

Q2 2019 Financial Summary for Investors and Analysts

A quarter of strong performance

- Healthcare – Underlying profitability better than Q1 and further boosted by non-recurring business-related income
- Life Science – Sustained strong organic growth driven by all businesses with Process Solutions as main contributor
- Performance Materials – Strong OLED growth more than offset by (1) lower LC due to decreasing China ramp-up support, and (2) market slowdown in Semiconductor Solutions and Surface Solutions
- Q2 2019 organic sales growth of +5.6%;
Q2 2019 organic EBITDA pre growth of +20.3%
- Full-year 2019 guidance confirmed: net sales: €15.3 to 15.9 bn;
EBITDA pre: € 4,150 to 4,350 m; EPS pre: € 5.30 to 5.65
- Financing structure for Versum Materials acquisition in place
– €1.5 bn hybrid bonds and €2 bn EUR bonds* successfully issued

Overview Financials

Q2 2019 Overview

- Net sales growth driven by Life Science and Healthcare
- EBITDA pre & margin reflect Peg-Pal (~€75 m) and Bavencio® (~€35 m) milestones, GSK deferred income (~€30 m) and strong performance of LS
- Strong operating cash flow due to higher profit after tax and GSK upfront payment
- Working capital reflects increased business activity and FX
- Higher net financial debt mainly due to IFRS 16 adoption, dividends and temporary investment of cash proceeds from CH divestment

*EUR bonds were placed on July 1st, 2019

Q2 2019 Balance Sheet

- Higher cash & cash equivalents driven by bond placements (€1.5 bn)
- Property, plant and equipment increase mainly due to IFRS 16 adoption
- Other assets reflect temporary investment of cash proceeds from Consumer Health divestment
- Increase in equity reflects profit after tax (equity ratio of 44.4%)
- Higher financial debt due to bond placements (€1.5 bn) and IFRS 16 reclassification of lease liabilities
- Increase of provisions for pensions reflects decline in interest rate

Q2 2019 Cash flow Statement

- Profit after tax in line with higher EBIT
- Changes in provisions driven by LTIP¹ adjustment
- Changes in other assets/liabilities reflects GSK upfront and Peg-Pal milestone payment
- Changes in working capital driven by increased trade accounts payable
- Increased investing cash flow due to temporary investment of cash proceeds from Consumer Health divestment
- Higher financing cash flow reflects the issuance of new hybrid bonds (€1.5 bn)

Q2 2019 Business Overview

Healthcare

- **Underlying profitability increases vs. Q1 driven by organic performance and cost discipline, further boosted by non-recurring business-related income**
- Net sales deviation YoY: organic +5.2%, FX +0.7%, portfolio 0.0%
- EBITDA pre deviation YoY: organic +37.3%², FX +2.2%, portfolio 0.0%
- Solid growth in Healthcare driven by General Medicine, Mavenclad®, Erbitux®, Fertility and Bavencio®, more than offset strong Rebif® decline
- Mavenclad® with continued strong uptake supported by initial U.S. sales following approval (+41% vs. Q1)
- Bavencio® on track; Erbitux® benefiting from China reimbursement, still facing ongoing competition and price pressure in major markets
- R&D below prior year due to stringent project prioritization
- Higher EBITDA pre driven by Peg-Pal (~€75 m) and Bavencio® (~€35 m) milestone as well as GSK deferred income (~€30 m), sequential underlying³ margin increase

¹LTIP – long-term incentive plan

²Thereof IFRS 16 effect with +3.2% (+€12 m)

³EBITDA pre adjusted for €140 m non-recurring income

Life Science

- **Strong organic growth fueled by all businesses**
- Net sales deviation YoY: organic +9.0%, FX +2.1%, portfolio -0.6%
- EBITDA pre deviation YoY: organic +16.7%¹, FX +0.7%, portfolio +0.7%
- Process Solutions with continued strong demand: double-digit growth in all major business fields, especially single-use
- Advanced Analytical and Lab Water main contributor to Applied Solutions solid organic growth, all business segments and regions contributing
- Moderate organic growth of Research Solutions due to ongoing strong demand for lab chemicals and workflow tools, especially in APAC and NA
- M&S increase reflects volume growth and investments in eCommerce
- EBITDA pre and margin increase driven by strong top-line

Performance Materials

- **Reduced China support for Liquid Crystals mitigated by strong demand for OLED, amid market slowdown in Semiconductor and Surface**
- Net sales deviation YoY: organic -2.0%, FX +2.4%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -8.4%², FX +5.6%, portfolio 0.0%
- About stable Display Solutions sales driven by strong demand for OLED, almost offset by decline in LC due to deceleration of China ramp-up support
- Softness of Semiconductor Solutions reflects market slowdown
- Surface Solutions below prior year due to weak automotive market
- Provisions related to Bright Future program drive M&S and R&D increase; adjusted for EBITDA pre - decrease in R&D reflecting cost control
- EBITDA pre impacted by ongoing liquid crystal price decline and slowing China ramp up contribution as well as reduced fixed cost leverage due to softness in Surface Solutions and Semiconductor Solutions

Guidance for 2019

Group – Full-year 2019 guidance³ confirmed:

- **EBITDA pre: Organic +10% to +13% YoY⁴, FX 0% to +2% YoY, ~ € 4,150 – 4,350 m⁵**
- Net sales: Organic +3% to +5% YoY, FX ~ 0% to +2% YoY, ~ € 15.3 – 15.9 bn
- EPS pre: ~ €5.30 – 5.65

¹Thereof IFRS 16 effect with +2.8% (+€12 m)

²Thereof IFRS 16 effect with +1.3% (+€3 m)

³Merck KGaA, Darmstadt, Germany stand-alone, i.e. without acquisition of Versum Materials and Intermolecular Inc.

⁴Incl. ~€130 m YoY contribution from adoption of IFRS 16 (Healthcare ~40%, Life Science ~40%, PM ~10%, CO ~10%)

⁵CO guidance 2019: -€420 m to -€480 m (assuming FX adjusted CO costs -€390 m to -€400 m)

Outlook by business sector¹:

Healthcare

- Net sales: Solid organic growth +4% to +6%; base business at least stable organically; strong contributions from launches including Mavenclad[®]
- EBITDA pre²:
 - Organic +19% to +23% YoY
 - FX -1% to +2% YoY
 - ~ €1,830 – 1,940 m

Life Science

- Net sales: Organic growth +7% to +8%, above expected market growth; main growth driver Process Solutions but all businesses contributing
- EBITDA pre²:
 - Organic +11% to +13% YoY
 - FX +0% to +2% YoY
 - ~ €2,020 – 2,120 m with 20-30 bps³ underlying margin progression

Performance Materials

- Net sales: Organic decline -4% to -7%; LC resuming decline, following temporary capacity ramp-up in China; economic environment may lead to moderate decline in Semiconductor, return to growth in 2020
- EBITDA pre^{2,4}:
 - Organic -9% to -13% YoY
 - FX +1% to +4% YoY
 - ~ €685 – 745 m

Additional financial guidance

- | | |
|---|--|
| ▪ Corporate & Other EBITDA pre ⁵ | ~ -€420 – -480 m |
| ▪ Interest result | ~ -€260 – -280 m |
| ▪ Effective tax rate | ~ 24% to 26% |
| ▪ Capex on PPE | ~ €1.1 bn – 1.2 bn |
| ▪ Hedging/USD assumption | FY 2019 hedge ratio ~60%
at EUR/USD ~1.20 |
| ▪ 2019 Ø EUR/USD assumption | ~ 1.12 – 1.16 |

¹Divisional guidances are only support to the group guidance and do not have to add up

²Incl. ~€130 m YoY group contribution from adoption of IFRS 16 (Healthcare ~40%, Life Science ~40%, PM ~10%, CO ~10%)

³bps = basis points

⁴Merck KGaA, Darmstadt, Germany stand-alone, i.e. without acquisition of Versum Materials and Intermolecular Inc.

⁵CO guidance 2019: -€420 m to -€480 m (assuming FX adjusted CO costs -€390 m to -€400 m)

Merck KGaA

Darmstadt, Germany

Group Q2 2019

€ m	Group			Healthcare			Life Science			Performance Materials			Corporate/Others		
	Q2 2018	Q2 2019	% YoY	Q2 2018	Q2 2019	% YoY	Q2 2018	Q2 2019	% YoY	Q2 2018	Q2 2019	% YoY	Q2 2018	Q2 2019	% YoY
Net sales	3.714	3.971	7%	1.584	1.677	6%	1.543	1.705	11%	587	589	0%			
% organic			6%			5%			9%			-2%			
% FX			2%			1%			2%			2%			
% portfolio			0%			0%			-1%			0%			
EBIT	392	618	58%	155	345	>100%	254	322	27%	131	100	-24%	-148	-148	0%
Depreciation and amortization	448	455	2%	183	177	-3%	188	197	4%	60	62	2%	16	20	23%
EBITDA	840	1.074	28%	338	523	54%	442	518	17%	192	161	-16%	-132	-128	-3%
Adjustments in EBITDA	80	65	-18%	40	5	-87%	9	15	61%	4	29	>100%	26	16	-39%
EBITDA pre	920	1.139	24%	379	528	39%	452	533	18%	196	190	-3%	-106	-112	6%
Net financial debt	6.701 *	7.829	17%												

* as per 31 December

Totals may not add up due to rounding

Group

P&L Group	Q2 2018	Q2 2019	% YoY
Net sales	3.714	3.971	7%
Cost of sales	-1.321	-1.454	10%
thereof: intangibles amortization	-44	-44	0%
Gross profit	2.392	2.517	5%
Marketing and selling expenses	-1.109	-1.157	4%
thereof: intangibles amortization	-244	-225	-8%
Administration	-275	-269	-2%
Impairment losses / reversals (IFRS16)	-6	2	n.m.
Other operating income/expenses	-72	79	n.m.
Research and development	-538	-553	3%
EBIT	392	618	58%
Depreciation and amortization	448	455	2%
EBITDA	840	1.074	28%
Adjustments in EBITDA	80	65	-18%
EBITDA pre	920	1.139	24%
Financial result	-65	-61	-5%
Profit before tax	328	557	70%
Income tax	-84	-136	63%
Income tax rate	26%	24%	
Profit after tax from continuing operations	244	421	73%
Profit after tax from discontinued operation	7	50	>100%
Profit after tax	251	471	88%
Non-controlling interests	-4	0	-100%
Net income	247	471	91%
Number of theoretical shares in million	434,8	434,8	
EPS in €	0,57	1,08	89%
EPS pre in €	1,22	1,54	25%

Totals may not add up due to rounding

Healthcare

P&L Healthcare	Q2 2018	Q2 2019	% YoY
Net sales	1.584	1.677	6%
Cost of sales	-343	-421	23%
thereof: intangibles amortization	-1	-1	28%
Gross profit	1.241	1.256	1%
Marketing and selling expenses	-592	-599	1%
thereof: intangibles amortization	-134	-112	-16%
Administration	-82	-84	2%
Impairment losses / reversals (IFRS16)	-5	2	n.m.
Other operating income/expenses	-1	165	n.m.
Research and development	-407	-395	-3%
EBIT	155	345	>100%
Depreciation and amortization	183	177	-3%
EBITDA	338	523	54%
Adjustments in EBITDA	40	5	-87%
EBITDA pre	379	528	39%

Totals may not add up due to rounding

Life Science

P&L Life Science	Q2 2018	Q2 2019	% YoY
Net sales	1.543	1.705	11%
Cost of sales	-677	-724	7%
thereof: intangibles amortization	-15	-15	-1%
Gross profit	865	982	13%
Marketing and selling expenses	-452	-490	8%
thereof: intangibles amortization	-107	-109	2%
Administration	-65	-68	4%
Impairment losses / reversals (IFRS16)	0	0	n.m.
Other operating income/expenses	-32	-32	-1%
Research and development	-61	-69	14%
EBIT	254	322	27%
Depreciation and amortization	188	197	4%
EBITDA	442	518	17%
Adjustments in EBITDA	9	15	61%
EBITDA pre	452	533	18%

Totals may not add up due to rounding

Performance Materials

P&L Performance Materials	Q2 2018	Q2 2019	% YoY
Net sales	587	589	0%
Cost of sales	-300	-307	2%
thereof: intangibles amortization	-28	-28	-1%
Gross profit	287	282	-2%
Marketing and selling expenses	-61	-66	9%
thereof: intangibles amortization	-3	-4	19%
Administration	-27	-25	-7%
Impairment losses / reversals (IFRS16)	0	0	n.m.
Other operating income/expenses	-9	-17	95%
Research and development	-59	-74	26%
EBIT	131	100	-24%
Depreciation and amortization	60	62	2%
EBITDA	192	161	-16%
Adjustments in EBITDA	4	29	>100%
EBITDA pre	196	190	-3%

Totals may not add up due to rounding