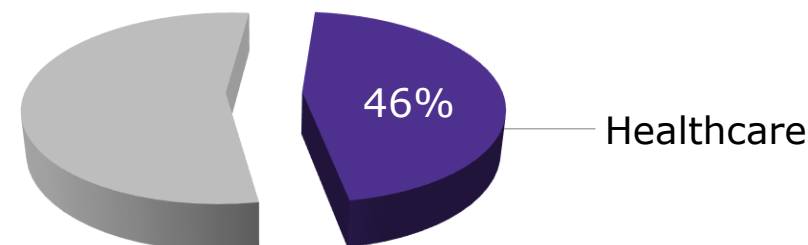
Net sales bridge



Comments

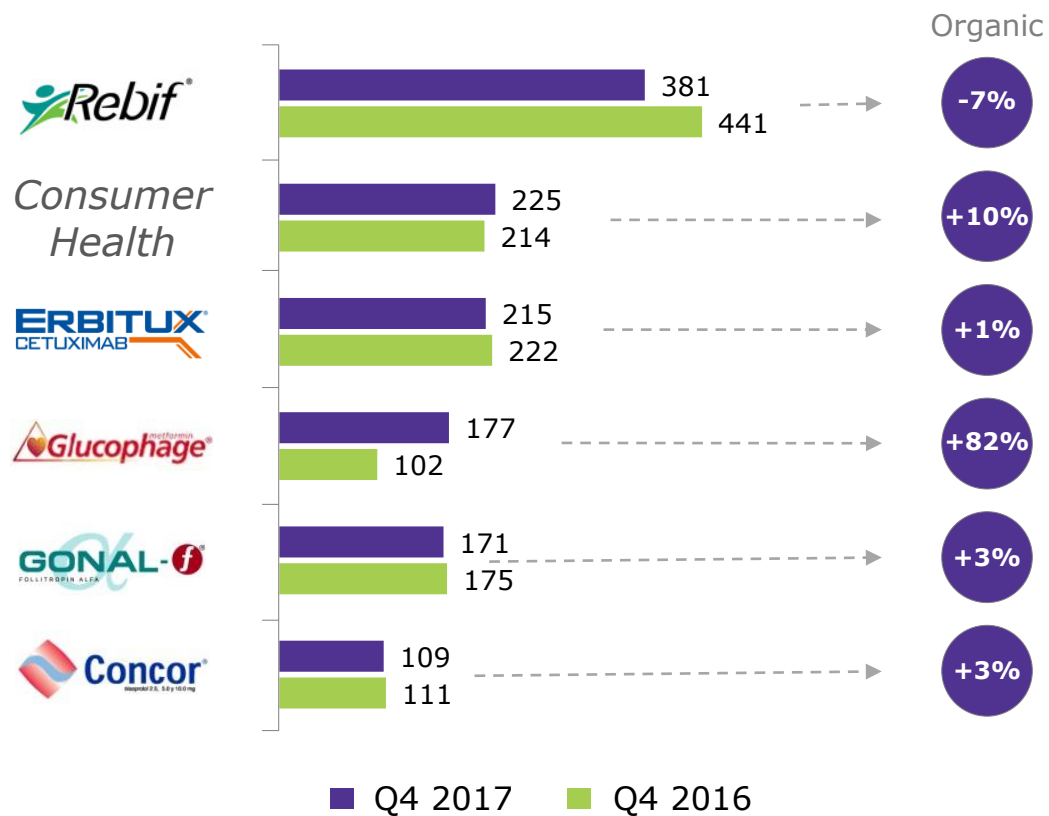
- Moderate Fertility growth reflects strong demand in China mitigating competition in EU and tough base LY
- Organic decline of Erbitux due to competition as well as price pressure in EU outweighing volume expansion in LatAm
- Rebif decline from competition in U.S. and EU, partially offset by U.S. pricing
- Marketing & selling reflects Bavencio and Mavenclad launches as well as costs for Glucophage repatriation
- R&D spend increases as pipeline development progresses
- Profitability burdened by higher R&D and launch costs, exceeding income from milestone payments for Bavencio and organic growth

FY 2017 share of group net sales

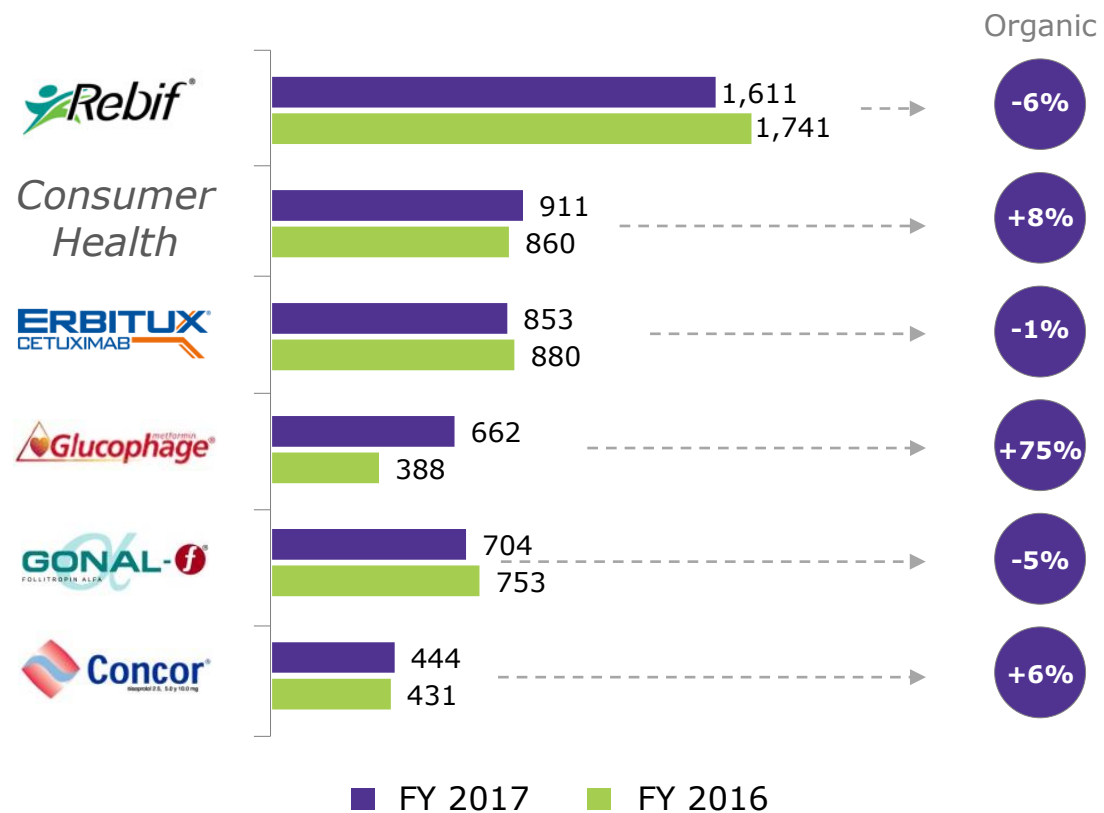


Healthcare organic growth by franchise/product

Q4 2017 organic sales growth [%]
by key product [€ m]



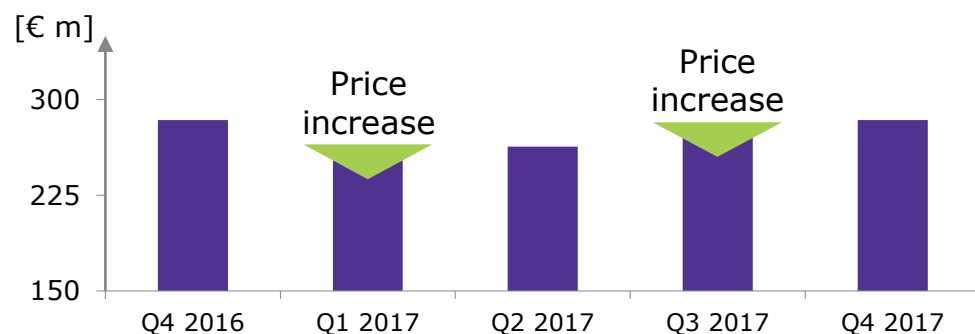
FY 2017 organic sales growth [%]
by key product [€ m]



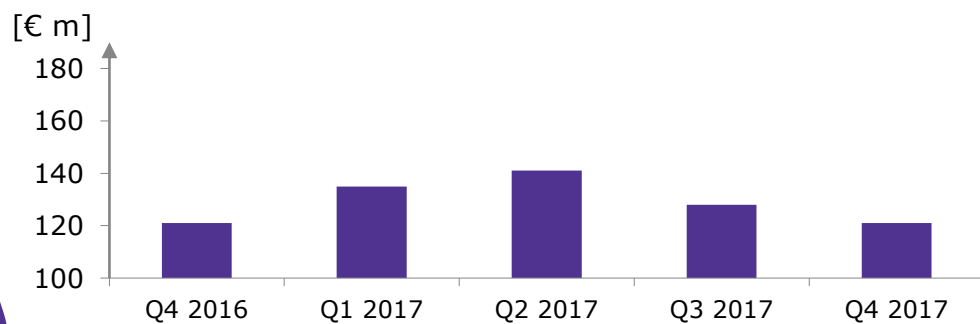
Rebif: Ongoing decline in line with interferon market

Rebif sales evolution

North America



Europe



Q4 drivers

-7.2% org.

- Price
- Volume
- FX

Q4 drivers

-7.6% org.

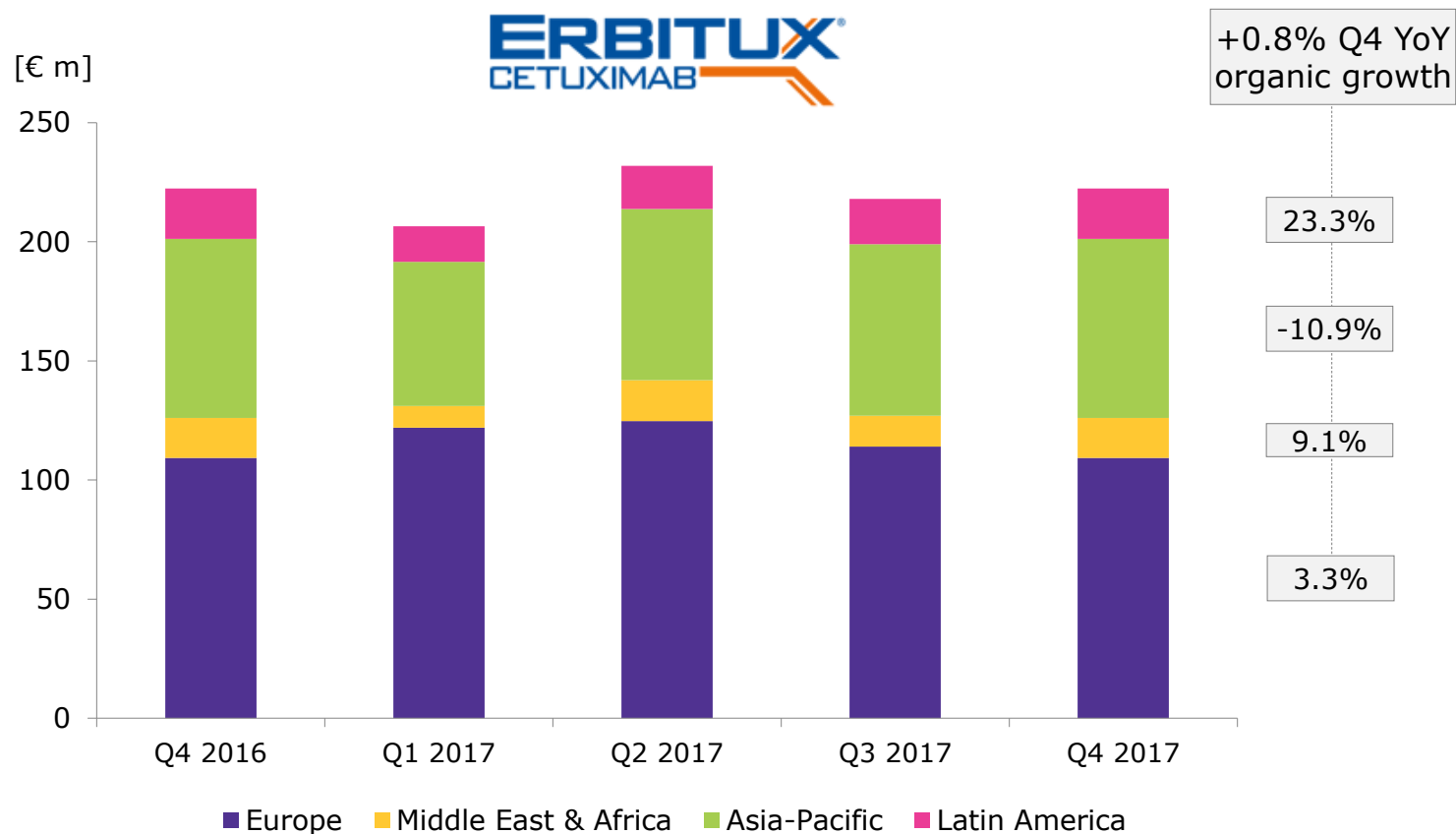
- Price
- Volume

Rebif performance

- Rebif sales of €381 m in Q4 2017 reflect organic decline of -7.2% as well as FX headwinds
- U.S. organic decline due to competition and stocking effects partially offset by price increases
- Market share within interferons stable due to high retention rates and long-term safety track record
- Competition from orals and occasional price adjustments cause ongoing organic decline in Europe

Erbitux: Almost stable in a challenging market environment

Erbitux sales by region



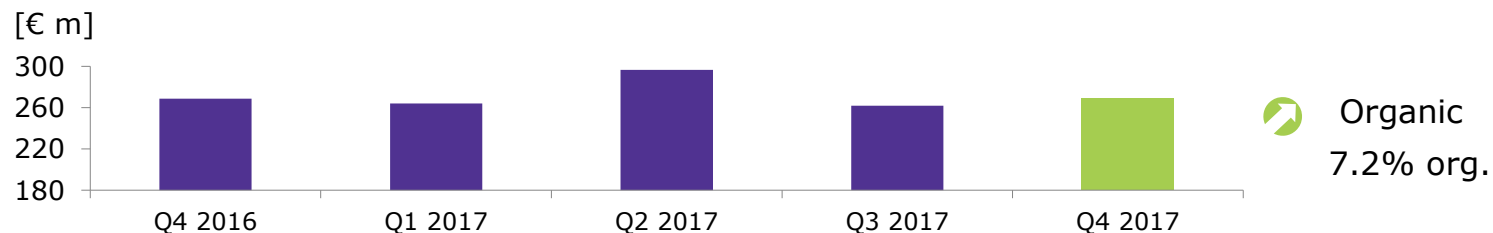
Erbitux performance

- Sales decrease to €215 m impacted by FX headwinds mainly from APAC & LatAm
- Europe impacted by competition, price reductions and shrinking market size due to increasing immuno-oncology trials
- Asia-Pacific with volume and price erosion in China and Japan
- MEA shows strong organic growth

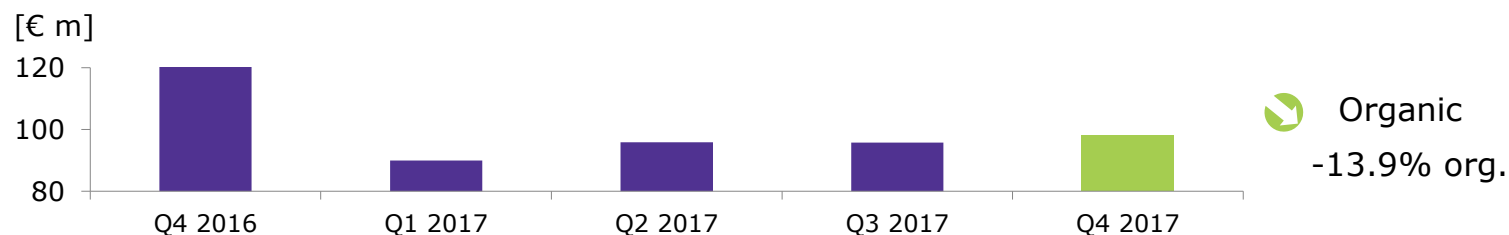
Strong organic growth in General Medicine and Fertility

Sales evolution

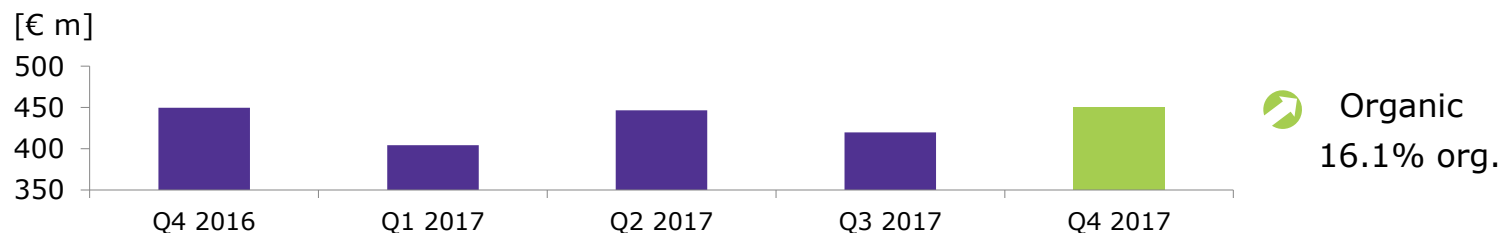
Fertility



Endocrinology



General Medicine (GM)*



Q4 drivers

- Fertility shows ongoing growth especially in APAC
- Gonal-f driven by double digit growth in APAC due to increased demand
- LY Endocrinology reflected release of accrual for rebates
- GM organic sales growth driven by Glucophage repatriation in China and increased demand in LatAm
- Euthyrox with strong demand in growth markets

Merck pipeline

February 15, 2018

Phase I	Phase II	Phase III	Registration
<p>M2698 p70S6K & Akt inhibitor Solid tumors</p> <p>M3814 DNA-PK inhibitor Solid tumors</p> <p>M9831 (VX-984) DNA-PK inhibitor Solid tumors</p> <p>M6620 (VX-970) ATR inhibitor Solid tumors</p> <p>M4344 (VX-803) ATR inhibitor Solid tumors</p> <p>M3541 ATM inhibitor Solid tumors</p> <p>M8891 MetAP2 inhibitor Solid tumors</p> <p>M7583 BTK inhibitor Hematological malignancies</p>	<p>avelumab anti-PD-L1 mAb Solid tumors</p> <p>avelumab anti-PD-L1 mAb Hematological malignancies</p> <p>M9241 (NHS-IL12)² Cancer immunotherapy Solid tumors</p> <p>M7824 anti-PD-L1/TGFbeta trap Solid tumors</p> <p>M4112 Cancer immunotherapy Solid tumors</p> <p>M1095 (ALX-0761)³ anti-IL-17 A/F nanobody Psoriasis</p> <p>M6495 anti-ADAMTS-5 nanobody Osteoarthritis</p> <p>M5717 PeEF2 inhibitor Malaria</p>	<p>tepotinib c-Met kinase inhibitor Non-small cell lung cancer</p> <p>tepotinib c-Met kinase inhibitor Hepatocellular cancer</p> <p>avelumab - anti-PD-L1 mAb Merkel cell cancer 1L¹</p> <p>sprifermin fibroblast growth factor 18 Osteoarthritis</p> <p>atacept anti-Blys/anti-APRIL fusion protein Systemic lupus erythematosus</p> <p>atacept anti-Blys/anti-APRIL fusion protein IgA nephropathy</p> <p>abrituzumab anti-CD51 mAb Systemic sclerosis with interstitial lung disease</p> <p>evobrutinib BTK inhibitor Rheumatoid arthritis</p> <p>evobrutinib BTK inhibitor Systemic lupus erythematosus</p> <p>evobrutinib BTK inhibitor Multiple sclerosis</p>	<p>avelumab - anti-PD-L1 mAb Non-small cell lung cancer 1L¹</p> <p>avelumab - anti-PD-L1 mAb Gastric cancer 1L-M^{1M}</p> <p>avelumab - anti-PD-L1 mAb Ovarian cancer platinum resistant/refractory</p> <p>avelumab - anti-PD-L1 mAb Ovarian cancer 1L¹</p> <p>avelumab - anti-PD-L1 mAb Urothelial cancer 1L-M^{1M}</p> <p>avelumab - anti-PD-L1 mAb Renal cell cancer 1L¹</p> <p>avelumab - anti-PD-L1 mAb Locally advanced head and neck cancer</p> <p>cladribine tablets lymphocyte targeting agent Relapsing multiple sclerosis⁴</p>

- Oncology
- Immuno-Oncology
- Immunology
- Neurology
- General Medicine

¹ First Line treatment; ^{1M} First Line maintenance treatment.

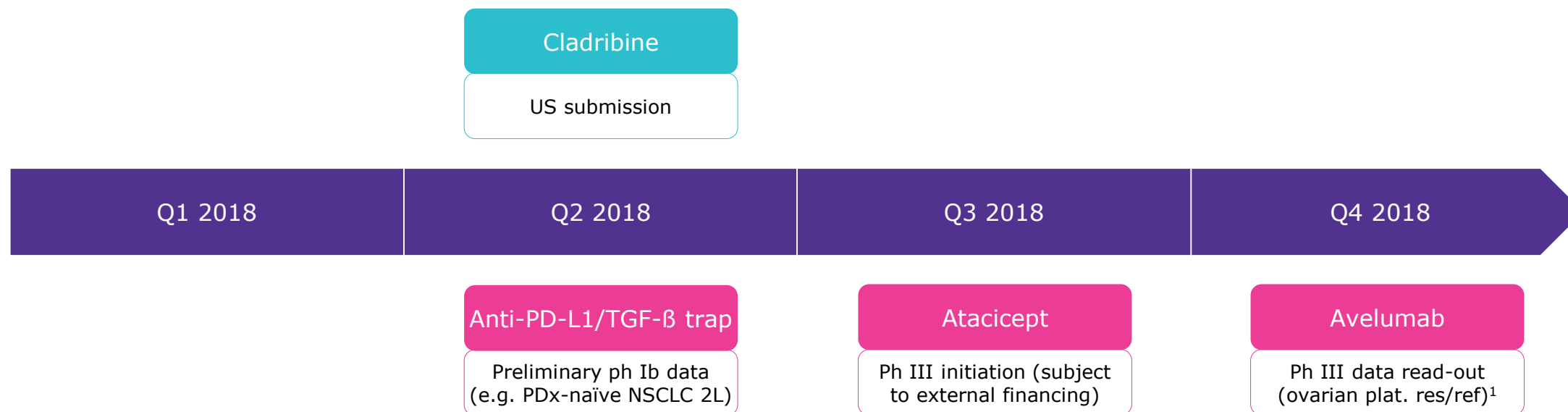
² Sponsored by the National Cancer Institute (USA).

³ As announced on March 30 2017, in an agreement with Avillion, anti-IL-17 A/F nanobody will be developed by Avillion for plaque psoriasis and commercialized by Merck.

⁴ As announced on August 25 2017, the European Commission has granted marketing authorization for cladribine tablets for the treatment of highly active relapsing multiple sclerosis in the 28 countries of the European Union in addition to Norway, Liechtenstein and Iceland.

Healthcare

Upcoming catalysts

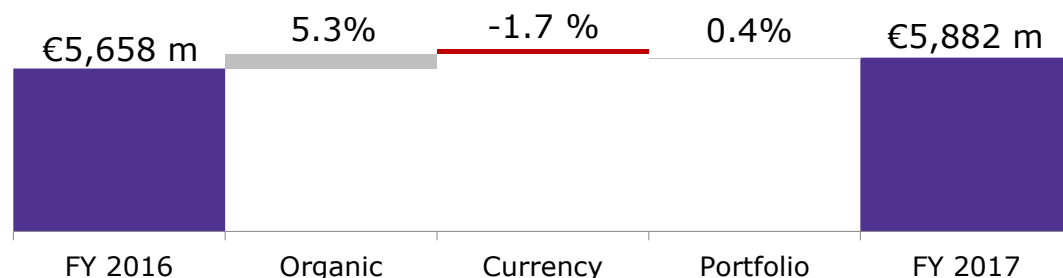


Life Science: Strong top-line growth and fast synergy realization

Life Science P&L

[€m]	FY 2016	FY 2017
Net sales	5,658	5,882
Marketing and selling	-1,706	-1,734
Administration	-248	-261
Research and development	-260	-241
EBIT	556	834
EBITDA	1,378	1,580
EBITDA pre	1,652	1,786
Margin (in % of net sales)	29.2%	30.4%

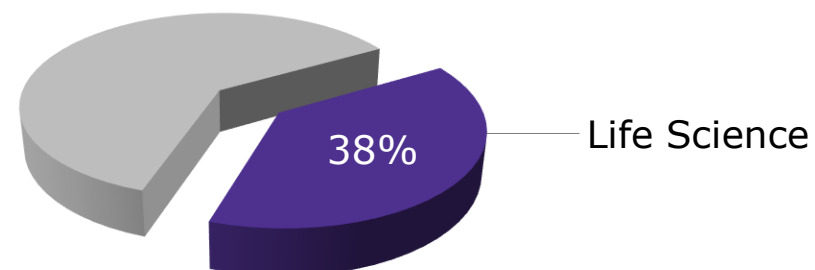
Net sales bridge



Comments

- Strong growth of Process Solutions driven by increasing production of large molecules across global and regional accounts
- Applied Solutions shows solid organic growth, driven by biomonitoring products for pharma & demand for analytical testing
- Research Solutions organic growth reflects eCommerce performance
- LY EBIT affected by inventory step-up for Sigma-Aldrich
- Profitability reflects organic growth and ongoing synergy realization, despite increasing FX headwinds in second half of the year

FY 2017 share of group net sales

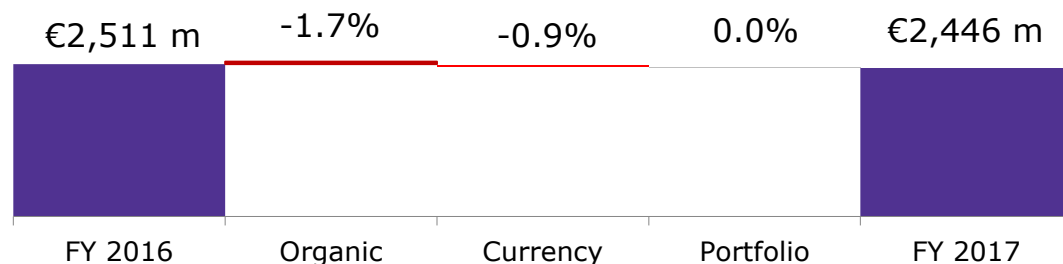


Performance Materials: Topline affected from LC softness but profitability kept intact

Performance Materials P&L

[€m]	FY 2016	FY 2017
Net sales	2,511	2,446
Marketing and selling	-233	-242
Administration	-61	-72
Research and development	-213	-225
EBIT	823	689
EBITDA	1,077	947
EBITDA pre	1,106	980
Margin (in % of net sales)	44.1%	40.1%

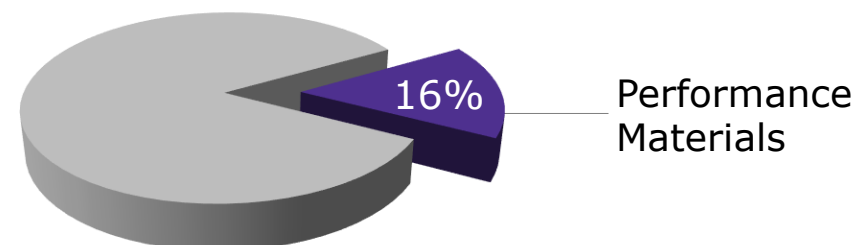
Net sales bridge



Comments

- Organic growth of Integrated Circuit Materials, Pigments and OLED cannot offset Liquid Crystal market share decline
- Sales decline driven by ongoing Liquid Crystal market share decline
- OLED grew in line with industry capacity expansion & investments
- Integrated Circuit Materials shows very strong growth in all major material classes driven by increasing demand & complexity of chips
- Healthy growth of Pigments due to solid demand for decorative pigments especially in automotive applications
- Profitability reflects negative business mix, usual Liquid Crystal price reductions as well as higher R&D for future growth projects

FY 2017 share of group net sales



Healthy operating cash flow reflects solid business performance

FY 2017 – cash flow statement

[€m]	FY 2016	FY 2017	Δ
Profit after tax	1,633	2,610	977
D&A	1,934	1,758	-177
Changes in provisions	-51	103	154
Changes in other assets/liabilities	-587	-1,256	-669
Other operating activities	-437	-349	88
Changes in net working capital	26	-170	-196
Operating cash flow	2,518	2,696	178
Investing cash flow	-503	-1,147	-644
thereof Capex on PPE	-716	-919	-203
Financing cash flow	-1,908	-1,870	39

Cash flow drivers

- Profit after tax reflects one time U.S. tax reform effect and Biosimilars divestment
- D&A lower mainly due to Mavenclad and Vevey site write up and impairment of Xalkori LY
- Changes in other assets/liabilities mainly reflects neutralization of non-cash relevant tax gain
- Investing cash flow contains Vertex and F-star licensing deals as well as increased Capex outweighing Biosimilars divestment
- Financing cash flow reflects mainly repayment of \$250 m and €700 m bond (Q1/Q3)

Adjustments in Q4 2017

Adjustments in EBIT

[€m]	Q4 2016		Q4 2017	
	Exceptionals	thereof D&A	Exceptionals	thereof D&A
Healthcare	20	0	109	33
Life Science	93	27	123	0
Performance Materials	25	16	34	19
Corporate & Other	27	1	43	4
Total	165	44	308	56

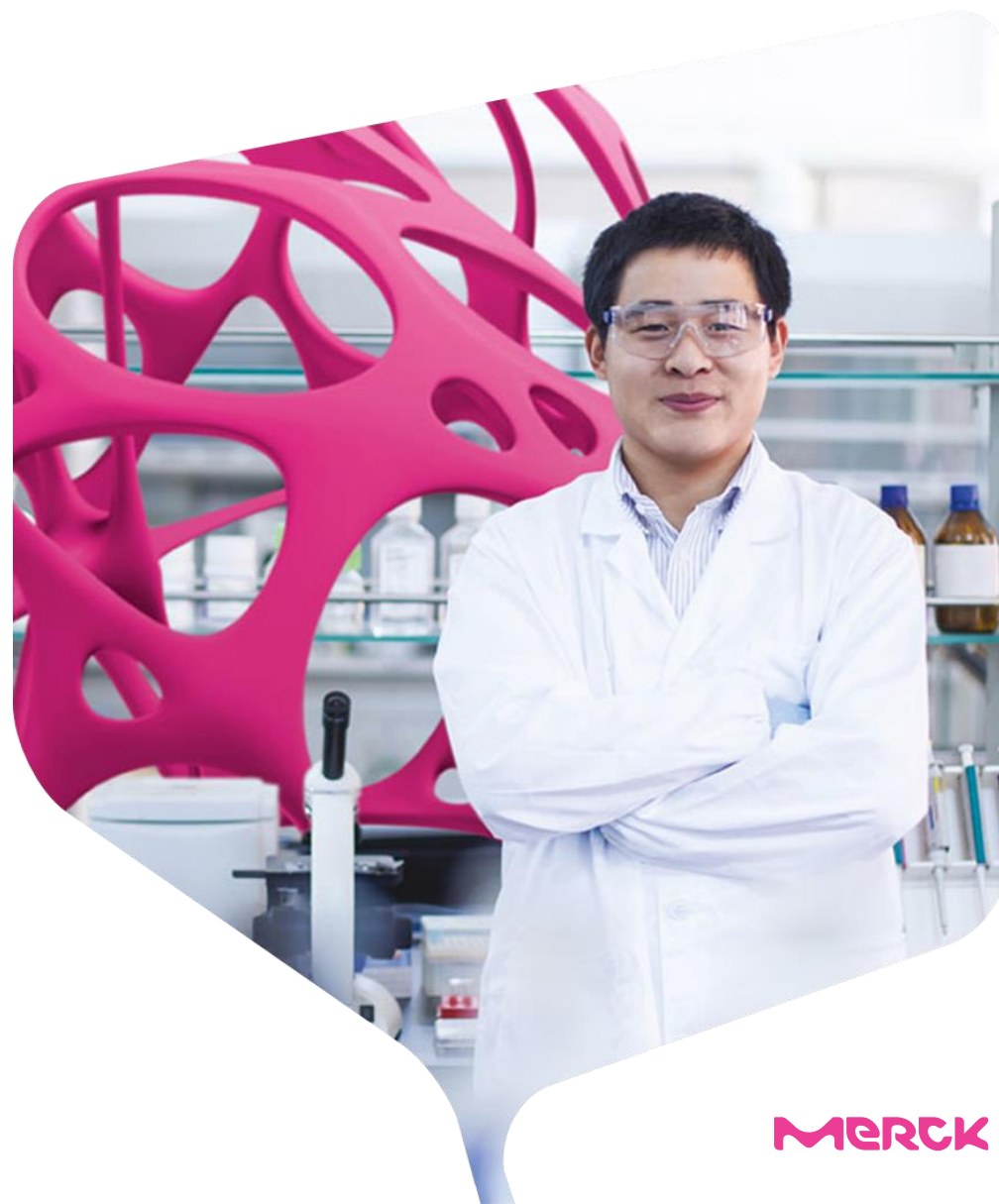
Adjustments in FY 2017

Adjustments in EBIT

[€m]	FY 2016		FY 2017	
	Exceptionals	thereof D&A	Exceptionals	thereof D&A
Healthcare	-225	71	-257	-51
Life Science	301	27	209	3
Performance Materials	46	16	59	26
Corporate & Other	69	1	103	4
Total	191	115	114	-19

Financial calendar

Date	Event
April 27, 2018	Annual General Meeting
May 15, 2018	Q1 2018 Earnings release
August 9, 2018	Q2 2018 Earnings release
November 14, 2018	Q3 2018 Earnings release



CONSTANTIN FEST



Head of Investor Relations
+49 6151 72-5271
constantin.fest@merckgroup.com

SVENJA BUNDSCHUH



Assistant Investor Relations
+49 6151 72-3744
svenja.bundschuh@merckgroup.com

ALESSANDRA HEINZ



Assistant Investor Relations
+49 6151 72-3321
alessandra.heinz@merckgroup.com

ANNETT WEBER



Institutional Investors /
Analysts
+49 6151 72-63723
annett.weber@merckgroup.com

NILS VON BOTH



Institutional Investors /
Analysts
+49 6151 72-7434
nils.von.both@merckgroup.com

EVA STERZEL



Retail Investors / AGM /
CMDs / IR Media
+49 6151 72-5355
eva.sterzel@merckgroup.com

PATRICK BAYER



Institutional Investors /
Analysts
+49 6151 72-5642
patrick.bayer@merckgroup.com

EMAIL: investor.relations@merckgroup.com

WEB: www.investors.merck.de

FAX: +49 6151 72-913321

