

Q3 2018 Financial Summary for Investors and Analysts

A good quarter

- Healthcare – Strong organic performance, Mavenclad[®] and Bavencio[®] launches on track
- Life Science – Strong organic sales performance across all businesses amid low base LY
- Performance Materials – Strong growth of Semiconductor Solutions and OLED; LC benefited from new plant ramp up projects in China
- Org. sales growth of +8.8%; Org. EBITDA pre growth of +3.7%
- 9M org. sales growth of +5.7%; 9M org. EBITDA pre decline of -3.1%
- Organic guidance confirmed: org. net sales growth +4 to +6%; org. EBITDA pre decline -1 to -3%

Overview Financials

Q3 2018 Overview

- EBITDA pre & margin reduction driven by FX effects & hedging losses, investments in LS, PM business mix and LY milestone payments in HC
- Lower EPS pre in line with EBITDA pre decline
- Net financial debt reduced by €506 m vs. June 30th 2018
- Working capital reflects strong organic sales growth
- Higher headcount related to growth initiatives in Life Science and launch activities in Healthcare

Q3 2018 Balance Sheet

- Total assets about stable, with an increased equity ratio of 42.9%
- Decrease in assets reflects D&A (~-€0.9 bn) mitigated by FX (~+€0.4 bn) intangible
- Higher net equity reflects 9M net income (~+€0.9 bn) and FX (~+€0.3 bn)
- Other liabilities decrease mainly driven by profit transfer to E. Merck KG, Darmstadt, Germany

Q3 2018 Cash flow Statement

- LY profit after tax reflects gain from Biosimilars divestment, which is neutralized in other operating activities
- Changes in provisions driven by pension provisions and LTIP
- Changes in other assets/liabilities includes LY upfront payment from Fresenius for future R&D activities
- Changes in working capital reflects higher trade account receivables mainly from HC and buildup of inventories mainly from LS and PM
- Investing cash flow reflects LY Biosimilars cash proceeds ~€150 m
- Financing cash flow reflects decrease in bank loans and commercial papers; LY includes bond repayment ~€700 m

Q3 2018 Business Overview

Healthcare

- **Strong organic growth overcompensates FX headwinds; Profitability burdened by LY's favorable one-time effects**
- Net sales deviation YoY: organic +9.9%, FX -3.3%, portfolio 0.0%
- EBITDA pre deviation YoY: organic +3.8%, FX -7.7%, portfolio 0.0%
- Strong organic growth fueled by double-digit growth of Fertility and Glucophage®; Mavenclad® and Bavencio® launches on track
- Erbitux® benefitting from phasing, still facing ongoing competition and price pressure in major markets
- Ongoing decline of Rebif® due to competition in U.S. & EU
- FX offsetting M&S investments for Mavenclad®
- EBITDA pre reflects FX headwinds (mainly BRL* & ARS*) strong topline contribution offsets unfavorable prior year effect (two Bavencio® milestones of ~€50 m)

Life Science

- **Strong organic sales growth across all businesses drives EBITDA pre**
- Net sales deviation YoY: organic +9.8%, FX -1.4%, portfolio 0.0%
- EBITDA pre deviation YoY: organic +11.9%, FX -3.7%, portfolio 0.0%
- Process Solutions posts double digit growth driven by all businesses, especially strong demand for filtration and single-use
- Applied Solutions shows high-single digit growth, reflecting continued strong demand for lab water
- Research Solutions benefits from positive demand trends across all businesses and regions, especially reagents and laboratory chemicals
- Strategic investments in viral vector manufacturing, single-use bioprocessing and China expansion start to impact topline growth
- M&S increase in line with previous quarters and topline growth
- EBITDA pre reflects strong topline growth, offset by investments in eCommerce and strategic initiatives as well as FX headwinds

Performance Materials

- **Organic growth mainly driven by Semiconductor Solutions**
- Net sales deviation YoY: organic 3.4%, FX -0.9%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -15.8%, FX -2.5%, portfolio 0.0%
- Moderate organic growth in PM driven by growth of Semiconductor Solutions & OLED; LC benefited from new panel plant ramp up projects in China
- Above-market growth of Semiconductor Solutions reflects strong demand of dielectrics, silica and lithography materials
- Ongoing strong demand for innovative UB-FFS technology
- M&S in line with topline growth and with previous quarters
- Increased R&D due to Semiconductor Solutions related projects
- Profitability reflects negative business mix and ongoing LC price decline

Guidance for 2018

Group – Full-year 2018 guidance*:

- **EBITDA pre: Organic -1% to -3% YoY, FX -8 to -10% YoY, ~ €3,700 – 3,900 m**
- Net sales: Organic +4% to +6% YoY, FX ~ -3% to -5% YoY, ~ €14.4 – 14.8 bn
- EPS pre: ~ €5.00 – 5.30

Outlook by business sector*:

Healthcare

- Net sales: Sound organic growth of +4% 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 -9% to -11% YoY
 - ~ €1,540 – 1,600 m (excl. CH)

Life Science

- Net sales: Organic growth ~+7% to 8%; slightly above market; all businesses contributing; main driver Process Solutions; 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: About stable with -1% to +1% YoY; volume increases in major businesses; Liquid Crystals temporarily benefiting from China capacity ramp-up
- EBITDA pre:
 - Organic -14% to -16% YoY, FX -6% to -8% YoY
 - ~€745 – 785 m

*Excluding Consumer Health

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 Q4/2018 – FY 2019 hedge ratio ~60%
at EUR/USD ~1.20
- 2018 Ø EUR/USD assumption ~ 1.18 – 1.21

Merck KGaA

Darmstadt, Germany

Group Q3 2018

€ m	Group			Healthcare			Life Science			Performance Materials			Corporate/Others		
	Q3 2017	Q3 2018	% YoY	Q3 2017	Q3 2018	% YoY	Q3 2017	Q3 2018	% YoY	Q3 2017	Q3 2018	% YoY	Q3 2017	Q3 2018	% YoY
Net sales	3.517	3.749	7%	1.498	1.596	7%	1.408	1.527	8%	611	626	2%			
% organic			9%			10%			10%			3%			
% FX			-2%			-3%			-1%			-1%			
% portfolio			0%			0%			0%			0%			
EBIT	862	491	-43%	539	191	-65%	220	277	26%	191	142	-25%	-88	-119	36%
Depreciation and amortization	415	428	3%	168	181	8%	181	173	-5%	56	60	7%	11	14	35%
EBITDA	1.277	919	-28%	707	372	-47%	401	449	12%	246	202	-18%	-77	-105	36%
Adjustments in EBITDA	-254	45	n.m.	-310	9	n.m.	24	11	-55%	2	1	-54%	29	23	-21%
EBITDA pre	1.023	963	-6%	397	381	-4%	426	460	8%	249	203	-18%	-48	-82	70%
Net financial debt	10.144 *	10.168	0%												

* as per 31 December

Totals may not add up due to rounding

Group

P&L Group	Q3 2017	Q3 2018	% YoY
Net sales	3.517	3.749	7%
Cost of sales	-1.237	-1.344	9%
thereof: intangibles amortization	-43	-44	3%
Gross profit	2.280	2.405	6%
Marketing and selling expenses	-1.051	-1.077	3%
thereof: intangibles amortization	-250	-241	-3%
Administration	-210	-240	14%
Impairment losses and reversals	-	32	n.m.
Other operating income/expenses	380	-87	n.m.
Research and development	-537	-542	1%
EBIT	862	491	-43%
Depreciation and amortization	415	428	3%
EBITDA	1.277	919	-28%
Adjustments in EBITDA	-254	45	n.m.
EBITDA pre	1.023	963	-6%
Financial result	-65	-56	-14%
Profit before tax	797	435	-45%
Income tax	-177	-112	-37%
Profit after tax from continuing operations	620	323	-48%
Profit after tax from discontinued operations	28	22	-22%
Profit after tax	648	345	-47%
Non-controlling interests	-4	-5	30%
Net income	644	340	-47%
Number of theoretical shares in million	434,8	434,8	
EPS in €	1,48	0,78	-47%
EPS pre in €	1,43	1,32	-8%

Totals may not add up due to rounding

Healthcare

P&L Healthcare	Q3 2017	Q3 2018	% YoY
Net sales	1.498	1.596	7%
Cost of sales	-317	-364	15%
thereof: intangibles amortization	-1	-1	n.m.
Gross profit	1.180	1.233	4%
Marketing and selling expenses	-583	-571	-2%
thereof: intangibles amortization	-139	-134	-3%
Administration	-64	-72	13%
Impairment losses and reversals	-	-3	n.m.
Other operating income/expenses	421	15	-96%
Research and development	-416	-409	-2%
EBIT	539	191	-65%
Depreciation and amortization	168	181	8%
EBITDA	707	372	-47%
Adjustments in EBITDA	-310	9	n.m.
EBITDA pre	397	381	-4%

Totals may not add up due to rounding

Life Science

P&L Life Science	Q3 2017	Q3 2018	% YoY
Net sales	1.408	1.527	8%
Cost of sales	-632	-656	4%
thereof: intangibles amortization	-14	-15	2%
Gross profit	776	871	12%
Marketing and selling expenses	-412	-443	8%
thereof: intangibles amortization	-108	-105	-3%
Administration	-59	-69	17%
Impairment losses and reversals	-	0	n.m.
Other operating income/expenses	-24	-23	-3%
Research and development	-60	-59	-3%
EBIT	220	277	26%
Depreciation and amortization	181	173	-5%
EBITDA	401	449	12%
Adjustments in EBITDA	24	11	-55%
EBITDA pre	426	460	8%

Totals may not add up due to rounding

Performance Materials

P&L Performance Materials	Q3 2017	Q3 2018	% YoY
Net sales	611	626	2%
Cost of sales	-287	-322	12%
thereof: intangibles amortization	-28	-28	2%
Gross profit	323	304	-6%
Marketing and selling expenses	-56	-62	11%
thereof: intangibles amortization	-4	-3	-26%
Administration	-18	-22	22%
Impairment losses and reversals	-	0	n.m.
Other operating income/expenses	-3	-12	>100%
Research and development	-57	-65	15%
EBIT	191	142	-25%
Depreciation and amortization	56	60	7%
EBITDA	246	202	-18%
Adjustments in EBITDA	2	1	-54%
EBITDA pre	249	203	-18%

Totals may not add up due to rounding