

Q1 2017 Financial Summary for Investors and Analysts

Solid start in a challenging year

- Healthcare – sound base business, first Bavencio approvals & further pipeline progress
- Life Science – solid growth against tough comps; Sigma integration on track
- Performance Materials – Four-pillar platform mitigates softness in Liquid Crystals
- Sales growth of 5.3%; EBITDA pre up 14.5% to €1,240 m
- Deleveraging on track – net financial debt decreases by €400 m
- FY 2017 guidance – net sales: €15.5 – 16.0 bn & EBITDA pre: €4,400 – 4,600 m

Overview Financials

Q1 2017 Overview

- EBITDA pre & margin increase mainly driven by royalty income swap
- Strong EPS pre growth due to higher EBITDA pre
- Operating cash flow reflects high profit and positive tax effects
- Net financial debt reduction driven by strong operating cash flow
- Working capital reflects increased receivables mainly due to Glucophage repatriation
- Higher headcount due to investments in growth markets and takeover of temporary workers

Q1 2017 Balance Sheet

- Total assets about stable, while equity ratio increases to 37.8%
- Reduction of intangible assets reflects D&A and FX, more than offsetting new assets from Vertex licensing deal
- Net equity increase driven by profit after tax
- USD250 m bond repayment reduces financial debt

Q1 2017 Cash flow Statement

- LY profit after tax includes gain from Kuvan sale, which is neutralized in other operating activities
- Changes in other assets/liabilities benefit from positive tax effects
- Changes in working capital reflect new Glucophage China business and R&D receivables from Pfizer
- Investing cash flow contains increased Capex and Vertex licensing deal; LY included sale of Kuvan
- Financing cash flow reflects repayment of USD250 m bond

Q1 2017 Business Overview

Healthcare

- **Solid base business and one-time gains supporting margin**
- Net sales deviation YoY: organic +4.4%, FX +2.0%, portfolio -1.0%
- Organic growth supported by Glucophage repatriation in China
- Rebif with ongoing volume and price declines in Europe outweighing U.S. pricing and contribution from PDP* in Brazil
- Erbitux shows moderate organic growth benefiting from demand in growth markets; competitive pressure in Europe persists
- Marketing & selling reflects investments for launch preparations and costs for Glucophage repatriation in China
- R&D costs phased – ramp-up towards coming quarters
- EBIT last year contained Kuvan disposal gain of €324 m
- Profitability spike mainly driven by net benefit of royalty income swap (~€100m) and Bavencio milestone, outweighing negative product mix

Life Science

- **Ongoing synergy realization drives margin progression**
- Net sales deviation YoY: organic +3.3%, FX +2.4%, portfolio +0.4%
- Process Solutions benefits from robust demand for single-use and upstream, but against tough comps & soft start at some larger accounts
- Applied Solutions shows solid organic growth, fueled by robust demand for food & beverage testing and lab water platform
- Research Solutions posts slight organic growth from solid demand in growth markets outweighing challenging U.S. market environment
- Marketing & selling increase in line with sales progression
- Q1 2016 EBIT affected by inventory step-up for Sigma-Aldrich
- Profitability reflects ongoing synergy realization and organic growth

Performance Materials

- **Top line recovery despite still declining Liquid Crystals**
- Net sales deviation YoY: organic -0.9%, FX +4.5%, portfolio 0.0%
- Organic growth of Integrated Circuit Materials, Pigments and OLED mitigate LC softness
- Liquid Crystals impacted by further market share normalization
- Integrated Circuit Materials with record quarter and above market growth due to strong demand from key accounts
- Pigments & Functionals post solid organic growth mainly driven by coatings applications especially automotive
- R&D increase reflects investments in LC technologies beyond displays
- Sound profitability despite negative business mix & higher R&D

* Productive Development Partnership

Guidance for 2017

Group:

- EBITDA pre: ~ €4,400 – 4,600 m
- Net sales: ~ €15.5 – 16.0 bn
- EPS pre: ~ €6.15 – 6.50

Outlook by business sector:

Healthcare

- Net sales: Slight organic growth, ongoing organic Rebif decline, other franchises growing – repatriation of Glucophage/china supportive
- EBITDA pre: ~ €1,900 – 2,000m

Life Science

- Net sales: Organic growth slightly above market, driven by Process Solutions, first minor contribution of top-line synergies
- EBITDA pre: ~ €1,780 – 1,850m

Performance Materials

- Net sales: Slight organic decline, volume increases in all businesses, further market share normalization in Liquid Crystals,
- EBITDA pre: ~ €1,050 – 1,130m

Additional financial guidance

- Corporate & Other EBITDA pre ~ -€350 – -400 m
- Interest result ~ -€250 – -260 m
- Underlying tax rate ~23% to 25%
- Capex on PPE ~€850 – 900 m
- Hedging/USD assumption 2017 hedge rate ~60%
at EUR/USD ~1.11 to 1.12
- 2017 Ø EUR/USD assumption ~€1.06 – 1.10

Merck KGaA

Darmstadt, Germany

Group Q1 2017

€ m	Group			Healthcare			Life Science			Performance Materials			Corporate/Others		
	Q1 2016	Q1 2017	% YoY	Q1 2016	Q1 2017	% YoY	Q1 2016	Q1 2017	% YoY	Q1 2016	Q1 2017	% YoY	Q1 2016	Q1 2017	% YoY
Net sales	3,665	3,861	5%	1,646	1,735	5%	1,397	1,481	6%	622	645	4%			
% organic			3%			4%			3%			-1%			
% FX			3%			2%			2%			4%			
% portfolio			0%			-1%			0%			0%			
EBIT	849	755	-11%	641	445	-31%	105	236	>100%	207	195	-6%	-104	-122	17%
Depreciation and amortization	433	448	3%	188	184	-2%	179	194	8%	61	62	1%	6	9	43%
EBITDA	1,282	1,203	-6%	829	629	-24%	284	430	51%	267	257	-4%	-98	-113	15%
Exceptionals in EBITDA	-198	38	n.m.	-321	4	n.m.	109	16	-86%	6	7	14%	7	11	62%
EBITDA pre	1,084	1,240	14%	508	633	25%	393	445	13%	273	263	-4%	-91	-101	11%
Net financial debt*	11,513	11,113	-3%												

* as per 31 December

Totals may not add up due to rounding

Group

P&L Group	Q1 2016	Q1 2017	% YoY
Net sales	3,665	3,861	5%
Cost of sales	-1,307	-1,296	-1%
thereof: intangibles amortization	-44	-47	7%
Gross profit	2,358	2,565	9%
Marketing and selling expenses	-1,090	-1,168	7%
thereof: intangibles amortization	-257	-259	1%
Administration	-206	-242	18%
Other operating income/expenses	276	95	-66%
Research and development	-489	-495	1%
EBIT	849	755	-11%
Depreciation and amortization	433	448	3%
EBITDA	1,282	1,203	-6%
Exceptionals in EBITDA	-198	38	n.m.
EBITDA pre	1,084	1,240	14%
Financial result	-68	-71	4%
Profit before tax	780	684	-12%
Income tax	-187	-161	-14%
Income tax rate	24%	24%	
Profit after tax discontinued operations	0	0	n.m.
Profit after tax	593	523	-12%
Non-controlling interests	-2	-2	-13%
Net income	591	521	-12%
Number of theoretical shares in million	434.8	434.8	
EPS in €	1.36	1.20	-12%
EPS pre in €	1.54	1.80	17%

Totals may not add up due to rounding

Healthcare

P&L Healthcare	Q1 2016	Q1 2017	% YoY
Net sales	1,646	1,735	5%
Cost of sales	-311	-371	19%
thereof: intangibles amortization	0	0	n.m.
Gross profit	1,335	1,364	2%
Marketing and selling expenses	-613	-656	7%
thereof: intangibles amortization	-143	-140	-2%
Administration	-71	-77	8%
Other operating income/expenses	367	191	-48%
Research and development	-378	-376	-1%
EBIT	641	445	-31%
Depreciation and amortization	188	184	-2%
EBITDA	829	629	-24%
Exceptionals in EBITDA	-321	4	n.m.
EBITDA pre	508	633	25%

Totals may not add up due to rounding

Life Science

P&L Life Science	Q1 2016	Q1 2017	% YoY
Net sales	1,397	1,481	6%
Cost of sales	-713	-622	-13%
thereof: intangibles amortization	-15	-15	3%
Gross profit	683	859	26%
Marketing and selling expenses	-421	-449	7%
thereof: intangibles amortization	-110	-116	6%
Administration	-63	-70	12%
Other operating income/expenses	-34	-43	28%
Research and development	-62	-62	0%
EBIT	105	236	>100%
Depreciation and amortization	179	194	8%
EBITDA	284	430	51%
Exceptionals in EBITDA	109	16	-86%
EBITDA pre	393	445	13%

Totals may not add up due to rounding

Performance Materials

P&L Performance Materials	Q1 2016	Q1 2017	% YoY
Net sales	622	645	4%
Cost of sales	-282	-299	6%
thereof: intangibles amortization	-28	-31	9%
Gross profit	340	346	2%
Marketing and selling expenses	-58	-62	8%
thereof: intangibles amortization	-5	-3	-27%
Administration	-16	-18	10%
Other operating income/expenses	-12	-13	15%
Research and development	-48	-58	20%
EBIT	207	195	-6%
Depreciation and amortization	61	62	1%
EBITDA	267	257	-4%
Exceptionals in EBITDA	6	7	14%
EBITDA pre	273	263	-4%

Totals may not add up due to rounding