



STRONGER

Merck FY 2015 results

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MERCK

Disclaimer

Cautionary Note Regarding Forward-Looking Statements

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; the impact of future regulatory or legislative actions; and the risks and uncertainties detailed by Sigma-Aldrich Corporation (“Sigma-Aldrich”) with respect to its business as described in its reports and documents filed with the U.S. Securities and Exchange Commission (the “SEC”).

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, and the Risk Factors section of Sigma-Aldrich’s most recent reports on Form 10-K and Form 10-Q. 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.

Agenda

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



01

EXECUTIVE SUMMARY

Highlights 2015

Execution of strategy

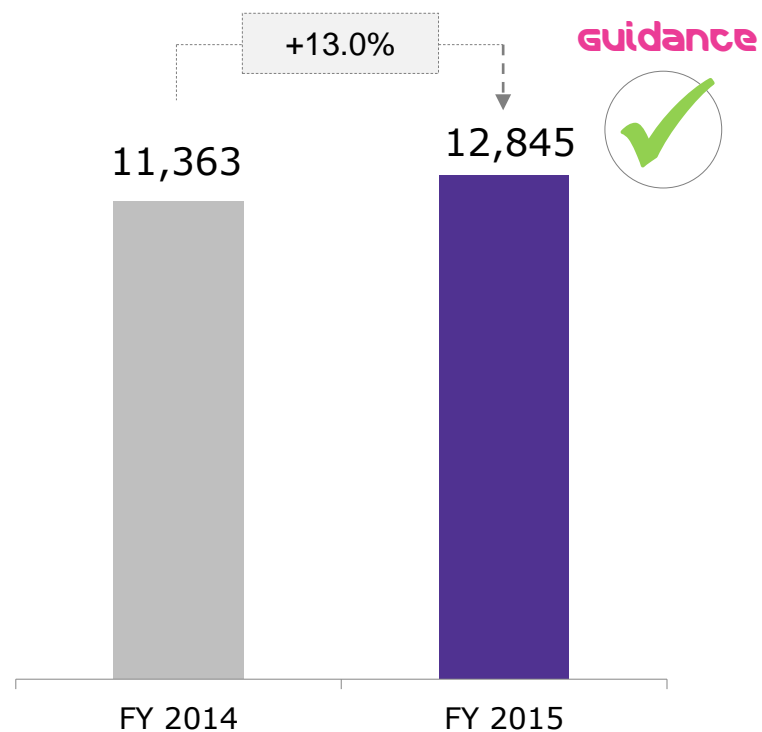
- ▶ Sigma acquisition closed – integration on track – 2015 synergies realized
- ▶ Avelumab: Six Phase III trials initiated – breakthrough designation for Merkel cell
- ▶ Strong development of innovative UB-FFS technology and dynamic growth of OLED
- ▶ Launch of the new **MERCK** brand and opening of Innovation Center

Delivery on financials

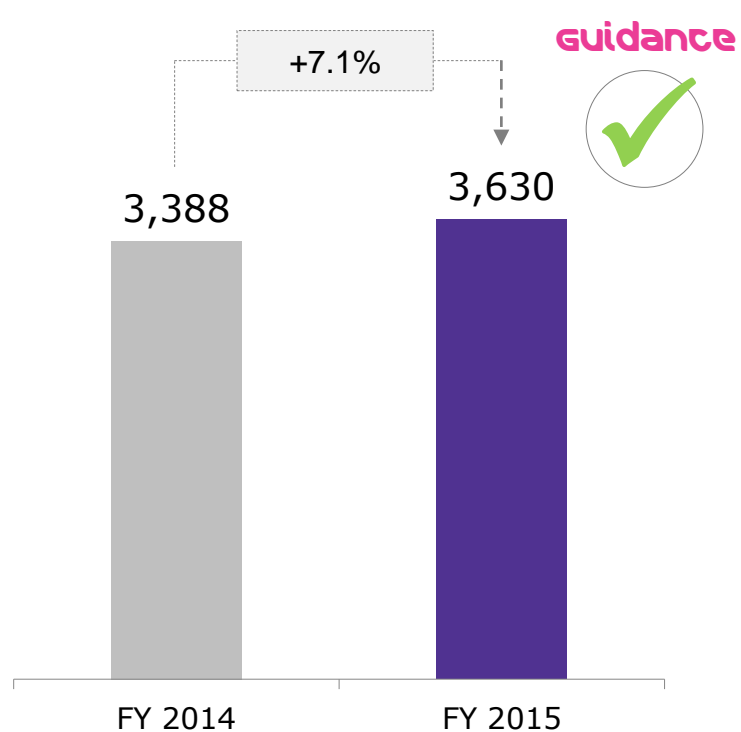
- ▶ Organic growth across all businesses
- ▶ Delivery of targets: Net sales €12.8 bn, EBITDA pre €3.63 bn, EPS pre €4.87
- ▶ Healthy operating cash flow of €2.2 bn – deleveraging already started

Strong financials and delivery of targets

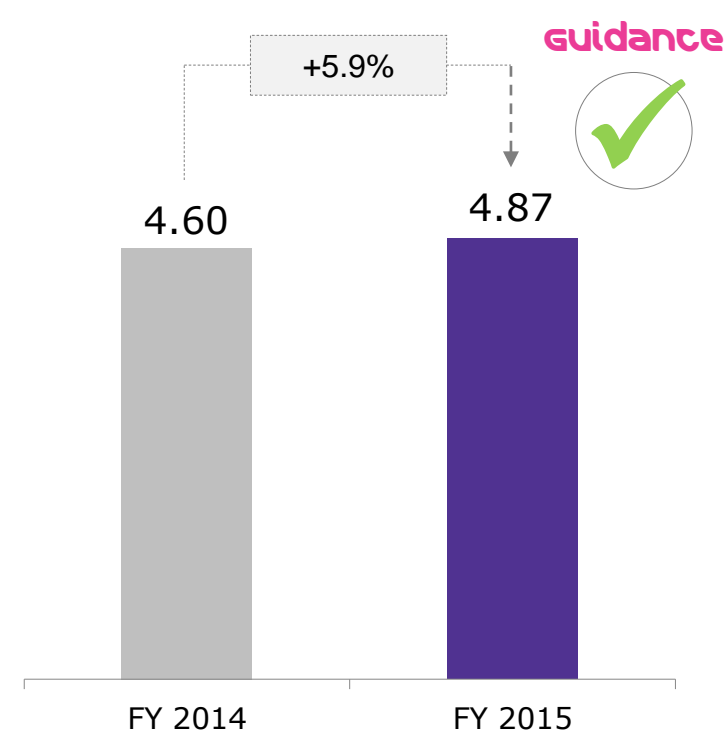
Net sales [€ m]



EBITDA pre [€ m]

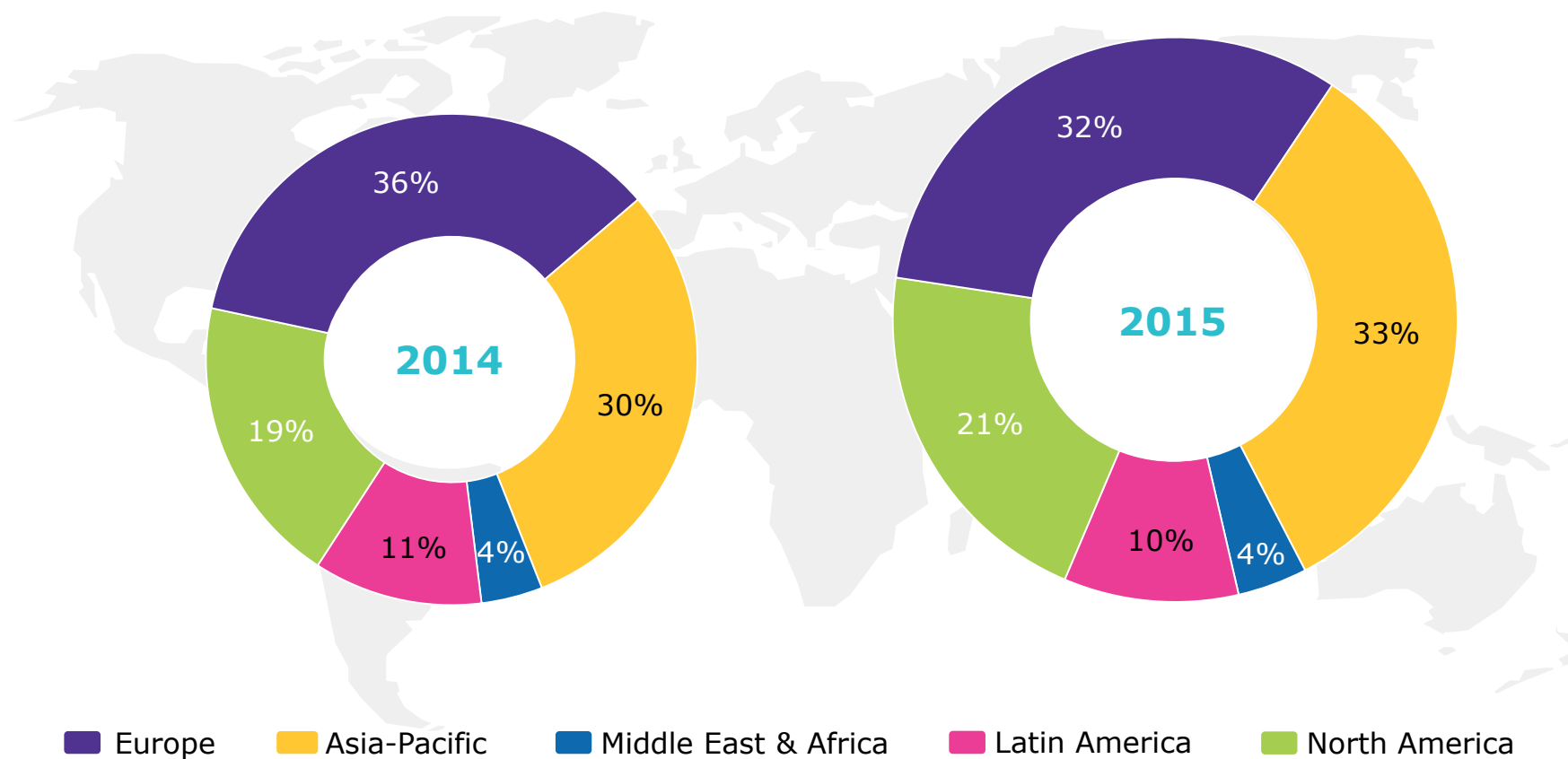


EPS pre [€]



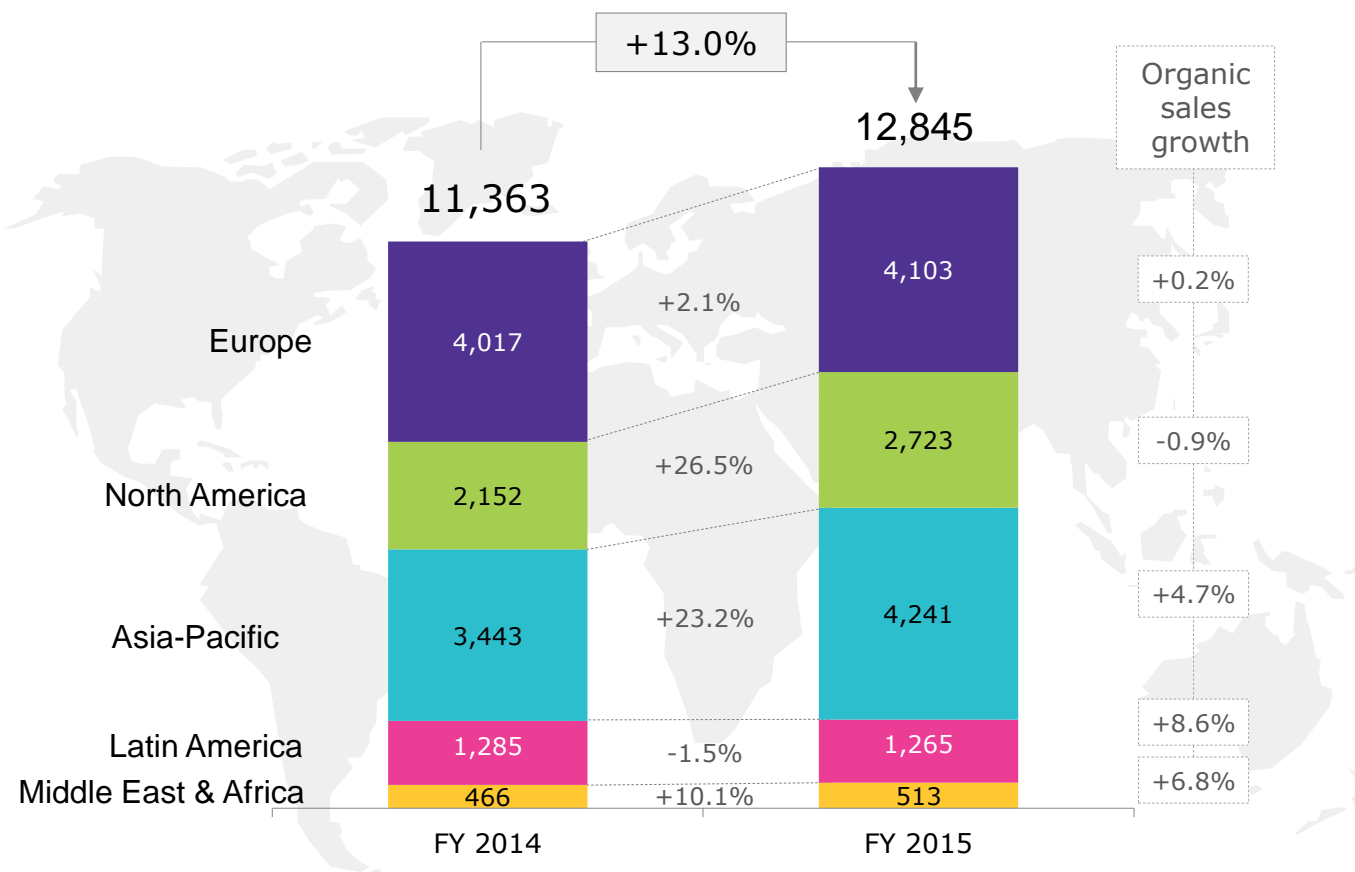
Asia-Pacific continuously gaining share

Merck Group FY 2014 and FY 2015 net sales by region [in %]



APAC, LatAm and MEA drive organic sales growth

Regional breakdown of net sales [€ m]

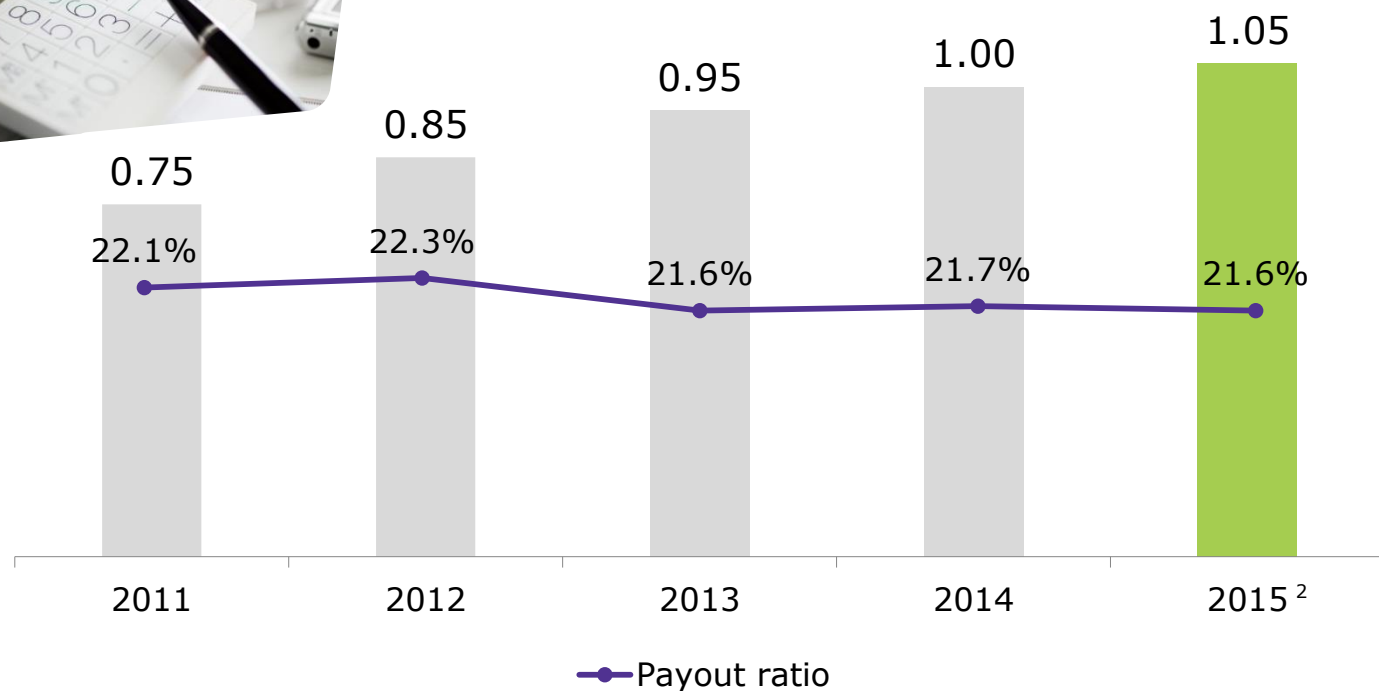


Regional development

- Europe predominantly driven by Life Science and Consumer Health
- Life Science growth in North America more than offset by lower Rebif volumes
- Organic growth in Asia-Pacific across all businesses and all major countries; China as main driver also in Q4
- Strong organic growth in Latin America, despite macroeconomic challenges

Sustainable dividend development

Dividend¹ development 2011-2015



2015 dividend and policy

- Dividend of €1.05 per share proposed² for 2015
- Last year's dividend constitutes the minimum level³
- Development of dividends in line with business performance and earnings progression
- Aiming for a corridor of 20%-25% of EPS pre

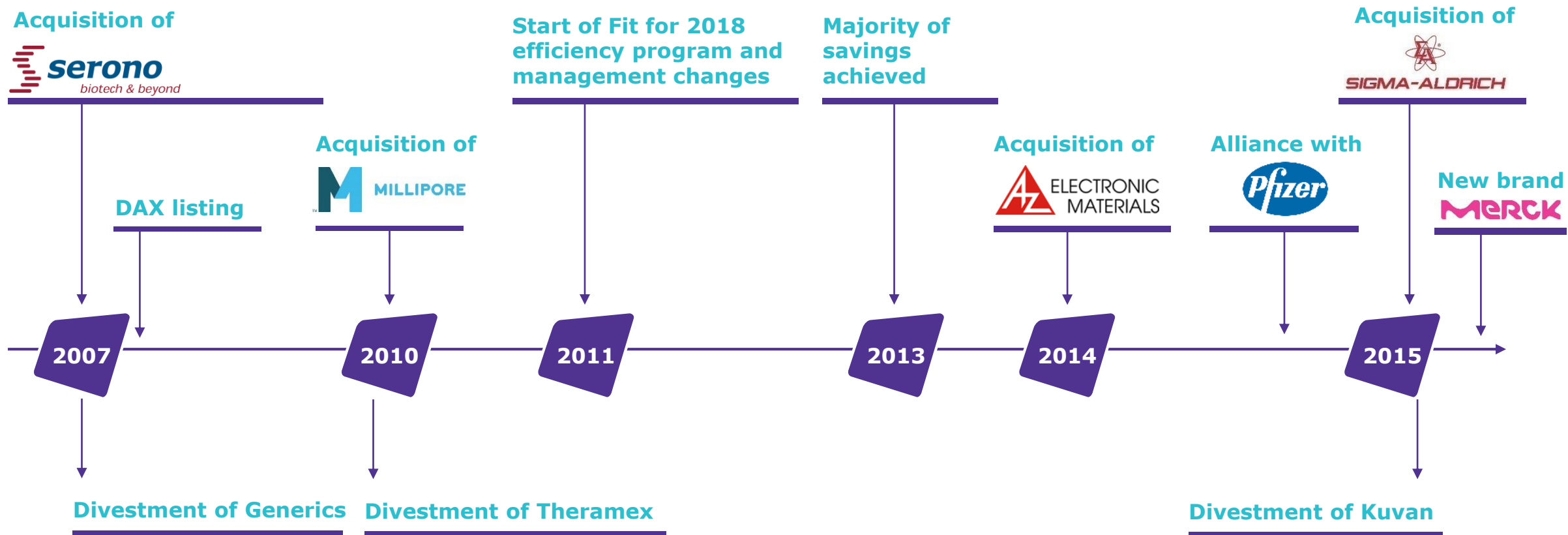
¹Adjusted for share split, which has been effective since June 30, 2014; ²Final decision subject to Annual General Meeting approval; ³Assuming a stable economic environment



02

STRATEGIC REVIEW

From ambition to reality



We have created three leading businesses

Healthcare

+ Serono

- Leading biotech company
- Global footprint
- Strong presence in growth markets
- Solid underlying business
- Promising pipeline assets

Life science

+ Millipore
+ Sigma

- No. 2 in the world market
- Broad and global product portfolio
- Leading eCommerce platform
- Best-in-class supply chain management

Performance Materials

+ AZ

- World market leader
- Technology and innovation leader

Science

Technology

Innovation

Specialties

Quality

Customer focus

Healthcare: Solid base business and further pipeline progress

Healthcare 2015

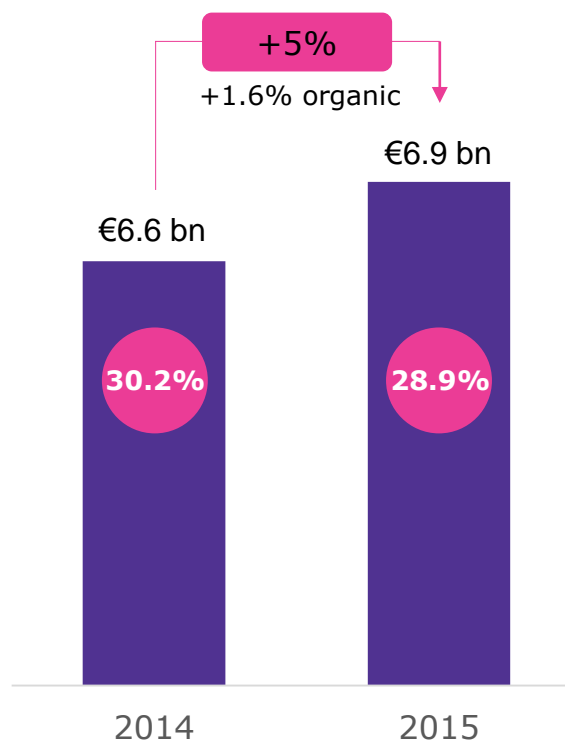
Maximize existing business

- Defending Rebif
- Successful product repatriations
- Further market expansion

Ongoing life-cycle-management

- Erbitux: Further collaboration for liquid biomarker testing
- Fertility: Ongoing development and launches of improved pens

sales and EBITDA pre Margin



Further development of pipeline

- Intention to file Cladribine in Europe
- Initiation of first-in-man studies for TGFbeta-trap and DNA-PK-Inhibitor
- 8 Phase 1b cohorts / Phase II trials initiated (e.g. Avelumab, BTKi, Tepotinib)

On track with avelumab

- Target of starting 15-20 trials met
- Initiation of six Phase III studies
- Breakthrough, Fast Track and Orphan Drug designation for Merkel cell carcinoma

Life Science: Profitable growth amid Sigma acquisition

Life Science 2015

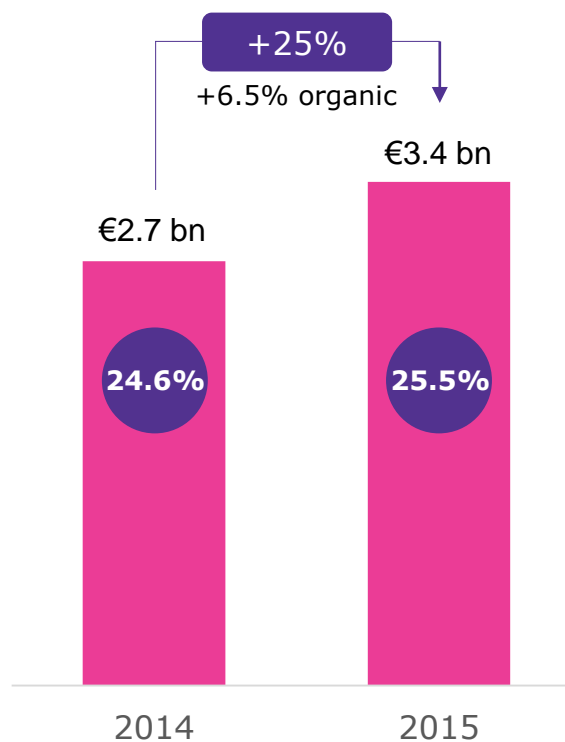
Strong operational performance

- Quality growth in line with market
- All businesses contributing
- Good performance of Sigma business

Ongoing product innovation

- Expanding portfolio with 2000L bioreactor
- Innovation award for lab water systems & RNA Reprogramming Technology
- Launch of 3-4 new antibodies per day

sales and EBITDA pre Margin



Sigma acquisition completed

- Antitrust process successfully managed
- Acquisition closed on November 18, 2015

Integration update

- Thorough integration planning; smooth day-one execution
- Key management positions already filled
- Successful realization of 2015 synergies as planned

Performance Materials: A year of ongoing technology and market leadership

Performance Materials 2015

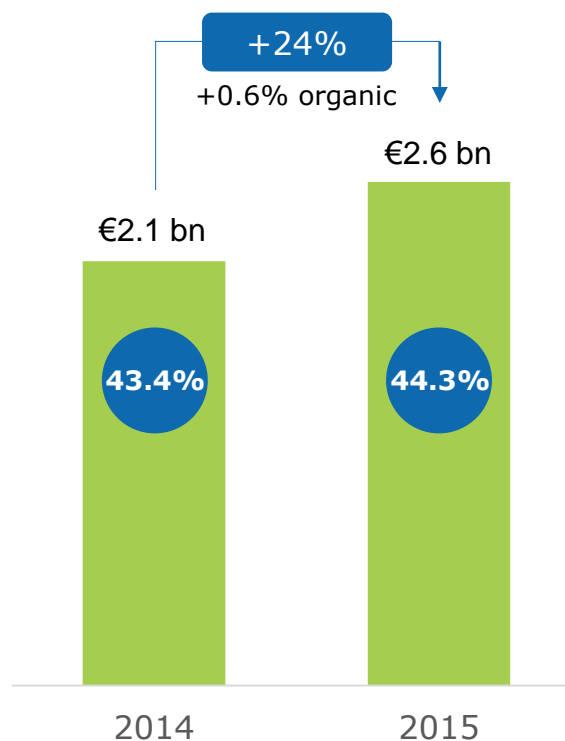
Display Materials

- Market shares retained at high levels
- German Innovation Award for energy-saving UB-FFS technology
- LC-Windows – intense collaboration with selected partners on commercialization

Pigments and Functionals

- Stability through broad diversification
- Further expanding coatings portfolio with new Xirallic NXT generation
- Partnership with BrandWatch for expansion of brand protection program

sales and EBITDA pre Margin



Integrated Circuit Materials

- Strong underlying trends trigger solid growth momentum
- Adding advanced metal-layer deposition materials through Sigma acquisition
- Acquisition of Ormet Circuits

Advanced Technologies

- Groundbreaking of new OLED facility
- OLED-ink being shipped for larger scale printing tests
- Acquisition of Qlight Nanotech – enhancing position in quantum materials

2015 – a year of operational excellence and execution on strategy



Organic growth across all businesses



Significant progress in pipeline development



Sigma closing and successful initiation of integration



Delivery on financial targets





03

FINANCIAL OVERVIEW

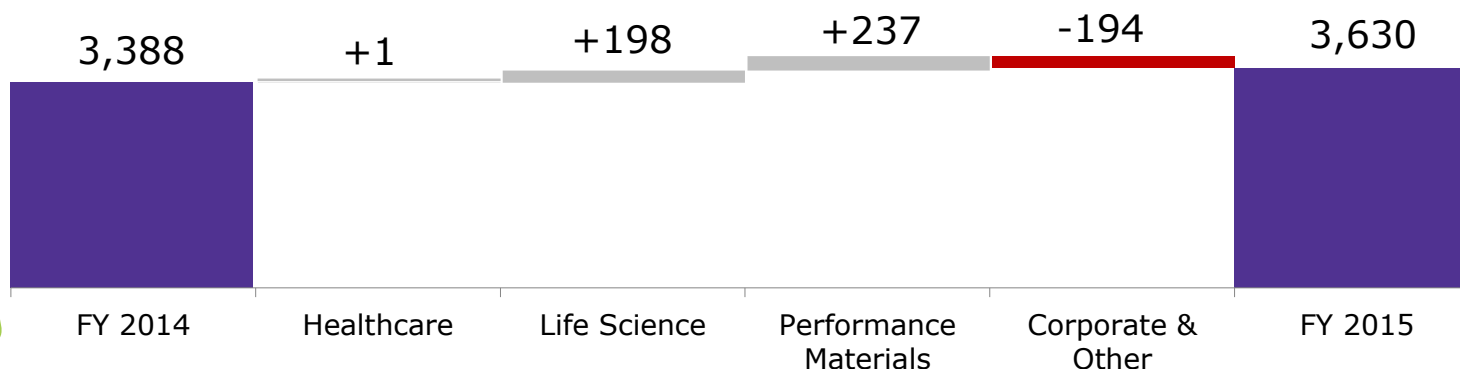
Organic growth and FX tailwinds at all businesses

FY 2015 YoY net sales

| | Organic | Currency | Portfolio | Total |
|-----------------------|---------|----------|-----------|--------------|
| Healthcare | 1.6% | 3.1% | 0.0% | 4.7% |
| Life Science | 6.5% | 8.4% | 10.2% | 25.1% |
| Performance Materials | 0.6% | 13.1% | 10.4% | 24.1% |
| Merck Group | 2.6% | 6.2% | 4.3% | 13.0% |

- Organic growth in Healthcare as GM* & Fertility more than offset Rebif decline
- Life Science shows organic growth from all businesses, Process Solutions main contributor
- Performance Materials driven by AZ and volume growth

FY YoY EBITDA pre contributors [€ m]



- Organic growth of Healthcare compensates for royalty income loss & Rebif decline
- Life Science driven by solid organic growth, positive product mix and Sigma
- Performance Materials contains FX benefits, AZ and positive product mix
- Corporate EBITDA pre reflects hedging losses & investments in corporate initiatives

*General Medicine and CardioMetabolic Care
Totals may not add up due to rounding

FY 2015: Overview

Key figures

| [€m] | FY 2014 | FY 2015 | Δ |
|-----------------------------------|---------|---------------|--------|
| Net sales | 11,363 | 12,845 | 13.0% |
| EBITDA pre | 3,388 | 3,630 | 7.1% |
| <i>Margin (in % of net sales)</i> | 29.8% | 28.3% | |
| EPS pre | 4.60 | 4.87 | 5.9% |
| Operating cash flow | 2,705 | 2,195 | -18.9% |

| [€m] | Dec. 31, 2014 | Dec. 31, 2015 | Δ |
|--------------------|---------------|---------------|-------|
| Net financial debt | 559 | 12,654 | >100% |
| Working capital | 2,356 | 3,448 | 46.4% |
| Employees | 39,639 | 49,613 | 25.2% |

Comments

- EBITDA pre increases, while margin softens due to royalty loss, Rebif decline and higher corporate costs
- EPS pre carries higher interest expenses from Sigma financing
- Operating cash flow burdened by higher tax and interest payments; 2014 included Pfizer upfront payment
- Net financial debt reflects Sigma
- Working capital increase driven by first time consolidation of Sigma and FX
- ~9,000 employees from Sigma added

FY 2015 – solid reported figures

Reported results

| [€m] | FY 2014 | FY 2015 | Δ |
|---------------------|---------|--------------|-------|
| EBIT | 1,762 | 1,843 | 4.6% |
| Financial result | -205 | -357 | 74.0% |
| Profit before tax | 1,557 | 1,487 | -4.5% |
| Income tax | -392 | -368 | -6.2% |
| <i>Tax rate (%)</i> | 25.2% | 24.8% | |
| Net income | 1,157 | 1,115 | -3.7% |
| EPS (€) | 2.66 | 2.56 | -3.8% |

Comments

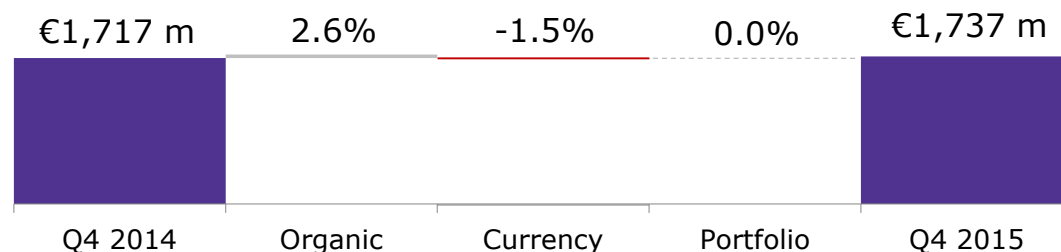
- EBIT reflects increased EBITDA pre amid higher exceptionals & D&A from acquisitions
- Financial result impacted by higher interest expenses for Sigma financing (-€154 m; hybrid, USD & EUR bonds)
- Tax rate within guidance range of 23-25%

Healthcare: Dynamic development of organic growth drivers

Healthcare P&L

| [€m] | Q4 2014 | Q4 2015 |
|----------------------------|---------|--------------|
| Net sales | 1,717 | 1,737 |
| Marketing and selling | -657 | -728 |
| Administration | -63 | -64 |
| Research and development | -331 | -283 |
| EBIT | 278 | 213 |
| EBITDA | 515 | 522 |
| EBITDA pre | 530 | 524 |
| Margin (in % of net sales) | 30.9% | 30.2% |

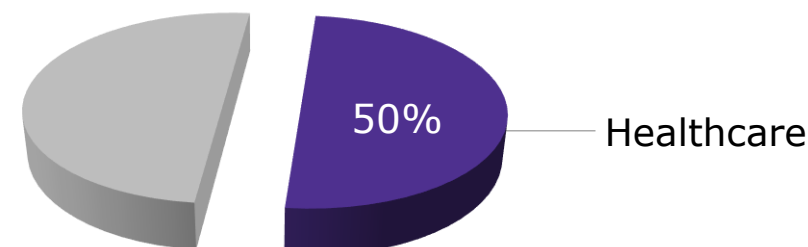
Net sales bridge



Comments

- GM, Fertility and Consumer Health continue to drive organic growth
- Rebif shows continuous volume decline in Europe, while U.S. price increases mitigate erosion in North America
- Erbitux stronger due to Q4 pickup in tender business as well as good demand in APAC countries, EU remains competitive
- Marketing & selling reflect repatriations in Russia, Japan and China as well as ramp-up of oncology sales force, Xalkori amortization and FX
- R&D spend impacted by phasing of avelumab trials and shift of Biosimilar Phase III trials to 2016

Q4 2015 share of group net sales

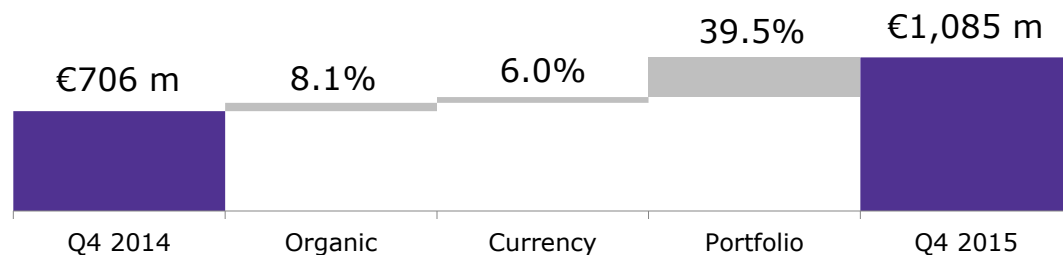


Life Science: Strong year-end performance thanks to growth in all businesses

Life Science P&L

| [€m] | Q4 2014 | Q4 2015 |
|----------------------------|---------|--------------|
| Net sales | 706 | 1,085 |
| Marketing and selling | -235 | -324 |
| Administration | -30 | -63 |
| Research and development | -43 | -59 |
| EBIT | 55 | 34 |
| EBITDA | 135 | 161 |
| EBITDA pre | 163 | 271 |
| Margin (in % of net sales) | 23.0% | 25.0% |

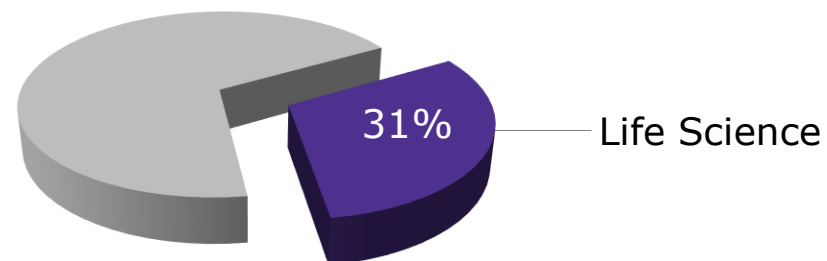
Net sales bridge



Comments

- Process Solutions posts double-digit organic growth across all businesses, main contributors are single-use & virus filtration
- Moderate organic growth in Lab Solutions led by U.S. Pharma demand for biomonitoring and lab water consumables
- Bioscience sees organic growth due to sound demand for cell analysis and protein detection systems, partially offset by research content
- Lower EBIT contains integration costs & one-time effects from consolidation of Sigma
- EBITDA pre reflects first Sigma contribution, favorable product mix and pricing but also higher admin

Q4 2015 share of group net sales

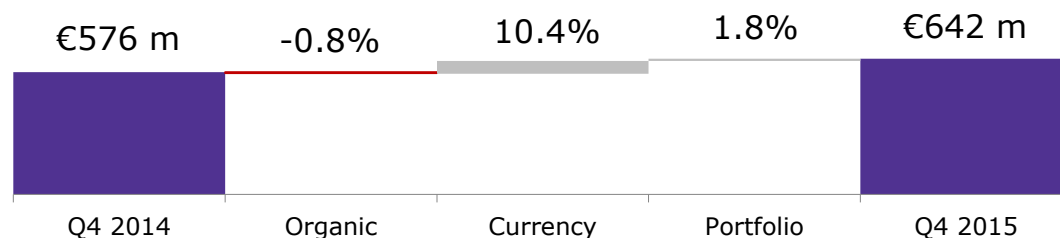


Performance Materials: Solid performance amid challenging market conditions

Performance Materials P&L

| [€m] | Q4 2014 | Q4 2015 |
|----------------------------|---------|--------------|
| Net sales | 576 | 642 |
| Marketing and selling | -49 | -54 |
| Administration | -15 | -15 |
| Research and development | -48 | -52 |
| EBIT | 170 | 193 |
| EBITDA | 229 | 257 |
| EBITDA pre | 239 | 263 |
| Margin (in % of net sales) | 41.6% | 40.9% |

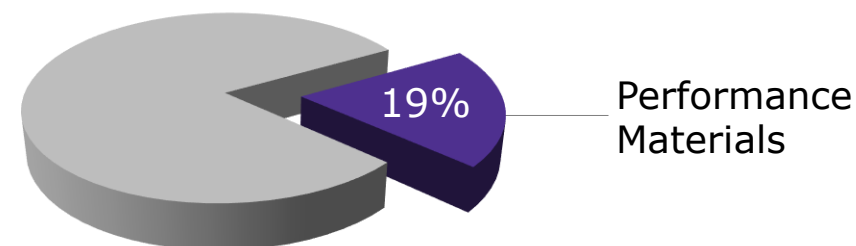
Net sales bridge



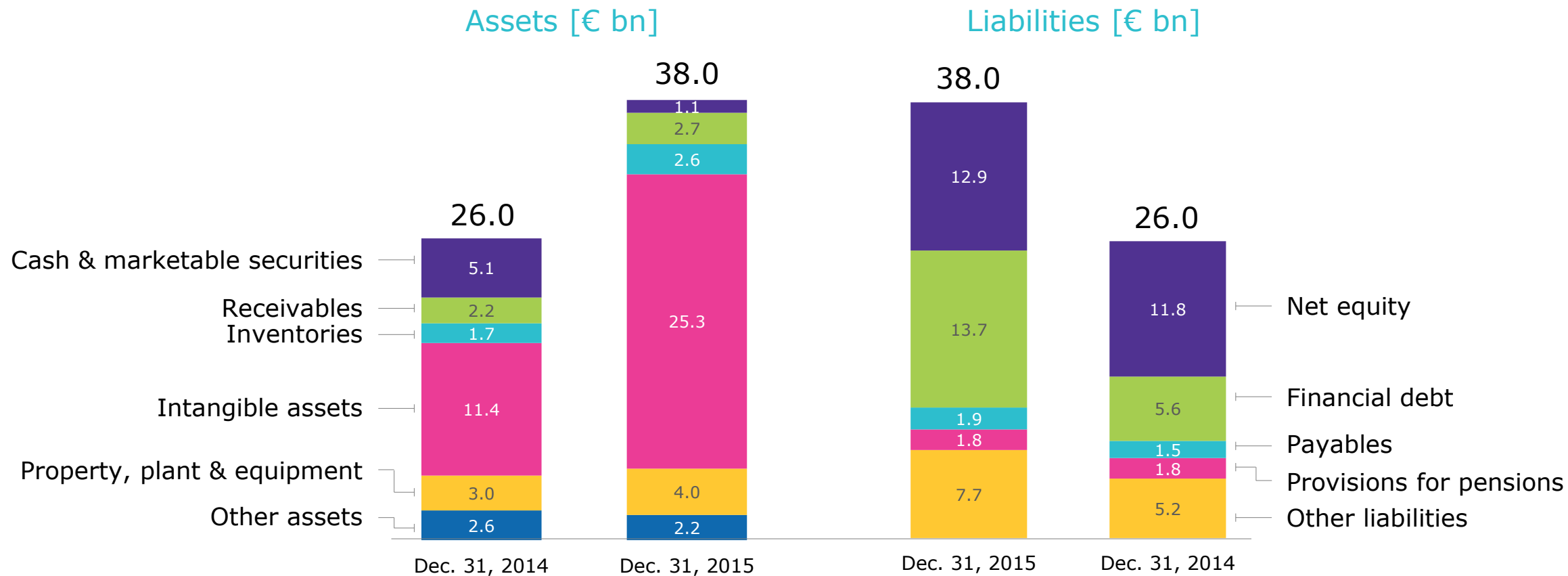
Comments

- Strong increase in sales reflects FX and Sigma's High-Tech business
- LC with slight organic decline vs. high base, as TN-TFT & typical price declines outweigh volume gains in flagship technologies
- Display industry supply chain inventories remain at high level
- Strong growth in OLED materials driven by ramp-up of market demand
- Pigments and Integrated Circuit Materials growing
- Healthy profitability; further ramp-up of OLED and increase in legal provisions and receivable allowances weigh on Q4 margin

Q4 2015 share of group net sales



Balance sheet reflects Sigma acquisition

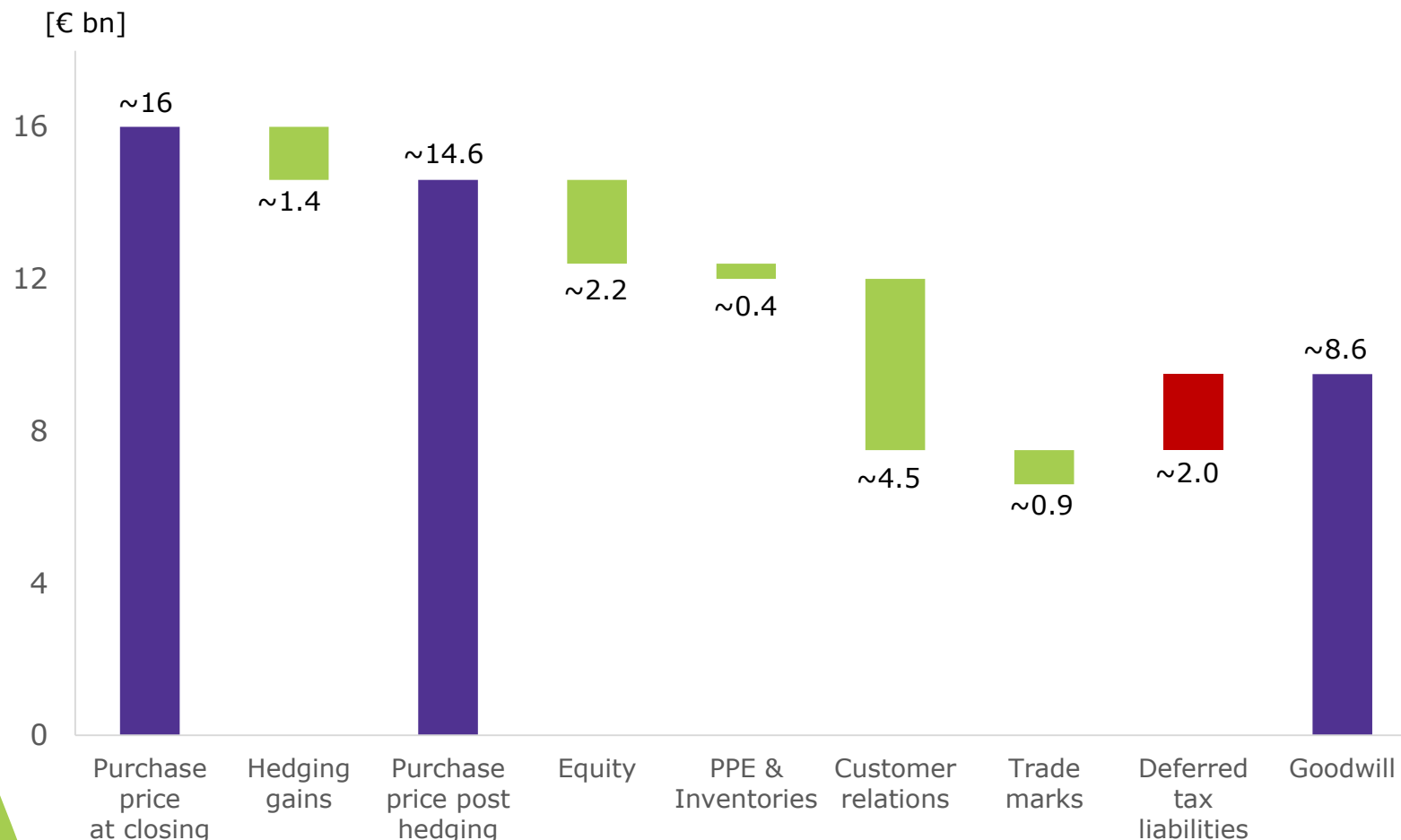


- First time consolidation of Sigma impacts balance sheet
- Intangible assets contain* €8.6 bn goodwill, €4.7 bn customer relationships and €1 bn trademarks

- FX development accounts for ~€1 bn total equity increase
- Financial debt increase reflects bond and loans for Sigma financing

*as added per November 18, 2015
Totals may not add up due to rounding

Hedging optimized Sigma balance sheet effects



Purchase price breakdown

- Purchase price fully hedged against EUR/USD movements
- Sizable cash position indicates Sigma's cash generative business and reflects delayed closing
- Intangibles amortization from Sigma PPA*: ~€250 – 300 m p.a.

Figures as of November 18, 2015
*Purchase price allocation

Healthy operating cash flow amid Sigma financing impacts

FY 2015 – cash flow statement

| [€m] | FY 2014 | FY 2015 | Δ |
|-------------------------------------|---------|----------------|---------|
| Profit after tax | 1,165 | 1,124 | -41 |
| D&A | 1,361 | 1,511 | 150 |
| Changes in provisions | -342 | 215 | 557 |
| Changes in other assets/liabilities | 533 | -636 | -1,169 |
| Other operating activities | 9 | -10 | -19 |
| Changes in working capital | -21 | -8 | 13 |
| Operating cash flow | 2,705 | 2,195 | -510 |
| Investing cash flow | -1,641 | -11,936 | -10,295 |
| thereof Capex on PPE | -481 | -514 | -33 |
| Financing cash flow | 761 | 7,164 | 6,403 |

Cash flow drivers

- D&A increase due to AZ and Sigma
- Changes in provisions reflect last year's release due to litigation settlement
- Higher tax and interest payments drive changes in other assets/liabilities; 2014 contains Pfizer upfront payment
- Investing cash flow mainly reflects AZ (2014) and Sigma (2015)
- Financing cash flow impacted by Sigma financing and repayments of bonds; LY reflects part of AZ purchase price



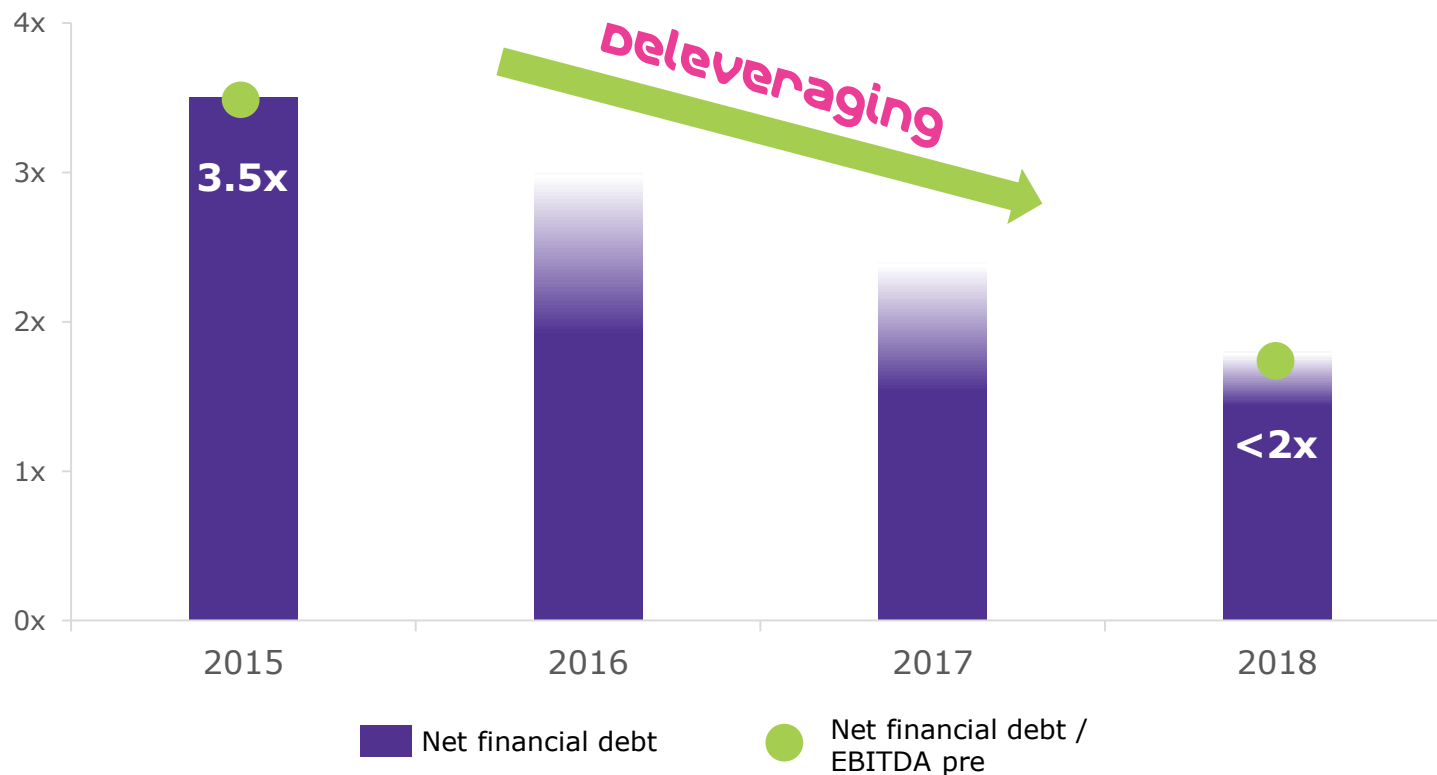
04

OUTLOOK AND GUIDANCE

High focus on cash generation to ensure swift deleveraging

Net debt and leverage development

[Net debt /
EBITDA pre]



Focus on deleveraging

- Commitment on swift deleveraging to ensure a strong investment grade 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 the next two years
- Interest result in 2016: ~-€270 – -300 m

Qualitative Merck full-year 2016 guidance

Net sales: Growth in the low double-digits from Sigma & slight organic growth from existing business

EBITDA pre: Increase in the low double-digits

Supporting factors

- + Sigma-Aldrich contribution will be sizeable including cost synergies of ~€90m in the first full year
- + Rebif/Pfizer end of co-promotion agreement in December 2015 (net effect ~+€250m)
- + Organic net sales growth of all three businesses

Burdening factors

- R&D costs in Healthcare to increase in 2016:
Immuno-Oncology: +€150-200m YoY;
Onc/Immunology: mid to high double-digit €m
- Cost for launch preparation (Avelumab, Cladribine) in the mid to high double-digit €m range
- Healthcare margins impacted by product mix effects
- Kuvan divestment leads to lower recurring EBITDA pre (net effect mid-double digit €m YoY)

2016 business sector guidance including Sigma-Aldrich



Net sales

- Slight organic growth
- Continued organic Rebif decline
- Other franchises growing

EBITDA pre

- High single-digit to mid-teens decline due to R&D investments, negative product mix and Kuvan divestment



Net sales

- Moderate organic growth
- Main driver Process Solutions
- High-double digit contribution from Sigma

EBITDA pre

- High double-digit increase
- Contribution of Sigma and organic growth of legacy business



Net sales

- Slight organic growth
- Volume increases in all businesses

EBITDA pre

- Slight organic increase, at least at prior year level



APPENDIX

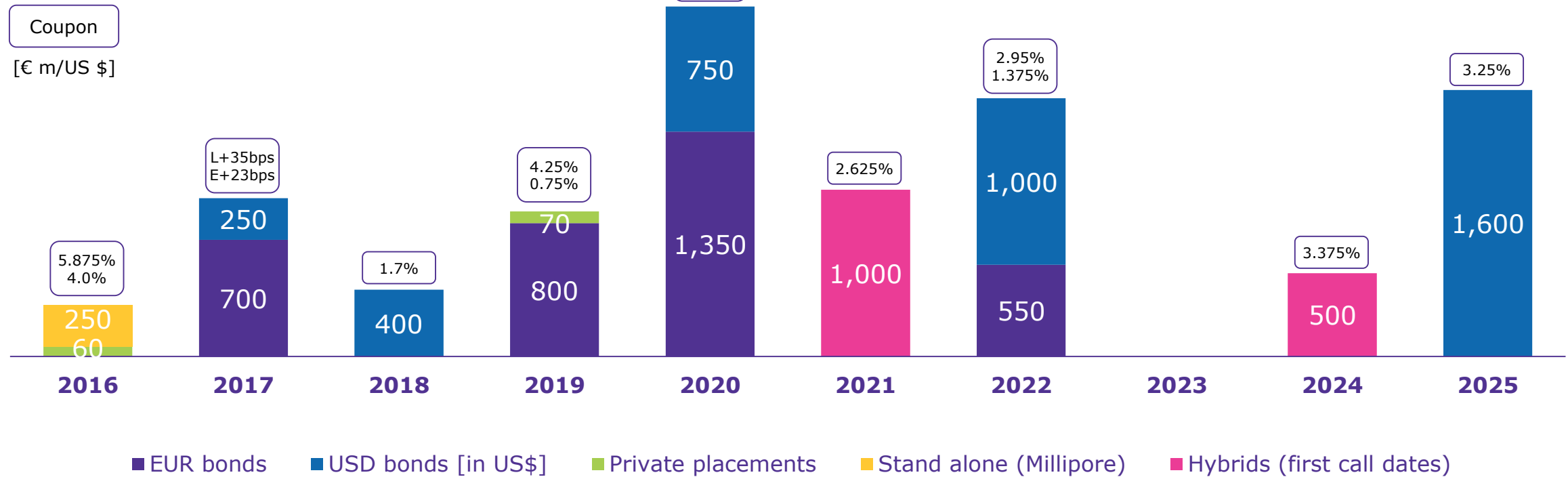
Additional financial guidance 2016

Further financial details

| | |
|---|--|
| Corporate & Other EBITDA pre | ~ -€370 – -400 m |
| Interest result | ~ -€270 – -300 m |
| Intangibles amortization from Sigma PPA | ~ €250 – 300 m p.a. |
| Underlying tax rate | ~23% to 25% |
| Capex on PPE | ~€750 – 800 m |
| Hedging/USD assumption | 2016 & 2017 hedge rate ~40-45% at EUR/USD ~1.10 to 1.15 |
| 2016 Ø EUR/USD assumption | ~1.07 – 1.12 |

Well-balanced maturity profile reflects Sigma-Aldrich related capital markets transactions

Maturity profile as of Dec. 31, 2015



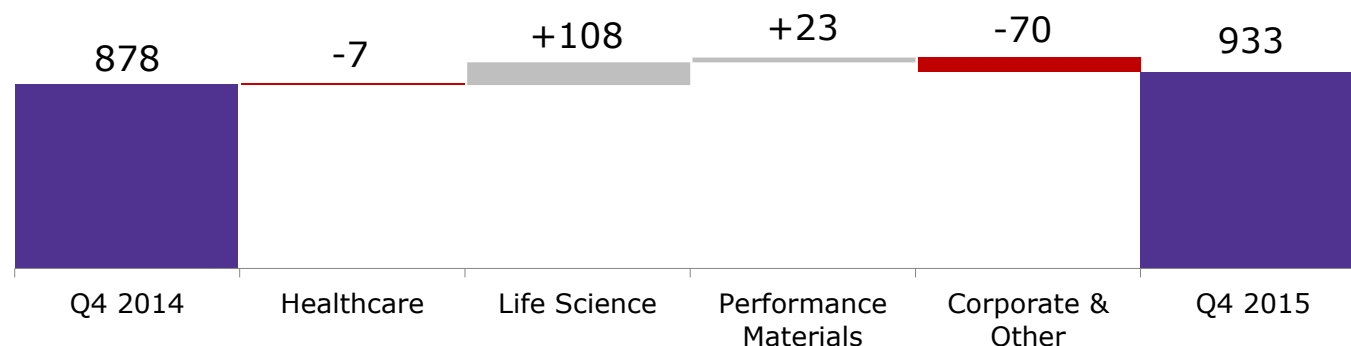
Financing structure enables flexible and swift deleveraging

Sales and EBITDA pre growth mainly driven by Life Science

Q4 2015 YoY net sales

| | Organic | Currency | Portfolio | Total |
|-----------------------|---------|----------|-----------|--------------|
| Healthcare | 2.6% | -1.5% | 0.0% | 1.2% |
| Life Science | 8.1% | 6.0% | 39.5% | 53.6% |
| Performance Materials | -0.8% | 10.4% | 1.8% | 11.5% |
| Merck Group | 3.3% | 2.6% | 9.7% | 15.5% |

Q4 YoY EBITDA pre contributors [€ m]



- Organic Growth in Fertility and General Medicine more than offset Rebif decline
- Life Science shows strong organic growth driven by all businesses and Sigma
- Performance Materials organically slightly lower; FX tailwinds and small Sigma effect
- Healthcare lower as higher commercial activities offset organic growth
- Life Science increase supported by strong organic performance and Sigma
- Performance Materials reflects FX benefits and ongoing cost discipline
- Hedging losses and corporate initiatives burden Corporate EBITDA pre

Q4 2015 overview

Key figures

| [€m] | Q4 2014 | Q4 2015 | Δ |
|-----------------------------------|---------|--------------|--------|
| Net sales | 2,999 | 3,464 | 15.5% |
| EBITDA pre | 878 | 933 | 6.3% |
| <i>Margin (in % of net sales)</i> | 29.3% | 26.9% | |
| EPS pre | 1.14 | 1.13 | -0.9% |
| Operating cash flow | 1,141 | 718 | -37.1% |

| [€m] | Dec. 31, 2014 | Dec. 31, 2015 | Δ |
|-----------------|---------------|---------------|-------|
| Net debt | 559 | 12,654 | >100% |
| Working capital | 2,356 | 3,448 | 46.4% |
| Employees | 39,639 | 49,613 | 25.2% |

Comments

- EBITDA pre increase driven by good organic performance, Sigma and FX
- Margin reflects Healthcare investments and corporate initiatives
- EPS pre burdened by higher financial result
- Operating cash flow healthy, prior year contains Pfizer upfront payment
- Net financial debt reflects Sigma
- Working capital increase driven by first time consolidation of Sigma and FX
- ~9,000 employees from Sigma added

Q4 2015 – reported figures reflect Sigma acquisition

Reported results

| [€m] | Q4 2014 | Q4 2015 | Δ |
|-------------------|---------|--------------|--------|
| EBIT | 424 | 298 | -29.7% |
| Financial result | -63 | -134 | 112.9% |
| Profit before tax | 361 | 164 | -54.5% |
| Income tax | -79 | -42 | -46.3% |
| Tax rate [in %] | 21.9% | 25.9% | |
| Net income | 280 | 126 | -55.1% |
| EPS [€] | 0.64 | 0.29 | -54.7% |

Comments

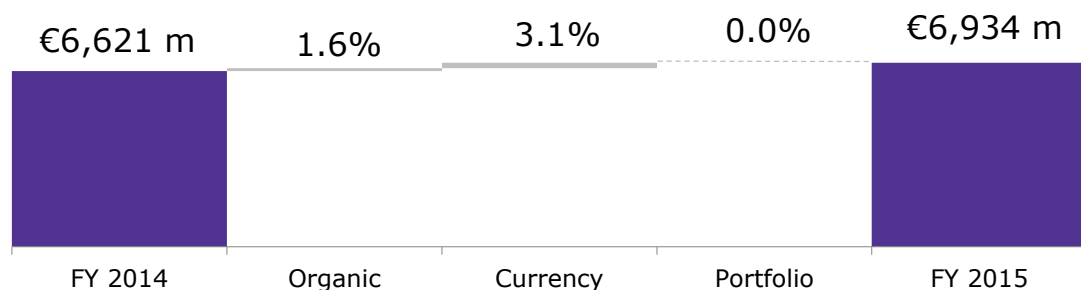
- Strong EBIT decrease reflects higher D&A & exceptionals related to Sigma
- Financial result includes interest expenses from Sigma financing and early Sigma bond repayment
- Tax rate last year lower due to higher share of profit in low-tax jurisdictions

Healthcare: Stability in base business and investments in future growth

FY 2015 YoY net sales

| [€m] | FY 2014 | FY 2015 |
|----------------------------|---------|---------------|
| Net sales | 6,621 | 6,934 |
| Marketing and selling | -2,551 | -2,801 |
| Administration | -247 | -259 |
| Research and development | -1,366 | -1,310 |
| EBIT | 1,106 | 1,097 |
| EBITDA | 1,946 | 1,970 |
| EBITDA pre | 2,000 | 2,002 |
| Margin (in % of net sales) | 30.2% | 28.9% |

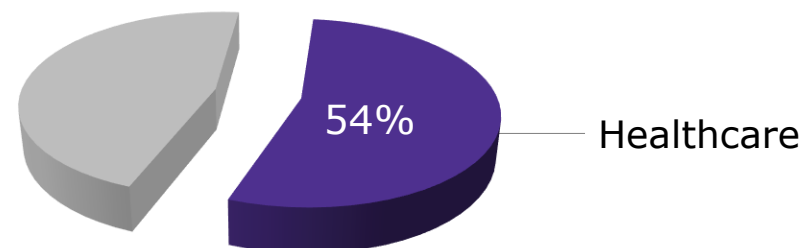
Net sales bridge



Comments

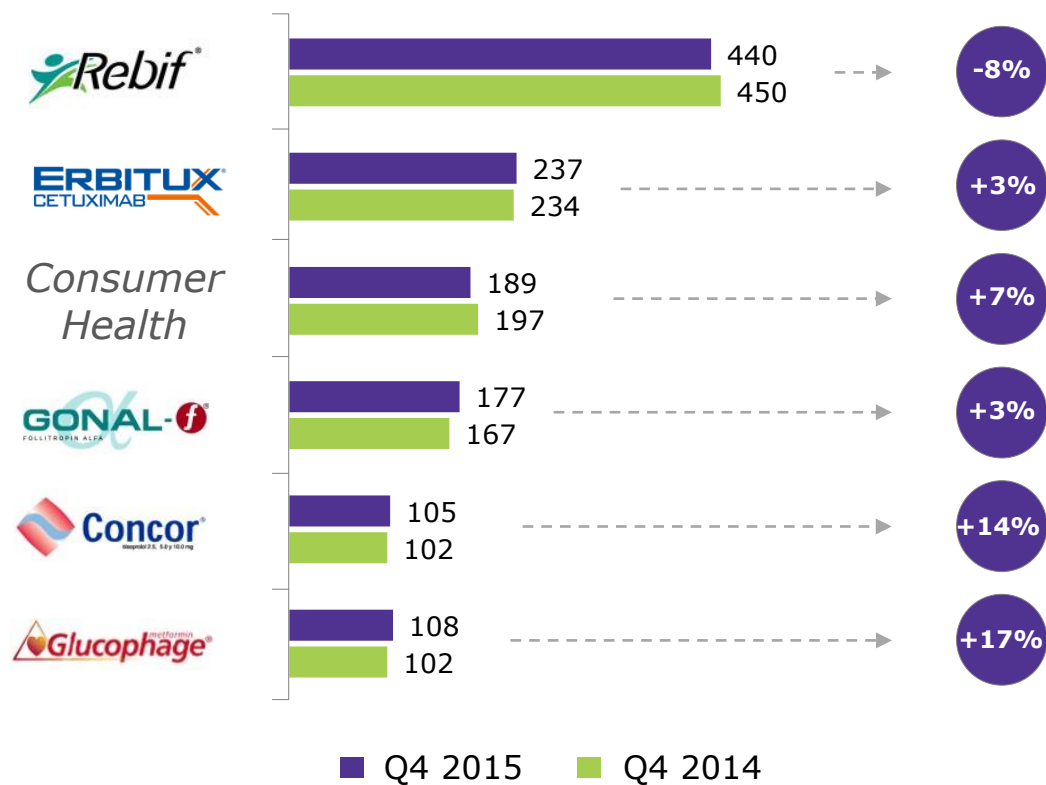
- Rebif decline due to competition partially mitigated by U.S. pricing
- Erbitux stable, as mandatory price cuts and competition in Europe offset volume increases in China and other growth markets
- General Medicine, Consumer Health and Fertility remain key growth drivers especially in Asia-Pacific and Latin America
- Higher M&S spend reflects investments in growth markets and FX
- R&D costs relate to shifted start of Phase III trials and provision release, last year impacted by terminations
- Lower profitability reflects solid top-line development amid investments and unfavorable product mix

FY 2015 share of group net sales

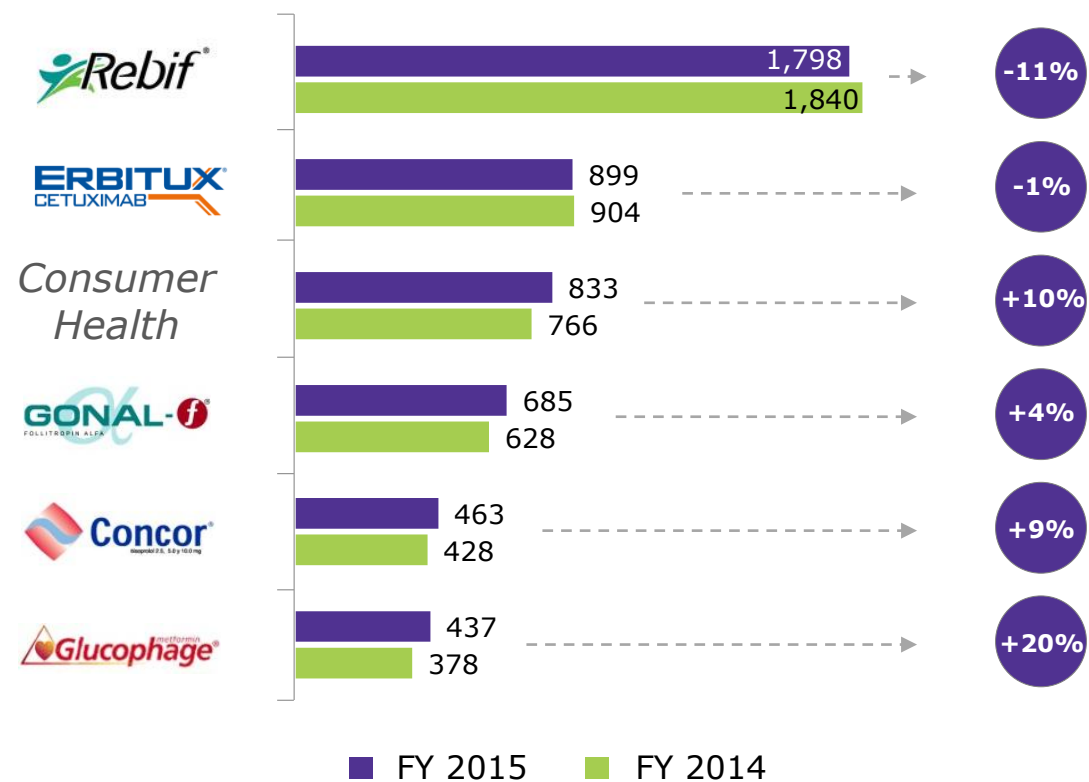


Healthcare organic growth by franchise/product

Q4 2015 organic sales growth [%]
by key products [€ m]



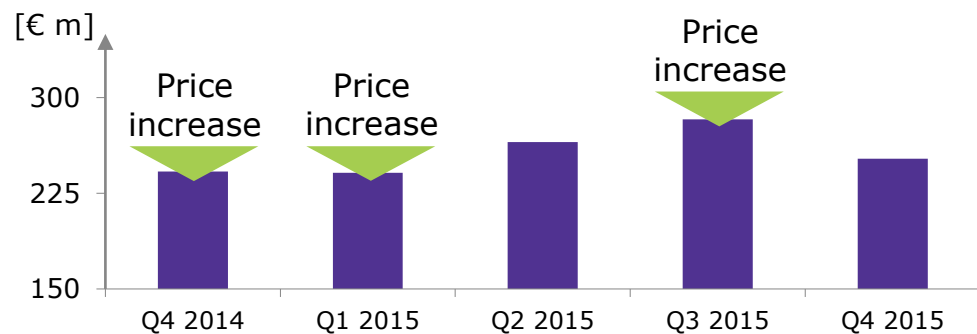
FY 2015 organic sales growth [%]
by key products [€ m]



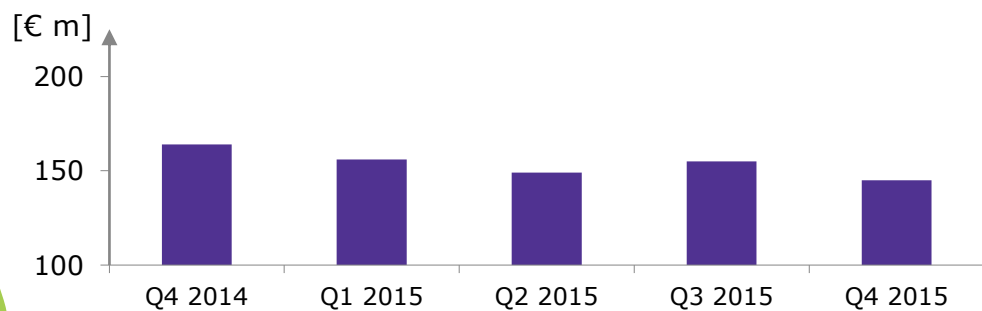
Rebif: Defending the franchise – competitive pressure in the U.S. and Europe

Rebif sales evolution

North America



Europe



Q4 drivers

-8.6% org.



Price



Volume



FX

Q4 drivers

-11.2% org.



Price



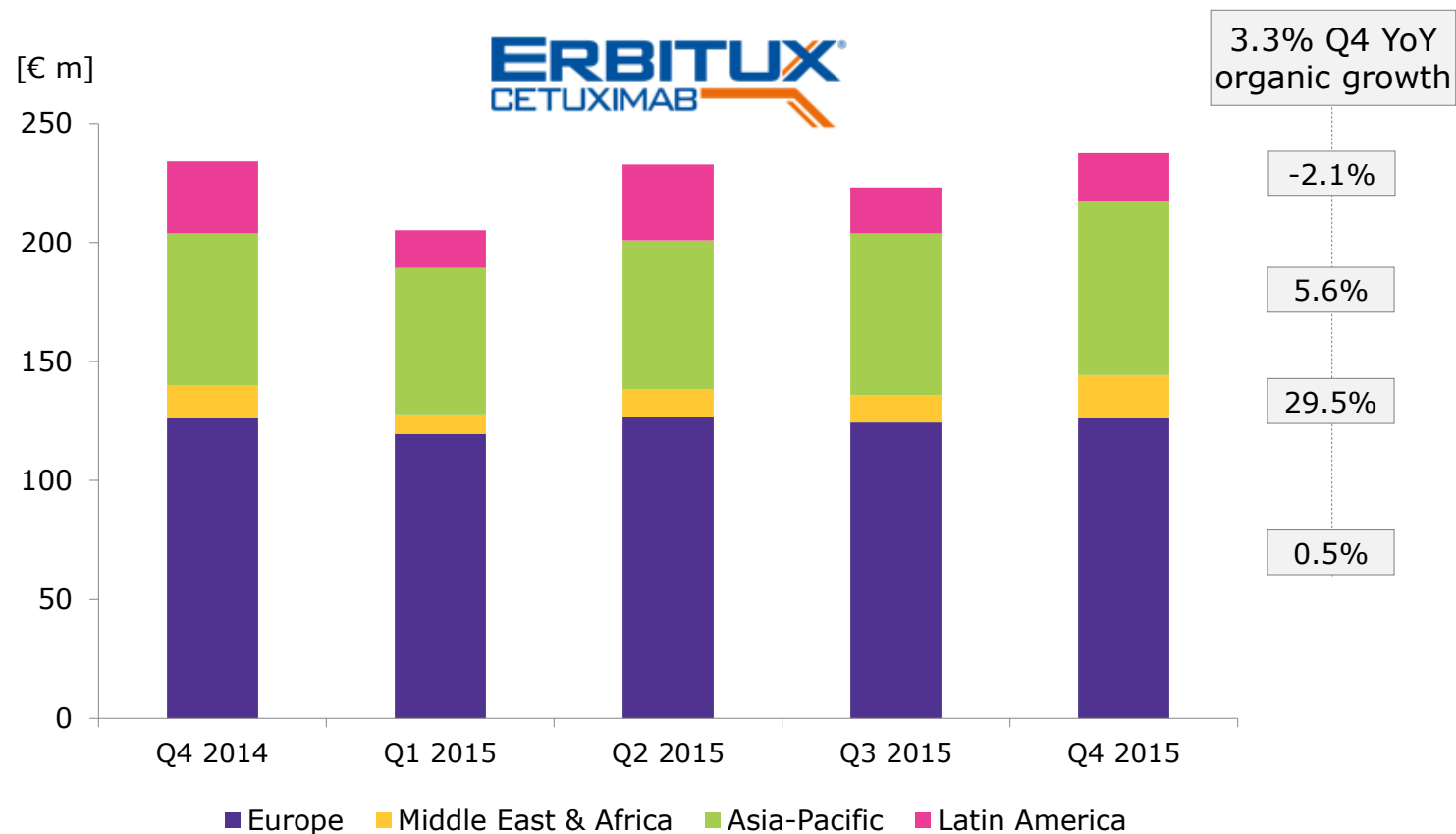
Volume

Rebif performance

- Rebif sales of €440m in Q4 2015 slightly lower despite FX tailwinds
- Organic decline of -7.9% due to lower volumes mitigated by U.S. pricing
- U.S. and European volume decline mainly due to competition from orals
- U.S. price increase in September supports performance

Erbitux: A challenging market environment

Erbitux sales by region



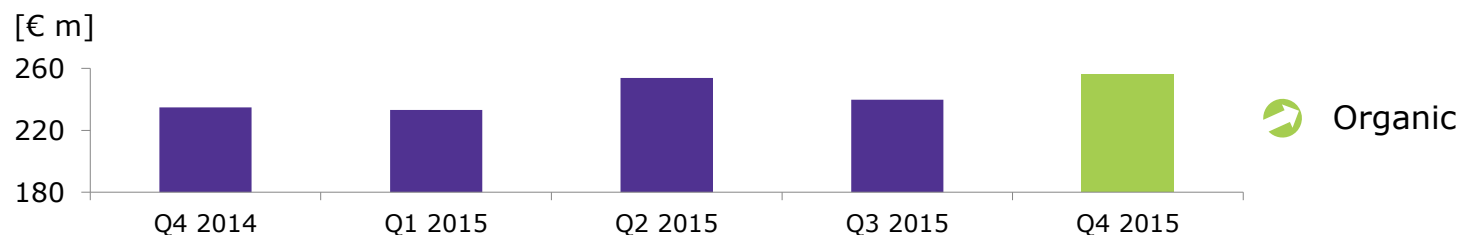
Erbitux performance

- Sales increase to €237m due to solid volume development
- Europe impacted by mandatory price cuts & increasing competition offset by uptake in Russia
- Latin America burdened by decline in private sector sales in Brazil
- APAC benefits from price adjustments and healthy market trends in China

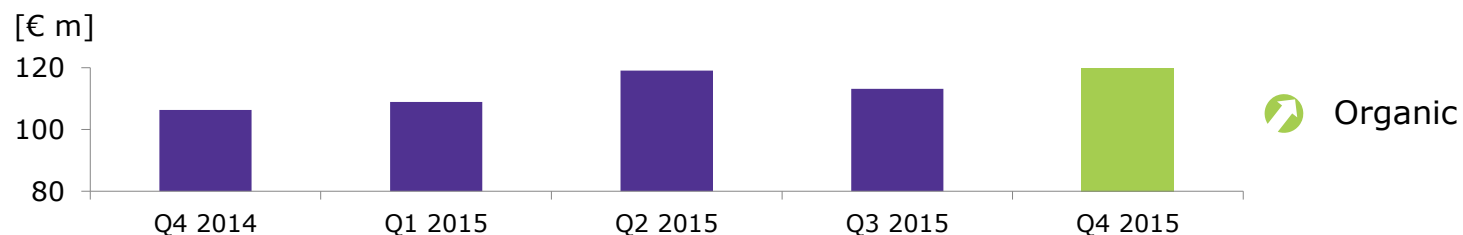
Strong growth in Fertility, General Medicine and Endocrinology

Sales evolution

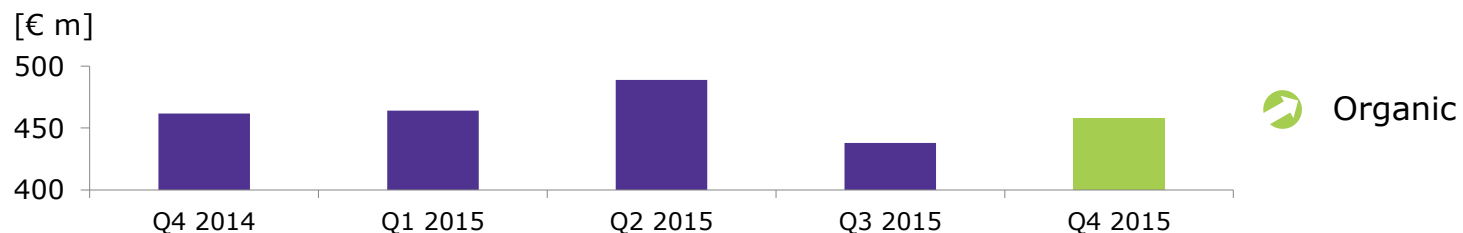
Fertility



Endocrinology



General Medicine*



Q4 drivers

- Organic growth of Fertility driven by all major regions, especially China
- Endocrinology with strong growth of Serostim in U.S. and Saizen with patient gains in Europe
- General Medicine sales burdened by FX, organic performance healthy across all major regions and products
- Thyroid products post sound volumes in Europe driven by market share gains in Russia
- Strong organic growth of Glucophage benefits from Russia repatriation and uptake in MEA; supply issues LY

Merck pipeline

Phase I

Tepotinib **c-Met kinase inhibitor**

Solid tumors

M2698

p70S6K & Akt inhibitor

Solid tumors

M3814

DNA-PK inhibitor

Solid tumors

Beigene-283

BRAF inhibitor

Solid tumors

Avelumab¹

Anti-PD-L1 mAb

Solid tumors

M9241 (NHS-IL12)²

Cancer immunotherapy

Solid tumors

M7824

Bifunctional immunotherapy

Solid tumors

M1095 (ALX-0761)

Anti-IL-17 A/F nanobody

Psoriasis

M2951

BTK inhibitor

Systemic lupus erythematosus

Phase II

M2736 (ATX-MS-1467) **Immune tolerizing agent**

Multiple sclerosis

Tepotinib **c-Met kinase inhibitor**

Non-small cell lung cancer

Tepotinib

c-Met kinase inhibitor

Hepatocellular cancer

Avelumab¹

Anti-PD-L1 mAb

Merkel cell carcinoma

Sprifermin

Fibroblast growth factor 18

Osteoarthritis

Atacicept

Anti-Blys/anti-APRIL fusion protein

Systemic lupus erythematosus

Phase III

Avelumab¹ – Anti-PD-L1 mAb

Non-small cell lung cancer 1L³

Avelumab¹ – Anti-PD-L1 mAb

Non-small cell lung cancer 2L⁴

Avelumab¹ – Anti-PD-L1 mAb

Gastric cancer 1L³

Avelumab¹ – Anti-PD-L1 mAb

Gastric cancer 3L⁵

Avelumab¹ – Anti-PD-L1 mAb

Bladder cancer 1L³

Avelumab¹ – Anti-PD-L1 mAb

Ovarian cancer platinum resistant/refractory

Registration

Cladribine Tablets⁶ – **Lymphocyte targeting agent**

Relapsing-remitting multiple sclerosis

■ Neurodegenerative Diseases

■ Oncology

■ Immunology

■ Immuno-Oncology

Pipeline as of March 8th, 2016

Pipeline products are under clinical investigation and have not been proven to be safe and effective.

There is no guarantee any product will be approved in the sought-after indication.

¹Avelumab is the proposed International Non-proprietary Name (INN) for the anti-PD-L1 monoclonal antibody (previously known as MSB 0010718C);

²Sponsored by the National Cancer Institute (USA); ³First Line treatment; ⁴Second Line treatment; ⁵Third Line treatment

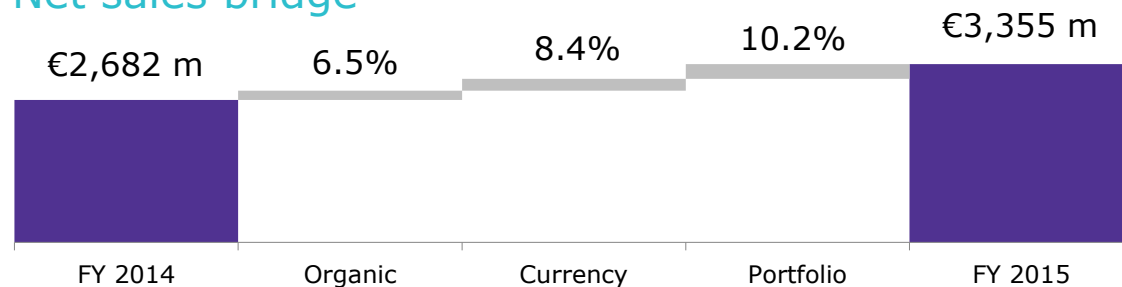
⁶As announced on September 11th, 2015 Merck KGaA Darmstadt, Germany is preparing a regulatory submission to the European Medicines Agency

Life Science: Strong and profitable growth driven by Process Solutions

FY 2015 YoY net sales

| | FY 2014 | FY 2015 |
|----------------------------|---------|---------------|
| Net sales | 2,682 | 3,355 |
| Marketing and selling | -860 | -1,038 |
| Administration | -110 | -151 |
| Research and development | -163 | -197 |
| EBIT | 289 | 301 |
| EBITDA | 599 | 674 |
| EBITDA pre | 659 | 856 |
| Margin (in % of net sales) | 24.6% | 25.5% |

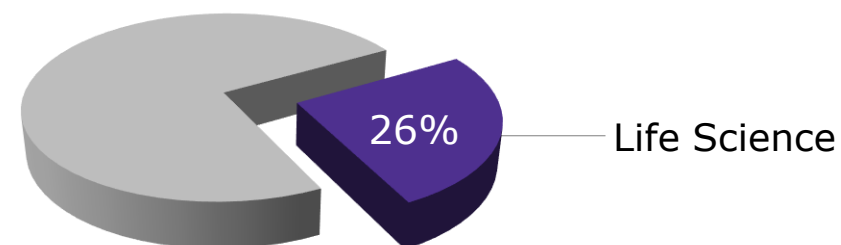
Net sales bridge



Comments

- Process Solutions strong organic growth mainly due to strong demand from biopharma production in Europe and U.S.
- Demand for lab water consumables and biomonitoring drive moderate organic growth in Lab Solutions
- Bioscience slightly positive as good development of protein detection systems offsets softness for reagents and antibodies
- Ongoing investments in R&D – several product launches in 2015
- EBITDA pre benefits from price and volume growth across all businesses and first Sigma contribution

FY 2015 share of group net sales

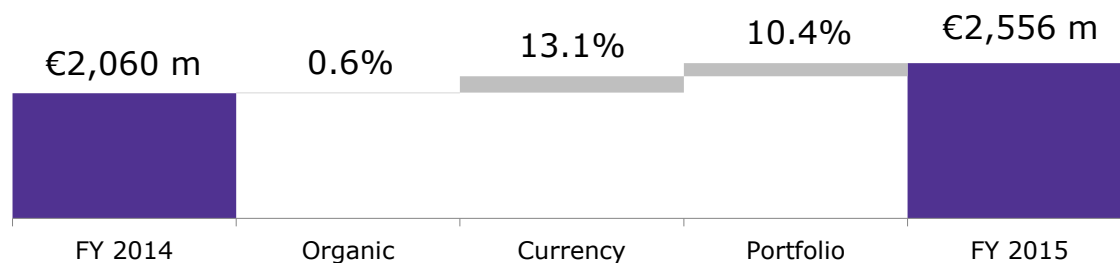


Performance Materials: Healthy trends & strong FX tailwinds drive growth

FY 2015 YoY net sales

| | FY 2014 | FY 2015 |
|----------------------------|---------|--------------|
| Net sales | 2,060 | 2,556 |
| Marketing and selling | -179 | -208 |
| Administration | -56 | -63 |
| Research and development | -171 | -197 |
| EBIT | 611 | 878 |
| EBITDA | 804 | 1,120 |
| EBITDA pre | 895 | 1,132 |
| Margin (in % of net sales) | 43.4% | 44.3% |

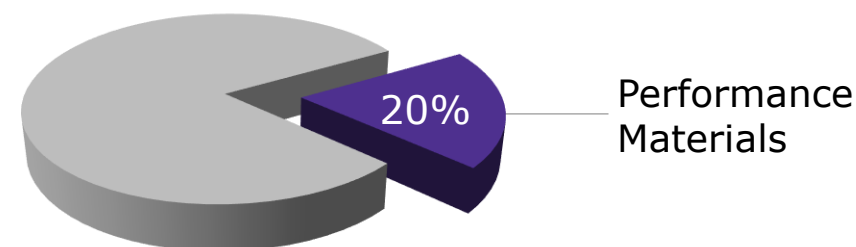
Net sales bridge



Comments

- Strong sales mainly reflect portfolio effect and FX tailwinds
- Liquid crystals volume trend remains largest contributor to growth
- Innovative UB-FFS mode main driver in LC; ongoing demand for high-end TVs benefits flagship technologies (PS-VA & IPS)
- Pigments show slight organic growth as focus on attractive growth markets outweighs volume decline in less profitable areas
- OLED & Integrated Circuit Materials support organic performance with sound volume development
- Increase in EBITDA pre driven by FX, AZ and positive product mix

FY 2015 share of group net sales



Strong operating cash flow; Pfizer upfront payment last year

Q4 2015 – cash flow statement

| [€m] | Q4 2014 | Q4 2015 | Δ |
|-------------------------------------|---------|----------------|---------|
| Profit after tax | 282 | 127 | -155 |
| D&A | 380 | 505 | 125 |
| Changes in provisions | -342 | 183 | 525 |
| Changes in other assets/liabilities | 600 | -288 | -888 |
| Other operating activities | 17 | -5 | -22 |
| Changes in working capital | 203 | 196 | -7 |
| Operating cash flow | 1,141 | 718 | -423 |
| Investing cash flow | -1,144 | -14,606 | -13,462 |
| thereof Capex* | -211 | -217 | -6 |
| Financing cash flow | 1,519 | 2,833 | 1,314 |

Cash flow drivers

- D&A increase due to AZ and Sigma
- Changes in provisions reflect last year's release due to litigation settlement
- Higher tax and interest payments drive changes in other assets/liabilities; 2014 contains Pfizer upfront payment
- Investing cash flow mainly reflects AZ (2014) and Sigma (2015)
- Financing cash flow impacted by Sigma financing and repayments of bonds; LY reflects part of AZ purchase price

Exceptionals in Q4 2015

Exceptionals in EBIT

| [€m] | Q4 2014 | | Q4 2015 | |
|-----------------------|--------------|-------------|--------------|-------------|
| | Exceptionals | thereof D&A | Exceptionals | thereof D&A |
| Healthcare | 16 | 1 | 90 | 88 |
| Life Science | 28 | 0 | 111 | 1 |
| Performance Materials | 10 | 0 | 6 | 0 |
| Corporate & Other | 23 | 1 | 13 | 0 |
| Total | 76 | 2 | 220 | 89 |

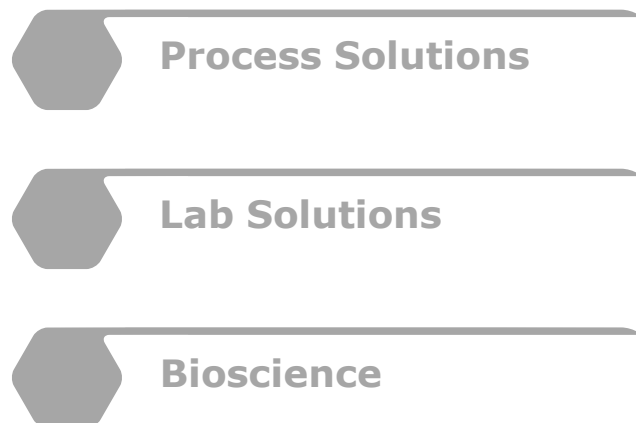
Exceptionals in FY 2015

Exceptionals in EBIT

| [€m] | FY 2014 | | FY 2015 | |
|-----------------------|--------------|-------------|--------------|-------------|
| | Exceptionals | thereof D&A | Exceptionals | thereof D&A |
| Healthcare | 59 | 5 | 122 | 90 |
| Life Science | 60 | 0 | 182 | 1 |
| Performance Materials | 91 | 0 | 12 | 0 |
| Corporate & Other | 65 | 5 | 51 | 1 |
| Total | 275 | 10 | 367 | 92 |

Life Science: New reporting structure reflects customer-centric approach

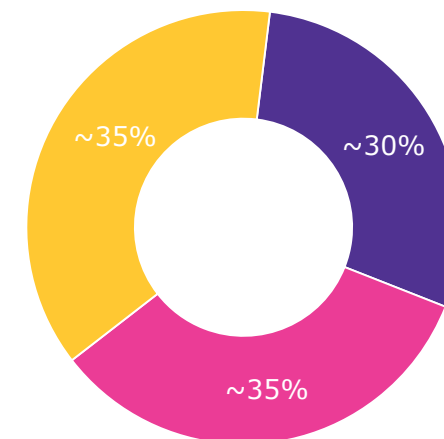
2015 product centric structure



New 2016 customer centric structure



New sales breakdown

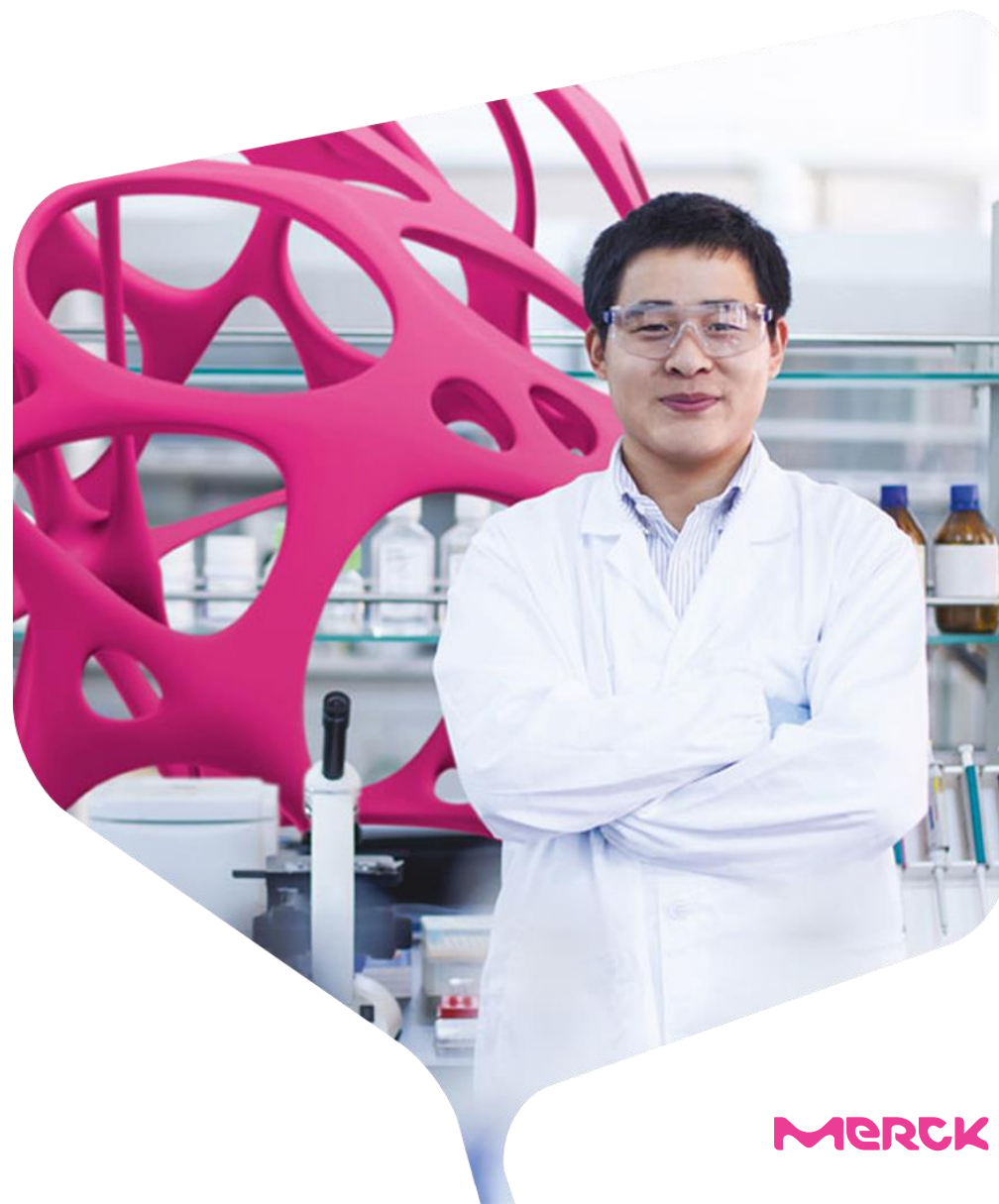


Customer-centric business approach:

- Enhanced emphasis on customers' unique needs
- Customized solutions for the specific needs of each segment from the start of product development to its completion

Financial calendar

| Date | Event |
|-------------------|--------------------------|
| April 29, 2016 | Annual General Meeting |
| May 19, 2016 | Q1 2016 Earnings release |
| August 4, 2016 | Q2 2016 Earnings release |
| November 15, 2016 | Q3 2016 Earnings release |



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