

Q1 2019 Financial Summary for Investors and Analysts

Solid growth at the start of the year

- Healthcare – Mavenclad® U.S. approval in March 2019, continued strong uptake in ex-US territories and M7824 alliance with GSK announced in February 2019
- Life Science – Very strong organic growth fueled by all businesses across all regions
- Performance Materials – Ongoing strong demand for LC and OLED; market demand driven softness in Semiconductor Solutions
- Q1 2019 organic sales growth of +5.7%; Q1 2019 organic EBITDA pre decline of -2.0%
- Full-year 2019 guidance – net sales: €15.3 to 15.9 bn; EBITDA pre: € 4,150 to 4,350 m; EPS pre: € 5.30 to 5.65
- Merger agreement with Versum Materials signed* – financing secured

Overview Financials

Q1 2019 Overview

- Net sales reflect organic sales growth across all business sectors fueled by FX tailwinds
- EBITDA pre & margin decrease due to hedging losses and LC price decline; last year contained Peg-Pal milestone (€50 m)
- Lower EPS pre driven by impairment of asset from F-star collaboration (~€27 m) and D&A from IFRS 16 effect (~€32 m)
- LY operating cash flow driven by higher income tax payments
- Working capital reflects increased business activity
- Higher net financial debt mainly due to IFRS 16 reclassification

Q1 2019 Balance Sheet

- Property, plant and equipment increase mainly driven by IFRS 16 adoption
- Other assets reflect temporary investment of cash proceeds from Consumer Health disposal
- GSK collaboration included in receivables and other liabilities
- Increase in equity driven by currency translation effects and profit after tax (equity ratio of 45.7%)
- Higher financial debt due to IFRS 16 reclassification of lease liabilities

*Merger agreement signed as of April 12th 2019.

Q1 2019 Cash flow Statement

- Profit after tax in line with lower EBIT
- D&A increase mainly due to IFRS 16 reclassification
- Changes in provisions driven by build up for transformation program
- Changes in other assets/liabilities reflects lower income tax payment
- Increased investing cash flow due to temporary investment of cash proceeds from Consumer Health disposal

Q1 2019 Business Overview

Healthcare

- **Solid core business and strong Mavenclad weighed down by last year's Peg-Pal milestone payment**
- Net sales deviation YoY: organic +2.9%, FX +0.4%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -13.9%, FX +1.0%, portfolio 0.0%
- Organic growth driven by double-digit growth of General Medicine and ongoing strong demand in Fertility
- Mavenclad® with continued strong uptake and U.S. approval in March 2019, mitigating ongoing Rebit® decline
- Bavencio® ramp-up on track; Erbitux® benefitting from China reimbursement, still facing ongoing competition and price pressure in major markets
- Flat M&S reflects pre-launch investments attributable to Mavenclad® and Bavencio® as well as investments to drive growth in China offset by lower investments in mature products
- Last year EBITDA pre higher due to Peg-Pal milestone payment (€50 m)

Life Science

- **Strong organic sales growth across all businesses drives margin expansion**
- Net sales deviation YoY: organic +9.4%, FX +2.8%, portfolio -0.5%
- EBITDA pre deviation YoY: organic +13.4%, FX +0.9%, portfolio -0.8%
- Ongoing strong demand in Process Solutions with double-digit growth driven by all businesses and all major regions
- Applied Solutions shows high-single digit growth fueled by all businesses across all regions, especially Advanced Analytical and Lab Water
- Research Solutions posts moderate organic growth fueled by ongoing strong demand for lab chemicals and workflow tools across all regions
- M&S increase reflects volume growth, investments in eCommerce and strategic initiatives
- EBITDA pre reflects strong topline and IFRS 16 effect

Performance Materials

- **Organic growth mainly driven by ongoing strong demand for OLED and support from LC capacity ramp-up and low comps**
- Net sales deviation YoY: organic +3.2%, FX +3.9%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -8.5%, FX +6.8%, portfolio 0.0%
- Performance Materials with moderate organic growth reflecting strong demand for OLED, LC support from new panel plant ramp-up projects in China and low comps
- About stable Semiconductor Solutions reflects observed market slowdown
- Increased R&D due to provisions related to Bright Future program; underlying decrease in R&D reflecting cost control
- EBITDA pre reflects negative business mix and ongoing Liquid Crystals price decline

Guidance for 2019

Group – Full-year 2019 guidance¹:

- **EBITDA pre: Organic +10% to 13% YoY², FX 0 to +2% YoY, ~ € 4,150 – 4,350 m³**
- Net sales: Organic +3% to +5% YoY, FX ~ 0% to +2% YoY, ~ € 15.3 – 15.9 bn
- EPS pre: ~ €5.30 – 5.65

Outlook by business sector⁴:

Healthcare

- Net sales: Moderate organic growth +4% to +6%; base business at least stable organically; strong contributions from launches incl. Mavenclad[®] US
- EBITDA pre²:
 - Organic +19% to +23% YoY, FX -2% to +3% YoY
 - ~ €1,820 – 1,950 m

Life Science

- Net sales: Organic growth +6% to +7% above expected market growth; all businesses contributing; Process Solutions remains main growth driver
- EBITDA pre²:
 - Organic ~ +10% to +12% YoY, FX +0% to +3% YoY
 - ~ €2,000 – 2,100 m with 20-30 bps⁵ underlying margin progression

Performance Materials

- Net sales: Moderate organic decline -3% to -6%; liquid Crystals benefiting from temporary capacity ramp-up in China
- EBITDA pre^{1,2}:
 - Organic -7% to -11% YoY
 - FX +0% to +4% YoY
 - ~ €700 – 760 m

¹Merck KGaA, Darmstadt, Germany stand-alone, i.e. without acquisition of Versum Materials and Intermolecular Inc.;

²Incl. ~€130 m YoY contribution from adoption of IFRS 16 (Healthcare ~40%, Life Science ~40%, PM ~10%, CO ~10%); ³CO guidance 2019: -€420 m to -€480 m (assuming FX adjusted CO costs -€390 m to -€400 m);

⁴Divisional guidances are only support to the group guidance and do not have to add up; ⁵bps = basis points

Additional financial guidance

- Corporate & Other EBITDA pre* ~ -€420 – -480 m
- Interest result ~ -€220 – -240 m
- Underlying 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 ~ 1.13 – 1.17

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

Merck KGaA

Darmstadt, Germany

Group Q1 2019

€ m	Group			Healthcare			Life Science			Performance Materials			Corporate/Others		
	Q1 2018	Q1 2019	% YoY	Q1 2018	Q1 2019	% YoY	Q1 2018	Q1 2019	% YoY	Q1 2018	Q1 2019	% YoY	Q1 2018	Q1 2019	% YoY
Net sales	3.486	3.746	7%	1.435	1.481	3%	1.487	1.661	12%	564	604	7%			
% organic			6%			3%			9%			3%			
% FX			2%			0%			3%			4%			
% portfolio			0%			0%			-1%			0%			
EBIT	502	379	-25%	195	128	-34%	273	313	15%	136	95	-30%	-101	-158	56%
Depreciation and amortization	422	474	12%	184	201	9%	169	193	15%	57	62	9%	13	17	37%
EBITDA	924	853	-8%	379	329	-13%	442	507	15%	192	157	-18%	-89	-140	58%
Adjustments in EBITDA	43	76	76%	3	3	7%	13	9	-31%	3	35	>100%	24	28	19%
EBITDA pre	967	929	-4%	381	332	-13%	455	516	13%	196	193	-2%	-65	-112	73%
Net financial debt	6.701 *	7.089	6%												

* as per 31 December

Totals may not add up due to rounding

Group

P&L Group	Q1 2018	Q1 2019	% YoY
Net sales	3.486	3.746	7%
Cost of sales	-1.260	-1.384	10%
thereof: intangibles amortization	-43	-43	1%
Gross profit	2.226	2.362	6%
Marketing and selling expenses	-1.021	-1.091	7%
thereof: intangibles amortization	-245	-223	-9%
Administration	-257	-283	10%
Impairment losses	-2	-4	62%
Other operating income/expenses	65	-79	n.m.
Research and development	-508	-527	4%
EBIT	502	379	-25%
Depreciation and amortization	422	474	12%
EBITDA	924	853	-8%
Adjustments in EBITDA	43	76	76%
EBITDA pre	967	929	-4%
Financial result	-61	-113	84%
Profit before tax	441	266	-40%
Income tax	-108	-67	-38%
Profit after tax from continuing operations	333	199	-40%
Profit after tax from discontinued operation	9	-10	n.m.
Profit after tax	342	190	-45%
Non-controlling interests	-1	-1	-1%
Net income	341	189	-45%
Number of theoretical shares in million	434,8	434,8	
EPS in €	0,78	0,43	-45%
EPS pre in €	1,33	1,13	-15%

Totals may not add up due to rounding

Healthcare

P&L Healthcare	Q1 2018	Q1 2019	% YoY
Net sales	1.435	1.481	3%
Cost of sales	-334	-325	-3%
thereof: intangibles amortization	-1	-1	1%
Gross profit	1.101	1.156	5%
Marketing and selling expenses	-550	-550	0%
thereof: intangibles amortization	-138	-112	-19%
Administration	-77	-88	14%
Impairment losses	0	-4	n.m.
Other operating income/expenses	100	-6	n.m.
Research and development	-379	-380	0%
EBIT	195	128	-34%
Depreciation and amortization	184	201	9%
EBITDA	379	329	-13%
Adjustments in EBITDA	3	3	7%
EBITDA pre	381	332	-13%

Totals may not add up due to rounding

Life Science

P&L Life Science	Q1 2018	Q1 2019	% YoY
Net sales	1.487	1.661	12%
Cost of sales	-650	-719	11%
thereof: intangibles amortization	-14	-14	0%
Gross profit	837	942	13%
Marketing and selling expenses	-409	-470	15%
thereof: intangibles amortization	-104	-108	3%
Administration	-78	-88	13%
Impairment losses	-1	0	n.m.
Other operating income/expenses	-16	-10	-40%
Research and development	-59	-62	4%
EBIT	273	313	15%
Depreciation and amortization	169	193	15%
EBITDA	442	507	15%
Adjustments in EBITDA	13	9	-31%
EBITDA pre	455	516	13%

Totals may not add up due to rounding

Performance Materials

P&L Performance Materials	Q1 2018	Q1 2019	% YoY
Net sales	564	604	7%
Cost of sales	-275	-338	23%
thereof: intangibles amortization	-28	-28	1%
Gross profit	289	266	-8%
Marketing and selling expenses	-60	-66	10%
thereof: intangibles amortization	-3	-3	-6%
Administration	-22	-23	7%
Impairment losses	0	0	n.m.
Other operating income/expenses	-12	-10	-15%
Research and development	-59	-72	22%
EBIT	136	95	-30%
Depreciation and amortization	57	62	9%
EBITDA	192	157	-18%
Adjustments in EBITDA	3	35	>100%
EBITDA pre	196	193	-2%

Totals may not add up due to rounding