

## Q2 2018 Financial Summary for Investors and Analysts

### Solid organic performance

- Healthcare – Solid organic sales growth, Mavenclad U.S. submission accepted by FDA (approved in 38 countries)
- Life Science – Continued strong organic sales performance across all businesses
- Performance Materials – Strong growth of Semiconductor Solutions and OLED, mitigated by ongoing LC decline
- Org. sales growth of 5.2%; Org. EBITDA pre decline of -2.7%
- H1 org. sales growth of 4.2%; H1 org. EBITDA pre decline of -6.2%
- FY 2018 guidance confirmed<sup>1</sup> – net sales: €14.1-14.6 bn & EBITDA pre: €3,750-4,000 m

### Overview Financials

#### Q2 2018 Overview

- EBITDA pre & margin reduction mainly driven by LY milestone in Healthcare and ongoing LC decline
- Lower EPS pre driven by EBITDA pre decline
- Operating cash flow impacted by higher working capital
- Net financial debt increase reflects lower operating cash flow amid dividend payment
- Working capital reflects organic sales growth

#### Q2 2018 Balance Sheet

- Deleveraging remains focus
- Total assets about stable, with an increased equity ratio of 41.6%
- Decrease in intangible assets reflects D&A (-€0.6 bn), FX (+€0.4 bn) and reallocation of CH (-€0.3 bn) to assets held for sale
- Higher financial debt due to weaker operating cashflow and dividend payments
- Other liabilities decrease driven by profit transfer to E. KG as well as incentive payments

#### Q2 2018 Cash flow Statement

- Operating cash flow impacted by higher working capital
- D&A increase due to low base LY related to write up of Vevey site (~ €70 m)
- Changes in other assets/liabilities driven by incentive and higher tax payments, mitigated by Peg-pal milestone
- Changes in working capital reflects uptake of receivables in line with business dynamics, LY contained higher payables
- Investing cash flow LY was driven by F-star licensing deals
- Financing cash flow reflects higher dividend payment than LY

<sup>1</sup>Guidance excludes Consumer Health

## Q2 2018 Business Overview

### Healthcare

- **Solid organic performance offsets FX headwinds; Profitability burdened by LY's favorable one-time effect**
- Net sales deviation YoY: organic +4.7%, FX -4.9%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -2.7%, FX -13.3%, portfolio 0.0%
- Organic growth supported by strong Fertility, Glucophage (China) as well as Mavenclad and Bavencio launches
- Erbitux facing ongoing competition and price pressure in major markets
- Rebif showing stable market shares in Interferons market in North America share, growing competition in Europe
- Lower M&S mainly due to favorable FX; higher M&S for Mavenclad and Bavencio offset by lower investment in declining products
- R&D investment picking up, expected further ramp-up in H2
- EBITDA pre reflects FX headwinds and higher investments; LY EBITDA pre contained Bavencio milestone payment (+ €36 m)

### Life Science

- **Strong organic sales growth across all businesses, profitability reflects phasing and unfavorable one-time effects**
- Net sales deviation YoY: organic +7.7%, FX -4.6%, portfolio 0.0%
- EBITDA pre deviation YoY: organic +2.9%, FX -3.4%, portfolio 0.0%
- Double-digit growth of Process Solutions driven by all major businesses, especially strong demand for single-use, cell culture media and filters
- Continued momentum in Applied Solutions with mid-single digit growth, reflecting solid demand for lab water and reference materials
- Solid organic growth of Research Solutions driven by all businesses across all regions, especially reagents and laboratory
- Profitability reflects unfavorable portfolio mix, one-time effects of startup costs on innovation projects and dissolving Sigma Aldrich regional operating model

### Performance Materials

- **Organic growth of Semiconductor Solutions and OLED compensates ongoing LC decline**
- Net sales deviation YoY: organic 0.4%, FX -4.6%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -9.5%, FX -8.8%, portfolio 0.0%
- Flat PM due to strong growth of Semiconductor Solutions and OLED compensating LC decline
- Above-market growth of Semiconductor Solutions reflects strong demand of dielectrics, lithography and deposition materials
- Stronger demand for innovative UB-FFS technology
- Profitability reflects business mix and ongoing LC price development

## Guidance for 2018

### Group – Full-year 2018 guidance\*

- EBITDA pre: Organic -1% to -3% YoY, FX -5 to -7% YoY, ~ €3,750 – 4,000 m
- Net sales: Organic +3% to +5% YoY, FX ~ -3% to -5% YoY, ~ €14.1 – 14.6 bn
- EPS pre: ~ €5.00 – 5.40

### Outlook by business sector:

#### Healthcare

- Net sales: Moderate organic growth +3% to +5%: ongoing organic Rebif decline offset by growth in other franchises; full-year contributions from 2017 launches
- EBITDA pre:
  - Organic -1% to -2% YoY, FX -5% to -7% YoY
  - ~ €1,580 – 1,650 m (excl. CH)

#### Life Science

- Net sales: Organic growth ~+5% to +6%, slightly above market; full realization of expected topline synergies
- EBITDA pre:
  - Organic ~ +8% YoY, FX -3% to -5% YoY
  - ~€1,830 - 1,880 m

#### Performance Materials

- Net sales: Slight to moderate organic decline of -2% to -4%; volume increases in all businesses; continuation of Liquid Crystals sales decline
- EBITDA pre:
  - Organic -14% to -16% YoY, FX -6% to -8% YoY
  - ~€745 – 785 m

### Additional financial guidance

- |                                |   |
|--------------------------------|---|
| ▪ Corporate & Other EBITDA pre | ~ -€360 – -400 m                                      |
| ▪ Interest result              | ~ -€230 – -250 m                                      |
| ▪ Underlying tax rate          | ~ 24% to 26%  |
| ▪ Capex on PPE                 | ~ €900 – 950 m  |
| ▪ Hedging/USD assumption       | 2018 hedge ratio ~50-60%<br>at EUR/USD ~ 1.19 to 1.20 |
| ▪ 2018 Ø EUR/USD assumption    | ~ 1.19 – 1.22   |

\*Excluding Consumer Health

# Merck KGaA

Darmstadt, Germany

## Group Q2 2018

€ m	Group			Healthcare			Life Science			Performance Materials			Corporate/Others		
	Q2 2017	Q2 2018	% YoY	Q2 2017	Q2 2018	% YoY	Q2 2017	Q2 2018	% YoY	Q2 2017	Q2 2018	% YoY	Q2 2017	Q2 2018	% YoY
Net sales	3.695	3.714	1%	1.587	1.584	0%	1.495	1.543	3%	612	587	-4%			
<b>% organic</b>			<b>5%</b>			<b>5%</b>			<b>8%</b>			<b>0%</b>			
% FX			<b>-5%</b>			<b>-5%</b>			<b>-5%</b>			<b>-5%</b>			
% portfolio			<b>0%</b>			<b>0%</b>			<b>0%</b>			<b>0%</b>			
EBIT	608	392	-35%	326	155	-52%	221	254	15%	167	131	-22%	-106	-148	39%
Depreciation and amortization	376	448	19%	113	183	62%	190	188	-1%	64	60	-5%	9	16	74%
EBITDA	984	840	-15%	439	338	-23%	411	442	8%	231	192	-17%	-97	-132	36%
Adjustments in EBITDA	82	80	-3%	12	40	>100%	43	9	-78%	8	4	-50%	19	26	36%
<b>EBITDA pre</b>	<b>1.066</b>	<b>920</b>	<b>-14%</b>	<b>450</b>	<b>379</b>	<b>-16%</b>	<b>454</b>	<b>452</b>	<b>-1%</b>	<b>239</b>	<b>196</b>	<b>-18%</b>	<b>-78</b>	<b>-106</b>	<b>36%</b>
Net financial debt	10.144 *	10.674	5%												

\* as per 31 December

Totals may not add up due to rounding

**Group**

<b>P&amp;L Group</b>	<b>Q2 2017</b>	<b>Q2 2018</b>	<b>% YoY</b>
<b>Net sales</b>	<b>3.695</b>	<b>3.714</b>	<b>1%</b>
Cost of sales	-1.274	-1.321	4%
thereof: intangibles amortization	-45	-44	-2%
<b>Gross profit</b>	<b>2.421</b>	<b>2.392</b>	<b>-1%</b>
Marketing and selling expenses	-1.124	-1.107	-1%
thereof: intangibles amortization	-257	-244	-5%
Administration	-248	-236	-5%
Impairment losses	-	-6	n.m.
Other operating income/expenses	72	-113	n.m.
Research and development	-513	-538	5%
<b>EBIT</b>	<b>608</b>	<b>392</b>	<b>-35%</b>
Depreciation and amortization	376	448	19%
EBITDA	984	840	-15%
Adjustments in EBITDA	82	80	-3%
<b>EBITDA pre</b>	<b>1.066</b>	<b>920</b>	<b>-14%</b>
Financial result	-66	-65	-2%
<b>Profit before tax</b>	<b>542</b>	<b>328</b>	<b>-40%</b>
Income tax	-130	-84	-35%
Profit after tax from continuing operations	412	244	-41%
Profit after tax from discontinued operations	15	7	-56%
Profit after tax	427	251	-41%
Non-controlling interests	-2	-4	>100%
<b>Net income</b>	<b>426</b>	<b>247</b>	<b>-42%</b>
Number of theoretical shares in million	434,8	434,8	
EPS in €	0,98	0,57	-42%
EPS pre in €	1,51	1,23	-19%

Totals may not add up due to rounding

## Healthcare

P&L Healthcare	Q2 2017	Q2 2018	% YoY
<b>Net sales</b>	<b>1.587</b>	<b>1.584</b>	<b>0%</b>
Cost of sales	-345	-343	-1%
thereof: intangibles amortization	0	-1	n.m.
<b>Gross profit</b>	<b>1.242</b>	<b>1.241</b>	<b>0%</b>
Marketing and selling expenses	-617	-592	-4%
thereof: intangibles amortization	-139	-134	-4%
Administration	-70	-79	13%
Impairment losses	-	-5	n.m.
Other operating income/expenses	152	-4	n.m.
Research and development	-381	-407	7%
<b>EBIT</b>	<b>326</b>	<b>155</b>	<b>-52%</b>
Depreciation and amortization	113	183	62%
<b>EBITDA</b>	<b>439</b>	<b>338</b>	<b>-23%</b>
Adjustments in EBITDA	12	40	>100%
<b>EBITDA pre</b>	<b>450</b>	<b>379</b>	<b>-16%</b>

Totals may not add up due to rounding

## Life Science

P&L Life Science	Q2 2017	Q2 2018	% YoY
<b>Net sales</b>	<b>1.495</b>	<b>1.543</b>	<b>3%</b>
Cost of sales	-648	-677	5%
thereof: intangibles amortization	-15	-15	-2%
<b>Gross profit</b>	<b>848</b>	<b>865</b>	<b>2%</b>
Marketing and selling expenses	-443	-451	2%
thereof: intangibles amortization	-114	-107	-6%
Administration	-65	-60	-8%
Impairment losses	-	0	n.m.
Other operating income/expenses	-52	-39	-24%
Research and development	-67	-61	-10%
<b>EBIT</b>	<b>221</b>	<b>254</b>	<b>15%</b>
Depreciation and amortization	190	188	-1%
<b>EBITDA</b>	<b>411</b>	<b>442</b>	<b>8%</b>
Adjustments in EBITDA	43	9	-78%
<b>EBITDA pre</b>	<b>454</b>	<b>452</b>	<b>-1%</b>

Totals may not add up due to rounding

**Performance Materials**

<b>P&amp;L Performance Materials</b>	<b>Q2 2017</b>	<b>Q2 2018</b>	<b>% YoY</b>
<b>Net sales</b>	<b>612</b>	<b>587</b>	<b>-4%</b>
Cost of sales	-284	-300	6%
thereof: intangibles amortization	-30	-28	-4%
<b>Gross profit</b>	<b>328</b>	<b>287</b>	<b>-13%</b>
Marketing and selling expenses	-64	-61	-5%
thereof: intangibles amortization	-4	-3	-16%
Administration	-19	-23	25%
Impairment losses	-	0	n.m.
Other operating income/expenses	-20	-13	-38%
Research and development	-59	-59	1%
<b>EBIT</b>	<b>167</b>	<b>131</b>	<b>-22%</b>
Depreciation and amortization	64	60	-5%
<b>EBITDA</b>	<b>231</b>	<b>192</b>	<b>-17%</b>
Adjustments in EBITDA	8	4	-50%
<b>EBITDA pre</b>	<b>239</b>	<b>196</b>	<b>-18%</b>

*Totals may not add up due to rounding*