

Q2 2016 Financial Summary for Investors and Analysts

Strong quarter and guidance upgrade

- Healthcare – strong profitable growth, cladribine tablets filing and positive Merkel Cell Carcinoma data
- Life Science – strong growth momentum continues while integration is on track
- Performance Materials – healthy profitability despite ongoing industry destocking
- Acquisition-driven sales growth of 18.2%; EBITDA pre up 28.8% to €1,158 m
- EBITDA pre margin increases to 30.4% driven by profitable growth in Healthcare and Life Science as well as Sigma synergies
- Guidance upgrade: Sales €14.9-15.1 bn, EBITDA pre €4,250-4,400 m, EPS pre €5.85-6.10

Overview Financials

Q2 2016 Overview

- EBITDA pre & margin increase driven by Sigma, organic performance and end of Rebif commission expenses
- EPS pre up due to EBITDA pre increase, but higher LTIP* charges burden financial result
- Healthy operating cash flow due to strong business performance amid higher tax payments
- Net financial debt reflects operating cash flow and dividend payments
- Working capital shows increase in business activity – further room for improvement

Q2 2016 Balance Sheet

- Total assets decline by 2.6%, equity ratio grows to 34.7%
- Other liabilities decrease by €1.2 bn mainly due to dividend payment to E. Merck KG, Darmstadt, Germany, and lower deferred taxes
- Further decline in interest rates increases pension provisions
- Stable net equity: Profit after tax offset by dividends, FX translation and actuarial losses

Q2 2016 Cash flow Statement

- D&A increases due to Sigma and Xalkori impairment
- Higher tax payments burden changes in other assets/liabilities
- Investing cash flow LY contained cash-in from Sigma hedging
- Capex higher due to HQ & Sigma; 2016 peak expected in Q4
- Financing cash flow reflects repayment of Millipore bond and commercial paper

*Long Term Incentive Plan

Q2 2016 Business Overview

Healthcare

- **Strong organic growth, EBITDA pre and profitability**
- Net sales deviation YoY: organic +7.3%, FX -9.0%, portfolio -1.0%
- Rebif organically stable; ramp-up of competition in Europe partially offset by tender in Russia; in U.S. pricing offsets declining volumes
- Solid organic growth of Erbitux across all regions, especially strong volume growth in China, but also low comparables
- Fertility shows strong growth across portfolio especially in China; Gonal-f benefiting from competitive situation in U.S. and low base
- Marketing & selling reflects end of commission expenses for Rebif (U.S.) partially offset by reinvestments in sales force & launch preparations
- R&D spend increases as pipeline development progresses
- Higher EBITDA pre due to strong organic growth, end of Rebif commissions and ~€30 m disposal gain from the Group Ventures minority

Life Science

- **Another strong quarter while integration on track**
- Net sales deviation YoY: organic +8.1%, FX -2.8%, portfolio +79.7%
- Double-digit growth of Process Solutions driven by increasing production of large molecules across global and regional accounts
- Applied Solutions shows moderate organic growth, driven by bio-monitoring products for pharma & demand for analytical testing
- Research Solutions benefits from strong demand in Emerging Markets, and for chemical analytics and molecular biology products
- Absolute costs higher due to Sigma, but improve in relation to sales
- Profitability reflects Sigma, business mix and synergies

Performance Materials

- **Strong profitability amid ongoing destocking**
- Net sales deviation YoY: organic -4.7 %, FX -2.0%, portfolio +3.1%
- LC declining as ongoing supply chain destocking & volume declines of mature TN-TFT outweighs volume increase in PS-VA and IPS
- Destocking is expected to continue into H2 2016
- OLED continues to grow on industry capacity expansion & investments
- Integrated Circuit Materials (ICM) shows above market growth mainly driven by dielectric and lithography materials for chip production
- Strong growth of Pigments & Functionals due to strong Xirallic for automotive coatings and cosmetic functionals, but on low comparables
- High profitability reflects leading market position, positive product mix within ICM and Pigments as well as active cost management

Guidance for 2016

Group:

- EBITDA pre: ~ €4,250 – 4,400 m
- Net sales: ~ €14.9 – 15.1 bn
- EPS pre: ~ €5.85 – 6.10

Outlook by business sector:

Healthcare

- Net sales: Slight organic growth, organic Rebif decline, other franchises growing
- EBITDA pre: ~ €1,950 – 2,050m

Life Science

- Net sales: Mid to high single-digit organic growth, main driver Process Solutions, high double-digit contribution from Sigma
- EBITDA pre: ~ €1,620 – 1,670m

Performance Materials

- Net sales: Moderate organic decline, improving macro signals amid destocking in liquid crystals, growing demand in all businesses
- EBITDA pre: ~ €1,100 – 1,150m

Additional financial guidance

- | | |
|---|--|
| ▪ Corporate & Other EBITDA pre | ~ -€370 – -400 m |
| ▪ Interest result | ~ -€270 – -300 m |
| ▪ Intangibles amortization from Sigma PPA | ~ €250 – 300 m p.a. |
| ▪ Underlying tax rate | ~ 23% to 25% |
| ▪ Capex on PPE | ~ €750 – 800 m |
| ▪ Hedging/USD assumption | 2016 & 2017 hedge ratio ~40-45%
at EUR/USD ~ 1.10 to 1.15 |
| ▪ 2016 Ø EUR/USD assumption | ~ 1.07 – 1.12 |

Merck KGaA

Darmstadt, Germany

Group Q2

€ m	Group			Healthcare			Life Science			Performance Materials			Corporate/Others		
	Q2 2015	Q2 2016	% YoY	Q2 2015	Q2 2016	% YoY	Q2 2015	Q2 2016	% YoY	Q2 2015	Q2 2016	% YoY	Q2 2015	Q2 2016	% YoY
Net sales	3.219	3.805	18%	1.803	1.754	-3%	773	1.430	85%	643	621	-4%			
% organic			5%			7%			8%			-5%			
% FX			-6%			-9%			-3%			-2%			
% portfolio			19%			-1%			80%			3%			
EBIT	501	550	10%	267	298	11%	87	166	91%	238	193	-19%	-90	-105	17%
Depreciation and amortization	343	519	51%	194	261	35%	83	178	>100%	61	74	22%	6	6	4%
EBITDA	845	1.069	27%	461	558	21%	170	343	>100%	299	267	-11%	-84	-99	18%
Exceptionals in EBITDA	55	89	63%	19	-1	n.m.	30	74	>100%	-3	7	n.m.	9	10	16%
EBITDA pre	899	1.158	29%	480	557	16%	200	417	>100%	295	273	-7%	-76	-89	18%
Net financial debt	12.654 *	12.510	-1%												

* as per 31 December

Totals may not add up due to rounding

Group H1

€ m	Group			Healthcare			Life Science			Performance Materials			Corporate/Others		
	H1 2015	H1 2016	% YoY	H1 2015	H1 2016	% YoY	H1 2015	H1 2016	% YoY	H1 2015	H1 2016	% YoY	H1 2015	H1 2016	% YoY
Sales	6.261	7.470	19%	3.490	3.400	-3%	1.511	2.826	87%	1.260	1.243	-1%			
% organic			5%			6%			9%			-4%			
% FX			-5%			-8%			-2%			-1%			
% portfolio			19%			-1%			81%			3%			
EBIT	981	1.399	43%	536	939	75%	170	271	60%	452	399	-12%	-176	-210	19%
Depreciation and amortization	669	952	42%	375	448	20%	164	356	>100%	120	135	13%	10	12	19%
EBITDA	1.650	2.351	42%	910	1.387	52%	334	627	88%	572	534	-7%	-165	-197	19%
Exceptionals in EBITDA	102	-109	n.m.	31	-322	n.m.	50	183	>100%	0	13	>100%	21	17	-17%
EBITDA pre	1.752	2.242	28%	941	1.065	13%	384	810	>100%	572	547	-4%	-144	-180	25%

Totals may not add up due to rounding

Group

P&L Group	Q2 2015	Q2 2016	% YoY
Net sales	3.219	3.805	18%
Cost of sales	-1.015	-1.315	30%
thereof: intangibles amortization	-42	-45	7%
Gross profit	2.204	2.489	13%
Marketing and selling expenses	-1.027	-1.114	8%
thereof: intangibles amortization	-189	-256	35%
Administration	-174	-209	20%
Other operating income/expenses	-46	-119	>100%
Research and development	-456	-497	9%
EBIT	501	550	10%
Depreciation and amortization	343	519	51%
EBITDA	845	1.069	27%
Exceptionals in EBITDA	55	89	63%
EBITDA pre	899	1.158	29%
Financial result	-41	-121	>100%
Profit before tax	461	429	-7%
Income tax	-115	-115	0%
Income tax rate	25%	27%	
Profit after tax discontinued operations	0	0	n.m.
Profit after tax	346	314	-9%
Non-controlling interests	-2	-2	2%
Net income	343	312	-9%
Number of theoretical shares in million	434,8	434,8	
EPS in €	0,79	0,72	-9%
EPS pre in €	1,30	1,55	19%

Totals may not add up due to rounding

Healthcare

P&L Healthcare	Q2 2015	Q2 2016	% YoY
Net sales	1.803	1.754	-3%
Cost of sales	-403	-350	-13%
thereof: intangibles amortization	0	0	n.m.
Gross profit	1.401	1.405	0%
Marketing and selling expenses	-730	-643	-12%
thereof: intangibles amortization	-145	-143	-1%
Administration	-69	-66	-4%
Other operating income/expenses	23	-19	n.m.
Research and development	-358	-378	6%
EBIT	267	298	11%
Depreciation and amortization	194	261	35%
EBITDA	461	558	21%
Exceptionals in EBITDA	19	-1	n.m.
EBITDA pre	480	557	16%

Totals may not add up due to rounding

Life Science

P&L Life Science	Q2 2015	Q2 2016	% YoY
Net sales	773	1.430	85%
Cost of sales	-326	-679	>100%
thereof: intangibles amortization	-12	-15	20%
Gross profit	447	751	68%
Marketing and selling expenses	-244	-413	69%
thereof: intangibles amortization	-41	-108	>100%
Administration	-28	-58	>100%
Other operating income/expenses	-40	-50	25%
Research and development	-49	-65	33%
EBIT	87	166	91%
Depreciation and amortization	83	178	>100%
EBITDA	170	343	>100%
Exceptionals in EBITDA	30	74	>100%
EBITDA pre	200	417	>100%

Totals may not add up due to rounding

Performance Materials

P&L Performance Materials	Q2 2015	Q2 2016	% YoY
Net sales	643	621	-4%
Cost of sales	-287	-287	0%
thereof: intangibles amortization	-29	-29	1%
Gross profit	356	334	-6%
Marketing and selling expenses	-53	-59	10%
thereof: intangibles amortization	-3	-5	33%
Administration	-14	-14	2%
Other operating income/expenses	-3	-15	>100%
Research and development	-49	-53	9%
EBIT	238	193	-19%
Depreciation and amortization	61	74	22%
EBITDA	299	267	-11%
Exceptionals in EBITDA	-3	7	n.m.
EBITDA pre	295	273	-7%

Totals may not add up due to rounding