## A SUCCESSFUL YEAR

#### Merck KGaA, Darmstadt, Germany FY 2016 results

Stefan Oschmann, CEO Marcus Kuhnert, CFO

March 9, 2017



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## Agenda



Executive summary

## **02** Strategic review











## **Highlights 2016**

Execution on strategy

Healthcare – solid commercial performance and first pipeline filings

Life Science – above-market growth amid seamless integration

Performance Materials – four pillar strategy supports profitability and innovation

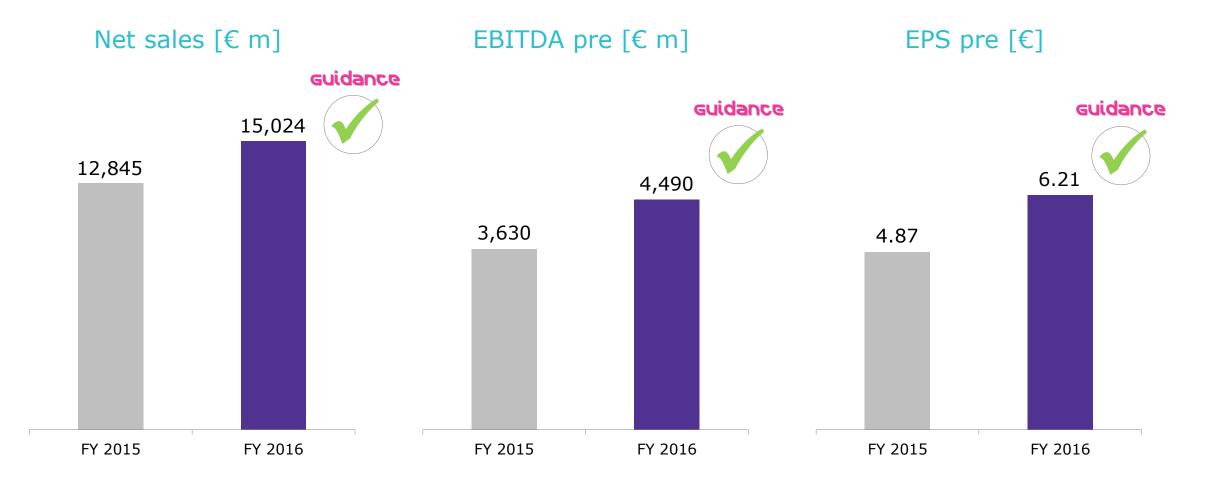
**Delivery of** financials

Organic growth across all regions and profitability expansion

Delivery of targets: Net sales €15 bn, EBITDA pre €4.49 bn, EPS pre €6.21

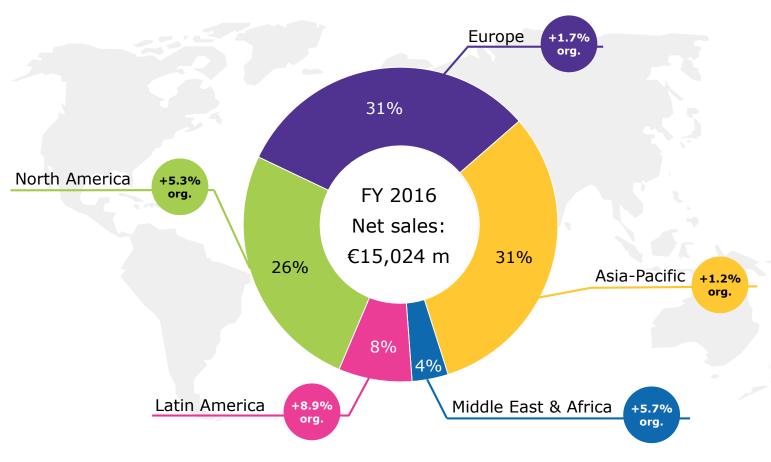
Strong operating cash flow of €2.5 bn allows for significant deleveraging

## **Strong financials and delivery of targets**



## **Organic growth in all regions**

#### Regional breakdown of net sales [€ m]

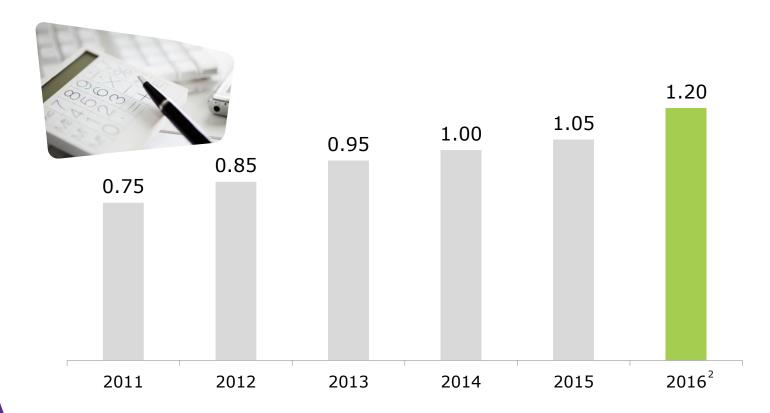


#### Regional organic development

- Organic growth in Europe driven by robust demand in Process Solutions
- Strong U.S. development of Fertility franchise, Xalkori co-promotion and solid Process Solutions yield sound growth
- Asia-Pacific shows slight organic growth driven by Healthcare and Life Science offsetting negative LC environment
- •Good organic development in LatAm and MEA driven by all relevant businesses, especially GM, CH and Applied Solutions

## **Sustainable dividend development**

#### Dividend<sup>1</sup> development 2011-2016



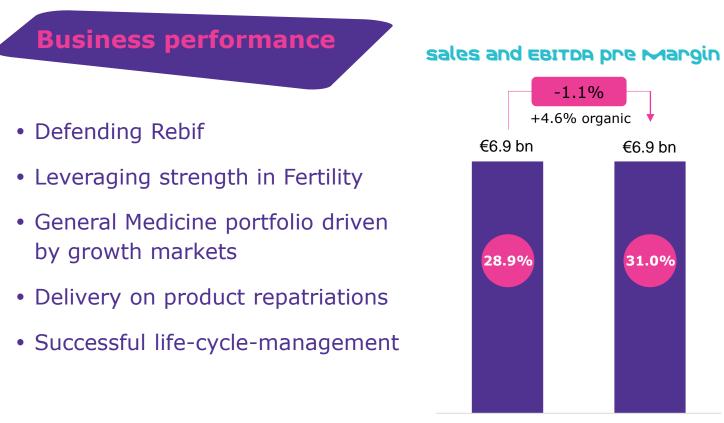
#### 2016 dividend

- Dividend of €1.20 per share proposed<sup>2</sup> for 2016, reflecting 19.3% of EPS pre
- Dividend development in line with business performance and earnings progression
- Dividend yield<sup>3</sup> of 1.21%

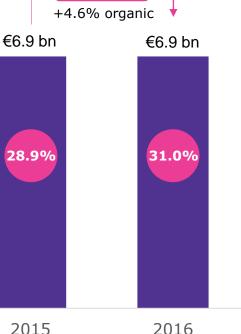




## Healthcare: Solid base business and first pipeline submissions



## -1.1% +4.6% organic €6.9 bn



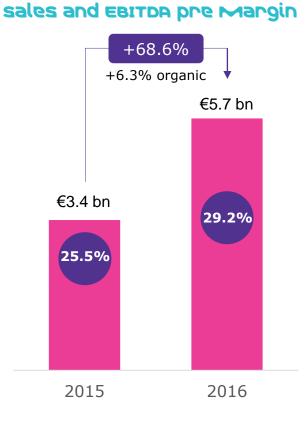
## Pipeline

- Cladribine tablets filed in Europe
- Filing of avelumab for Merkel Cell carcinoma in the U.S. and Europe
- Avelumab progresses with nine Phase III studies and increasing Investigator Sponsored Studies (ISS)
- Progressing with three Phase II studies for BTK-i (RA, SLE and MS)

Totals may not add up due to rounding

## Life Science: Profitable growth amid Sigma integration





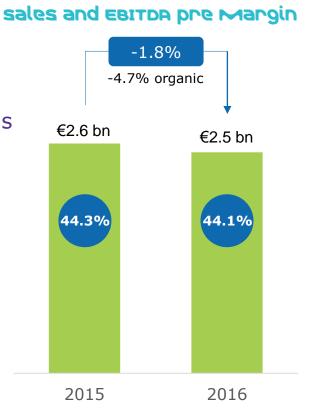
## Integration

- Organizational structure implemented
- Strong cultural fit
- Faster implementation of cost synergies in 2016 than planned
- Expecting additional growth from top-line synergies

## **Performance Materials: Driving innovation despite a challenging display market**

**Business performance** 

- Successfully managed challenging market dynamics in Display Materials
- Record year for Pigments with strong development of coatings and cosmetic functionals
- Above-market growth of Integrated Circuits fueled by technology trends
- Further progress towards OLED leadership; opening of new production facility



## Innovation

- LC Windows investment in production facility
- European Frost & Sullivan Award for innovative Meoxal & Xirallic pigments
- License agreement with Nanoco enhancing position in quantum materials





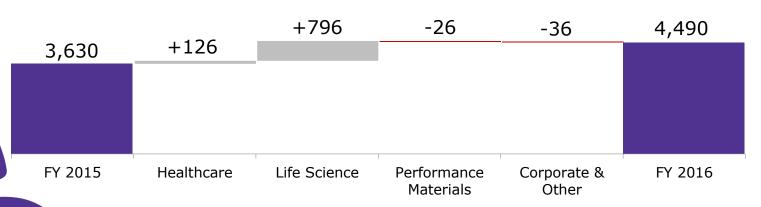


## Life Science and Healthcare drive growth and profitability

#### FY 2016 YoY net sales

	Organic	Currency	Portfolio	Total
Healthcare	4.6%	-4.6%	-1.1%	-1.1%
Life Science	6.3%	-0.8%	63.1%	68.6%
Performance Materials	-4.7%	0.2%	2.7%	-1.8%
Group	3.2%	-2.6%	16.4%	17.0%

#### FY 2016 YoY EBITDA pre contributors [€ m]



• Growth in Healthcare fueled by strong Fertility, GM as well as Xalkori

• Strong organic growth in Life Science driven by all businesses, esp. Process Solutions

- Organic decline in Performance Materials reflects destocking in display supply chain
- Portfolio effects reflect Sigma and Kuvan
- HC benefits from solid organic growth and end of Rebif commission expenses, outweighing higher R&D costs
- Sigma, strong organic growth and positive business mix drive Life Science
- Performance Materials slightly lower due to Liquid Crystals sales decline
- Corporate EBITDA pre contains hedging and investments in corporate initiatives

## FY 2016: Overview

#### Key figures

[€m]	FY 2015	FY 2016	Δ
Net sales	12,845	15,024	17.0%
EBITDA pre Margin (in % of net sales)	3,630 <i>28.3%</i>	<b>4,490</b> 29.9%	23.7%
EPS pre	4.87	6.21	27.5%
Operating cash flow	2,195	2,518	14.7%
[€m]	Dec. 31, 2015	Dec. 31, 2016	Δ
Net financial debt	12,654	11,513	-9.0%
Working capital	3,438	3,486	1.4%

49,613

50,414

1.6%

#### Comments

- EBITDA pre & margin increase driven by Sigma, organic performance and end of Rebif commission expenses
- EPS pre additionally supported by improved financial result
- Healthy operating cash flow driven by business performance and Sigma
- Net financial debt reflects strong cash generation capabilities and focus on deleveraging
- Working capital increase due to higher business activity and FX

Employees

## **Reported figures reflect solid business performance and Kuvan divestment**

#### Reported results

FY 2015	FY 2016	Δ
1,843	2,481	34.6%
-357	-326	-8.5%
1,487	2,154	44.9%
-368	-521	41.7%
24.8%	24.2%	
1,115	1,629	46.1%
2.56	3.75	46.5%
	1,843 -357 1,487 -368 <i>24.8%</i> 1,115	1,8432,481-357-3261,4872,154-368-52124.8%24.2%1,1151,629

#### Comments

- EBIT reflects increased EBITDA pre and Kuvan disposal gain amid integration costs and D&A from Sigma
- Financial result improvement driven by lower hedging costs; LY included costs for early Sigma bond redemption
- Effective tax rate within guidance range of ~23% to 25%

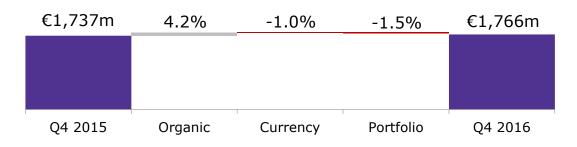
## Healthcare: Solid organic growth and pick-up of pipeline investments

#### Healthcare P&L

[€m]	Q4 2015	Q4 2016
Net sales	1,737	1,766
Marketing and selling	-728	-709
Administration	-64	-68
Research and development	-283	-418
EBIT	213	279
EBITDA	522	478
EBITDA pre	524	497
Margin (in % of net sales)	30.2%	28.2%

#### Net sales bridge

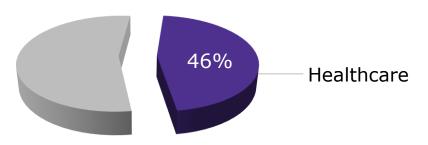
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#### Comments

- Rebif stable, volume erosion in EU due to competition is outweighed by U.S. pricing and higher U.S. year-end demand due to pharmacy stocking
- Moderate organic decline of Erbitux driven by mandatory EU price cuts and competition offsetting volume growth in China and Brazil
- Fertility portfolio remains strong, especially in U.S. and China, despite softer Gonal-f sales
- Marketing & selling reflect end of commission expenses for Rebif (U.S.) partially offset by year-end investments in launch preparations
- R&D spend pick-up reflects progress of key pipeline projects (avelumab, TGF-beta, BTK-i); low base last year
- Lower EBITDA pre and margin due to higher R&D costs

### Q4 2016 share of group net sales

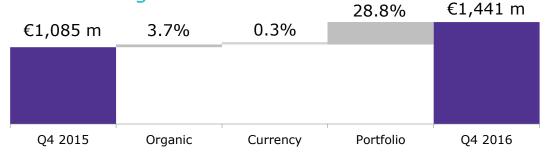


## Life Science: Record sales quarter amid tough comparables

#### Life Science P&L

[€m]	Q4 2015	Q4 2016
Net sales	1,085	1,441
Marketing and selling	-324	-458
Administration	-63	-71
Research and development	-59	-70
EBIT	34	70
EBITDA	161	352
EBITDA pre	271	419
Margin (in % of net sales)	25.0%	29.1%

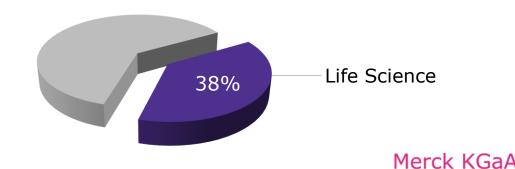
#### Net sales bridge



#### Comments

- Process Solutions growth driven by single-use products and services business, however some customer orders delayed
- Good demand from EU and U.S. pharma for biomonitoring yields solid organic growth of Applied Solutions
- Research Solutions shows slight organic growth growth in Europe and Asia is almost offset by lower demand in the U.S.
- Absolute costs higher due to Sigma and investments in Process Solutions field force
- Strong profitability reflects Sigma, business mix & synergy ramp-up

#### Q4 2016 share of group net sales



Darmstadt, Germany

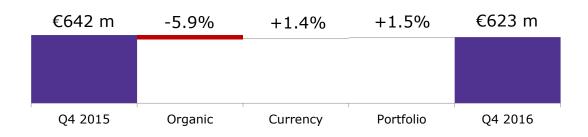
## Performance Materials: Resilient profitability despite tougher LC environment

#### Performance Materials P&L

[€m]	Q4 2015	Q4 2016
Net sales	642	623
Marketing and selling	-54	-57
Administration	-15	-16
Research and development	-52	-56
EBIT	193	210
EBITDA	257	269
EBITDA pre	263	278
Margin (in % of net sales)	40.9%	44.6%

#### Net sales bridge

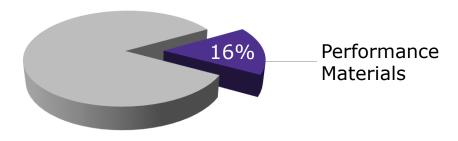
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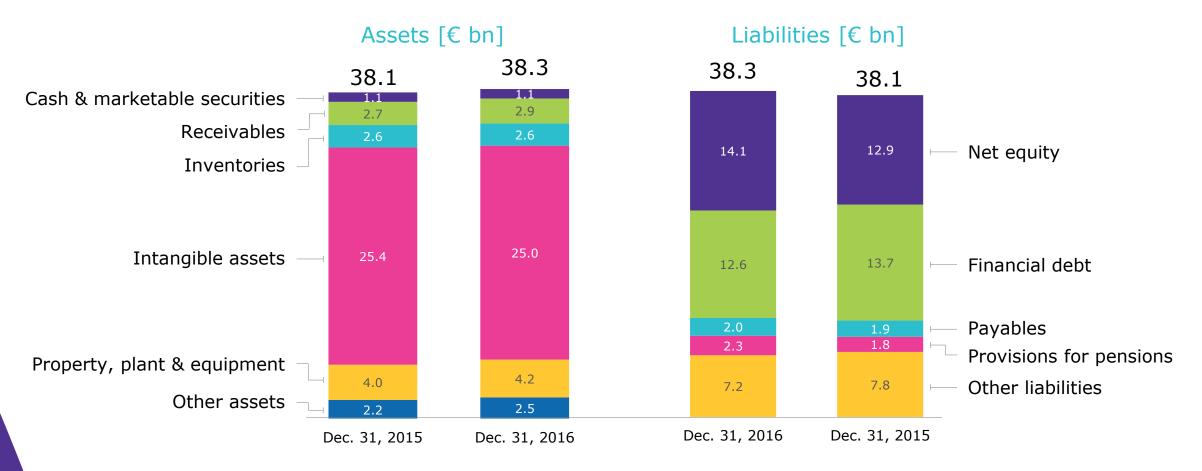
#### Comments

- 2016 display industry destocking still muting Liquid Crystals amid first signs of a normalization of market shares
- Innovative UB-FFS technology with record quarter, SA-VA launch in H2 2017
- Strong growth of Integrated Circuit Materials driven by all major material classes, esp. strong dielectrics demand for complex structures
- Solid growth of Pigments & Functionals due to demand for automotive coating pigments and highly differentiated functional materials
- Resiliently strong profitability reflects leading market position in four high-margin businesses

#### Q4 2016 share of group net sales



## **Balance sheet – focus on rapid deleveraging**



- Ongoing amortization of Sigma-related intangible assets
- Significant reduction of financial debt

- Decline in interest rates drives increase in pension provisions
- Net equity increase reflects net income and FX

## High EBITDA pre drives strong operating cash flow

#### Q4 2016 – cash flow statement

[€m]	Q4 2015	Q4 2016	Δ
Profit after tax	127	265	138
D&A	505	548	43
Changes in provisions	183	-9	-192
Changes in other assets/liabilities	-289	-191	98
Other operating activities	-5	-17	-12
Changes in net working capital	196	191	-5
Operating cash flow	718	787	69
Investing cash flow	-14,606	-450	-14,156
thereof Capex on PPE	-217	-260	-43
Financing cash flow	2,833	-277	-3,110

#### Cash flow drivers

- D&A increases due to Sigma, LY contains evofosfamide impairment
- Changes in provisions last year mainly reflect provision build-up for evofosfamide
- Investing cash flow reflects capex and Biocontrol; LY contains Sigma purchase
- Capex higher due to HQ, Sigma and investments in China
- Financing cash flow reflects repayment of debt; commercial paper issuance LY



## **Qualitative Group full-year 2017 guidance**

Net sales:	Slight to moderate	organic growth	
EBITDA pre:	About stable*		
EBITDA pre growth dr	ivers	EBITDA pre growth burdens	
Organic net sales growth wit	h all 3 businesses contributing	<ul> <li>R&amp;D costs increase 2017 in Healthcare: ongoing progress of pipeline and Vertex in-licensing</li> </ul>	
Sigma-Aldrich incremental co of ~+€80m YoY	ost and revenue synergies	<ul> <li>Healthcare margins negatively impacted by product mix</li> </ul>	
Rebif U.S. price increase as c	of January 2017	<ul> <li>Fertility growth less fueled by favorable competitive situation in U.S.</li> </ul>	
Avonex royalty income for ad	lditional 6 months in 2017	<ul> <li>Elimination of 2016 one-time effects (disposal gain (</li> </ul>	
Swap of royalty & license inconsection of not benefit of mid to high doe		reversal R&D termination provisions) ~-€90m YoY	

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## 2017 business sector guidance



#### Net sales

- Slight organic growth
- Ongoing organic Rebif decline
- Other franchises growing; Glucophage repatriation in China supportive

#### EBITDA pre

- YoY % decline in the high single digits
- Higher R&D investments, mix effects and 2016 positive one-time effects mitigated by higher royalty income



### Net sales

- Organic growth slightly above market; driven by Process Solutions
- First contribution from top-line synergies

#### EBITDA pre

- % YoY growth in the high single digits to low teens
- Sigma synergies and organic growth contributing



### Net sales

- Slight organic growth
- Volume increases in all businesses
- Continuation of slight LC market share normalization cannot be ruled out

#### EBITDA pre

Slight increase YoY





## APPENDIX

## **Additional financial guidance 2017**

### Further financial details

Corporate & Other EBITDA pre	~ -€350 – -380m
Interest result	~ -€250 – -260 m
Effective tax rate	~ 23% to 25%
Capex on PPE	~ €850 – 900 m
Hedging/USD assumption	2017 hedge ratio ~50% at EUR/USD ~ 1.11 to 1.12
2017 Ø EUR/USD assumption	~ 1.06 - 1.10

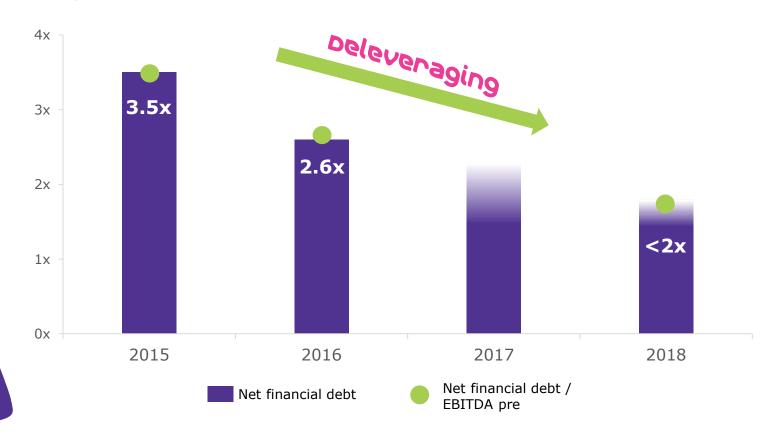




## Strong focus on cash generation to ensure swift deleveraging

#### Net financial debt<sup>\*</sup> and leverage development

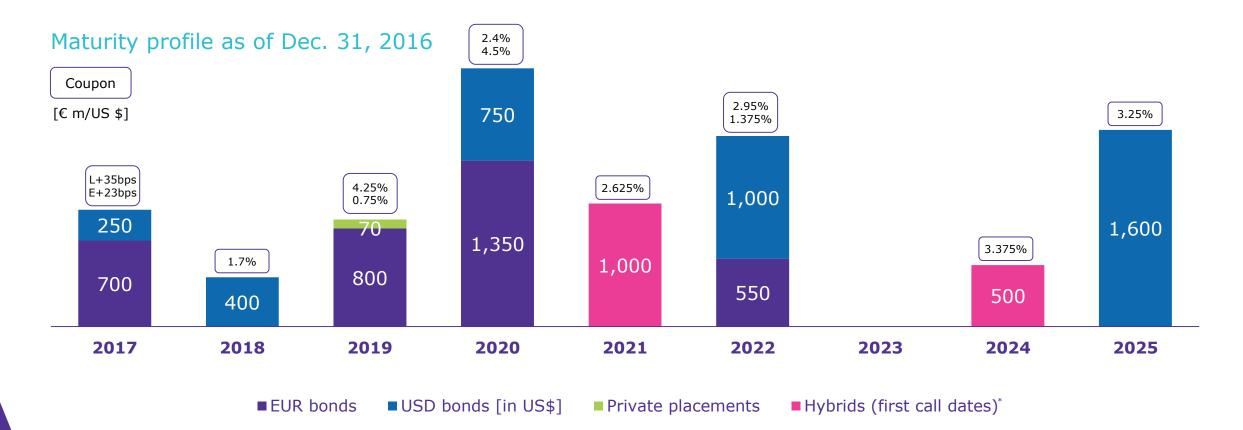
[Net financial debt/ EBITDA pre]



#### 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 the next two years (or financed by divestments)

# Well-balanced maturity profile reflects capital market transactions related to Sigma-Aldrich



Financing structure enables flexible and swift deleveraging

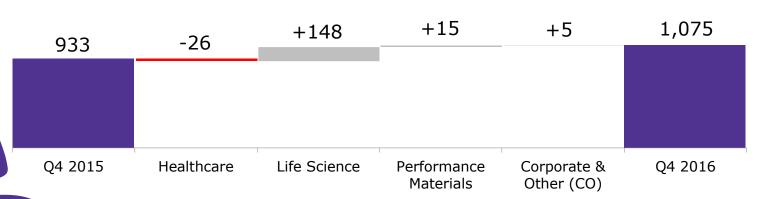


## Seamless Sigma integration and organic growth drive EBITDA pre

### Q4 2016 YoY net sales

	Organic	Currency	Portfolio	Total
Healthcare	4.2%	-1.0%	-1.5%	1.7%
Life Science	3.7%	0.3%	28.8%	32.8%
Performance Materials	-5.9%	1.4%	1.5%	-3.0%
Group	2.2%	-0.1%	8.5%	10.6%

### Q4 YoY EBITDA pre contributors [€ m]



• Solid organic growth of Healthcare driven by strong Fertility, Xalkori commissions and stable Rebif sales, offsetting softer Erbitux

- Life Science organic growth reflects phasing of larger orders in Process Solutions
- •LC market share normalization impacts PM
- Portfolio reflects Sigma and Kuvan

- Healthcare reflects higher R&D and M&S costs offsetting end of Rebif commissions, organic growth and higher royalty income
- •LS driven by Sigma portfolio effect, moderate organic growth and synergies
- Performance Materials slightly higher, but versus weak comparables

## Q4 2016: Overview

#### Key figures

[€m]	Q4 2015	Q4 2016	Δ
Net sales	3,464	3,830	10.6%
EBITDA pre Margin (in % of net sales)	933 <i>26.9%</i>	<b>1,075</b> 28.1%	15.1%
EPS pre	1.13	1.43	26.5%
Operating cash flow	718	787	9.6%
[€m]	Dec. 31, 2015	Dec. 31, 2016	Δ
Net financial debt	12,654	11,513	-9.0%
Working capital	3,438	3,486	1.4%

49,613

50,414

1.6%

#### Comments

- EBITDA pre increase driven by Sigma, end of Rebif commission expenses and higher royalties, offsetting higher R&D
- EPS pre up due to EBITDA pre increase and improved financial result
- Strong operating cash flow from EBITDA pre progression and improved working capital management in Q4
- Net financial debt reduction reflects strong focus on deleveraging
- Working capital increase due to higher business activity and FX

Employees

## **Reported figures reflect Sigma acquisition**

#### Reported results

[€m]	Q4 2015	Q4 2016	Δ
EBIT	298	405	36.0%
Financial result	-134	-70	-47.8%
Profit before tax	164	335	104.3%
Income tax	-42	-70	65.6%
<i>Effective tax rate (%)</i>	25.9%	21.0%	
Net income	126	269	113.8%
EPS (€)	0.29	0.62	113.8%

#### Comments

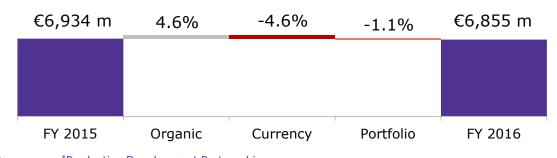
- •EBIT reflects increased EBITDA pre amid integration costs and Sigma D&A
- Financial result contains lower Sigma financing costs; LY included charges for Sigma bond repayment and LTIP
- Improved effective tax rate due to higher profits in low tax jurisdictions
- Guidance range of ~23% to 25% confirmed for 2017

## Healthcare: Good organic growth and product mix drive profitability

#### Healthcare P&L

[€m]	FY 2015	FY 2016
Net sales	6,934	6,855
Marketing and selling	-2,801	-2,587
Administration	-259	-270
Research and development	-1,310	-1,496
EBIT	1,097	1,593
EBITDA	1,970	2,425
EBITDA pre Margin (in % of net sales)	2,002 28.9%	2,128 <i>31.0%</i>

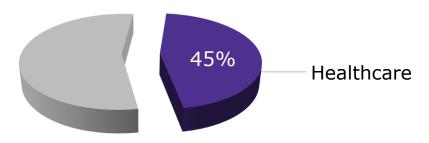
#### Net sales bridge



Comments

- Rebif still impacted by ramp-up of competition in Europe, while U.S. pricing and PDP\* in Brazil support performance
- Erbitux shows slight organic growth as volume expansion in emerging markets more than offset mandatory price cuts and competition in EU
- Strong Fertility driven by favorable competitive situation in the U.S.
- Marketing & selling reflects end of commission expenses for Rebif (U.S.) partially offset by reinvestments in sales force & launch preparations
- R&D spend increases as pipeline development progresses
- EBIT reflects Kuvan disposal gain of €330m in 2016
- Profitability improves due to solid organic growth and end of Rebif commissions

### FY 2016 share of group net sales



Merck KGaA Darmstadt, Germany

\*Productive Development Partnership Totals may not add up due to rounding

## Healthcare organic growth by franchise/product

## Q4 2016 organic sales growth [%] by key product [€ m]

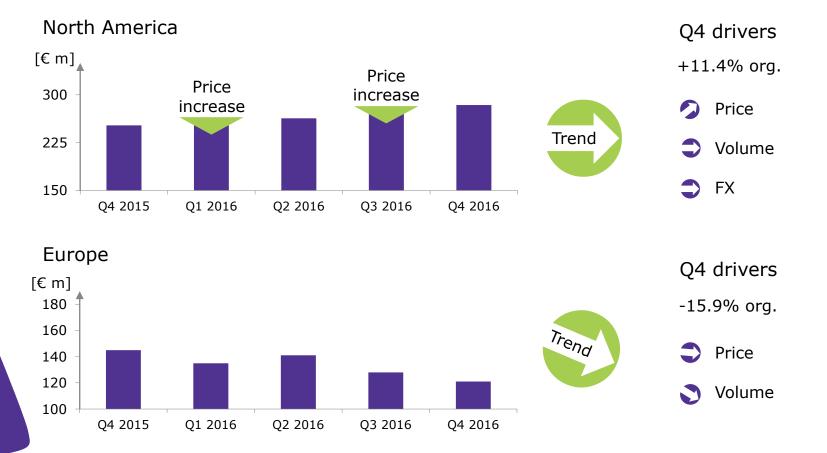
#### Organic Organic 441 **%**Rebif *Rebif* 1,741 +1% -2% \_ \_ \_ -- - -440 1,798 222 880 -5% +1% 237 899 Consumer Consumer 214 860 +6% +3% 207 Health Health 905 175 753 GONAL--1% GONAL-+12% 177 685 111 431 Concor +8% Concor<sup>®</sup> +4% 105 463 102 388 / Glucophage -5% Glucophage -2% 108 437 Q4 2016 Q4 2015 FY 2016 FY 2015

# FY 2016 organic sales growth [%] by key product [€ m]

Merck KGaA Darmstadt, Germany

## **Rebif: Relief in the U.S. – competitive ramp-up in Europe ongoing**

#### Rebif sales evolution

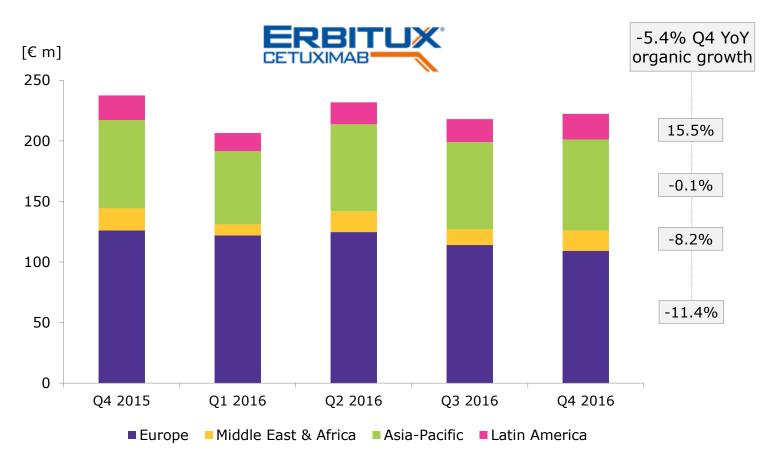


#### Rebif performance

- Rebif sales of €441 m in Q4 2016 reflect stable organic sales amid slight negative FX effects mainly from LatAm
- •U.S. performance was positively influenced by year-end demand due to pharmacy inventory stocking
- Market share within interferons stable due to high retention rates and longterm safety track record
- •U.S. pricing & market share stabilization partially offset decline of interferon class
- Ongoing volume decline in Europe due to phased market entry of orals

## **Erbitux: A challenging market environment**

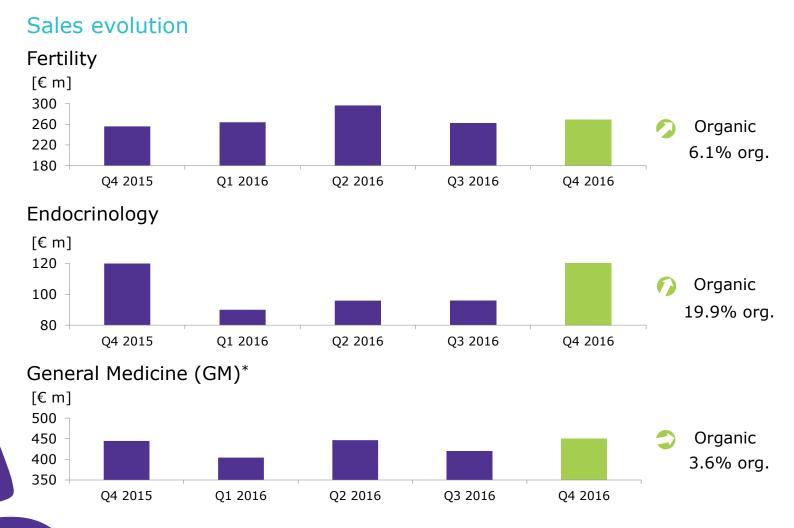
#### Erbitux sales by region



#### Erbitux performance

- Sales decrease to €222m due to moderate organic decline and FX headwinds mainly from LatAm
- Europe organically lower in ongoing tough environment (price & competition)
- •Asia-Pacific shows strong volume growth in China offset by softness in Japan
- •Organic growth in LatAm reflects growing demand especially in Brazil

## Solid organic growth in Fertility, General Medicine and Endocrinology



#### Q4 drivers

- Fertility shows ongoing growth especially in the U.S. and China
- Gonal-f flat as growth in the U.S. is offset by slight uptake of biosimilars in Europe and softer demand in MEA
- Sales jump in Endocrinology reflects slight volume growth and larger release of accruals for rebates
- •GM organic sales growth driven by solid developments in all growth markets; neg. FX from LatAM and China
- Glucophage still impacted by phasing of tenders especially in MEA

## **Clinical pipeline**

#### Phase I

**Tepotinib – c-Met kinase inhibitor** Solid tumors

M2698 – p70S6K & Akt inhibitor Solid tumors

M3814 – DNA-PK inhibitor Solid tumors

**M9831 (VX-984) – DNA-PK inhibitor** Solid tumors

Beigene-283 – BRAF inhibitor Solid tumors

**M7583 – BTK inhibitor** Hematological malignancies

M66207<sup>7</sup> (VX-970) – ATR inhibitor Solid tumors

M4344 (VX-803) – ATR inhibitor Solid tumors

Avelumab – Anti-PD-L1 mAb Solid tumors

Avelumab – Anti-PD-L1 mAb Hematological malignancies

M9241 (NHS-IL12) Cancer immunotherapy Solid tumors

M7824 - Bifunctional immunotherapy Solid tumors

M1095 (ALX-0761) Anti-IL-17 A/F nanobody Psoriasis

#### Phase II

Tepotinib c-Met kinase inhibitor Non-small cell lung cancer Tepotinib c-Met kinase inhibitor Hepatocellular cancer

Avelumab – Anti-PD-L1 mAb Merkel cell carcinoma 1L<sup>1</sup>

Sprifermin Fibroblast growth factor 18 Osteoarthritis Atacicept Anti-Blys/anti-APRIL fusion protein Systemic lupus erythematosus M2951 BTK inhibitor Rheumatoid arthritis M2951

BTK inhibitor Systemic lupus erythematosus Abituzumab

anti-CD 51 mAb Systemic sclerosis with interstitial lung disease

#### Phase III

Avelumab – Anti-PD-L1 mAb Non-small cell lung cancer 1L<sup>1</sup> Avelumab – Anti-PD-L1 mAb Non-small cell lung cancer 2L<sup>2</sup> Avelumab – Anti-PD-L1 mAb Gastric cancer 1L<sup>1</sup> Avelumab – Anti-PD-L1 mAb Gastric cancer 3L<sup>3</sup> Avelumab – Anti-PD-L1 mAb Urothelial cancer 1L<sup>1</sup> Avelumab – Anti-PD-L1 mAb Ovarian cancer platinum resistant/refractory Avelumab – Anti-PD-L1 mAb Ovarian cancer 1L<sup>1</sup> Avelumab - Anti-PD-L1 mAb Renal cell cancer 1L<sup>1</sup> Avelumab - Anti-PD-L1 mAb Locally advanced head and neck cancer

MSB11022 Proposed biosimilar of Adalimumab Chronic plaque psoriasis

#### Registration

**Cladribine**<sup>4</sup> **Tablets** – **Lymphocyte targeting agent** Relapsing-remitting multiple sclerosis

Avelumab<sup>5</sup> – Anti-PD-L1 mAb Merkel cell carcinoma

Avelumab<sup>6</sup> – Anti-PD-L1 mAb Urothelial cancer 2L<sup>2</sup>

- Neurodegenerative Diseases
  Oncology
  Immunology
  Immuno-Oncology
- Biosimilars

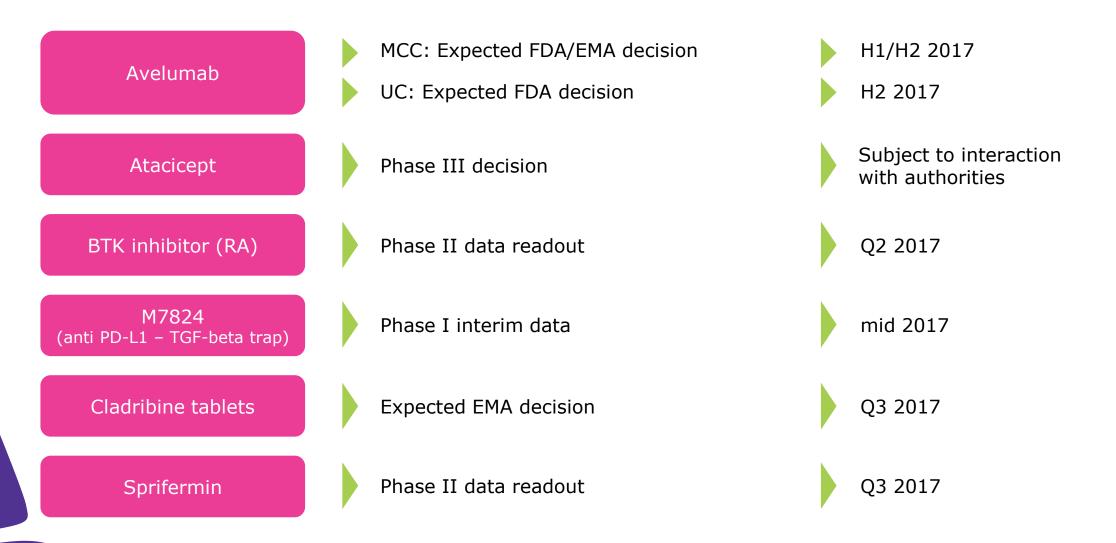
Pipeline as of March 1<sup>st</sup>, 2017 Pipeline products are under clinical investigation and have not been proven to be safe and effective. There is no guarantee any product will be approved in the sought-after indication.

<sup>1</sup> 1st line treatment; <sup>2</sup> 2nd line treatment; <sup>3</sup> 3rd line treatment; <sup>4</sup> European Medicines Agency (EMA) accepted Marketing Authorization Application (MAA) from Merck KGaA, Darmstadt, Germany in July 2016; <sup>5</sup> EMA accepted MMA from Merck KGaA, Darmstadt, Germany in July 2016 and the US Food and Drug Administration (FDA) has accepted for Priority Review the Biologics License Application (BLA);

<sup>6</sup> FDA accepted for Priority Review the BLA;<sup>7</sup> Includes expansion cohorts in non small cell lung cancer, small cell lung cancer and triple negative breast cancer



## **Newsflow: Upcoming pipeline catalysts**

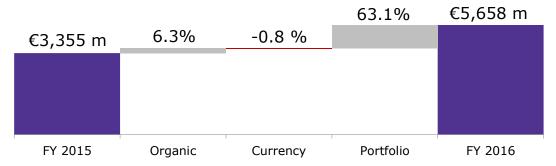


## Life Science: Strong top-line growth and fast synergy realization

#### Life Science P&L

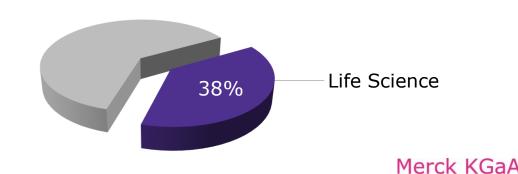
[€m]	FY 2015	FY 2016
Net sales	3,355	5,658
Marketing and selling	-1,038	-1,706
Administration	-151	-248
Research and development	-197	-260
EBIT	301	556
EBITDA	674	1,378
EBITDA pre	856	1,652
Margin (in % of net sales)	25.5%	29.2%

#### Net sales bridge



#### Comments

- Double-digit growth of Process Solutions driven by increasing production of large molecules across global and regional accounts
- Applied Solutions shows moderate organic growth, driven by biomonitoring products for pharma & demand for analytical testing
- Slight organic growth of Research Solutions due to solid demand for biology portfolio
- Cost base contains Sigma, but improves in relation to sales
- Profitability jump reflects Sigma, business mix as well as uptake of synergies



Darmstadt, Germany

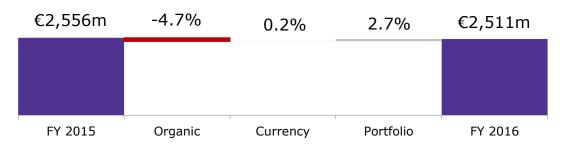
#### FY 2016 share of group net sales

## Performance Materials: Healthy profitability amid display supply chain destocking

#### Performance Materials P&L

[€m]	FY 2015	FY 2016
Net sales	2,556	2,511
Marketing and selling	-208	-233
Administration	-63	-61
Research and development	-197	-213
EBIT	878	823
EBITDA	1,120	1,077
EBITDA pre	1,132	1,106
Margin (in % of net sales)	44.3%	44.1%

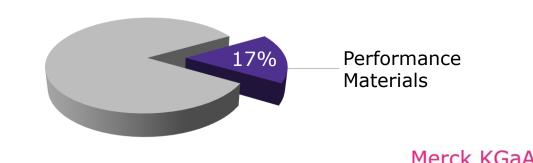
#### Net sales bridge



#### Comments

- LC impacted by volume declines of mature TN-TFT and inventory correction in supply chain linked with slight market share normalization
- OLED continues to grow on industry capacity expansion & investments
- Integrated Circuit Materials (ICM) shows good growth in all major product categories driven by increasing complexity of chips
- Pigments & Functionals post solid growth esp. due to decorative coatings
- Marketing & selling reflects contribution from Sigma's SAFC Hitech
- Healthy profitability due to leading market position with highly differentiated products, despite destocking in display supply chain

#### FY 2016 share of group net sales



Darmstadt, Germany

## Healthy operating cash flow reflects strong business performance

#### FY 2016 – cash flow statement

[€m]	FY 2015	FY 2016	Δ
Profit after tax	1,124	1,633	509
D&A	1,511	1,934	423
Changes in provisions	215	-51	-266
Changes in other assets/liabilities	-636	-587	49
Other operating activities	-11	-437	-426
Changes in net working capital	-8	26	34
Operating cash flow	2,195	2,518	323
Investing cash flow	-11,936	-503	11,433
thereof Capex on PPE	-514	-716	-202
Financing cash flow	7,164	-1,908	-9,072

#### Cash flow drivers

- Profit after tax includes gain from Kuvan divestment, which is neutralized in other operating activities
- D&A increases mainly due to Sigma
- Changes in provisions mainly reflect provision for evofosfamide in 2015
- Investing cash flow contains increased Capex & BioControl; LY is mainly Sigma purchase
- Financing cash flow reflects repayments of Sigma-related debt; LY contains € and US\$ bond issuances

## **Exceptionals in Q4 2016**

### Exceptionals in EBIT

[€m]	Q4 2015		Q4 20	016
	Exceptionals	thereof D&A	Exceptionals	thereof D&A
Healthcare	90	89	20	0
Life Science	111	1	93	27
Performance Materials	6	0	25	16
Corporate & Other	13	0	27	1
Total	220	89	165	44



## **Exceptionals in FY 2016**

### Exceptionals in EBIT

[€m]	FY 2015		FY 20	)16
	Exceptionals	thereof D&A	Exceptionals	thereof D&A
Healthcare	122	90	-225	71
Life Science	182	1	301	27
Performance Materials	12	0	46	16
Corporate & Other	51	1	69	1
Total	367	92	191	115



## **Financial calendar**

Date	Event
April 28, 2017	Annual General Meeting
May 18, 2017	Q1 2017 Earnings release
August 3, 2017	Q2 2017 Earnings release
November 9, 2017	Q3 2017 Earnings release



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