

Q2 2022 Financial Summary for Investors and Analysts

Continued strength amid a challenging macro environment

- **Life Science:** Life Science delivers 10% organic growth & another record quarter, driven by core business performance in Process Solutions (org. growth >20% excl. declining COVID-19); largest growth contribution to group (org. +€232 m); all business units growing
- **Healthcare:** Recent launches up +41% organically; moderate sector growth against elevated comps due to U.S. Erbitux supply (+€26 m org. growth contribution to group)
- **Electronics:** +7% organic growth mainly driven by ongoing strength in Semiconductor Solutions (+20% org.); contribution of +€63 m to group organic growth
- **Q2 organic sales:** growth of +6.6%
- **Q2 organic EBITDA pre:** growth of +3.2%
- **Guidance:**
Net sales: €21.9 bn to €23.0 bn
EBITDA pre: €6.75 bn to €7.25 bn
EPS pre: €9.85 to €10.75
- Net financial debt to EBITDA pre 1.6 on June 30, 2022

Overview Financials

Q2 2022 Overview

- Sales up +14%, driven by FX tailwinds on top of strong organic performance
- Life Science drives organic EBITDA pre growth, boosted by FX tailwinds
- EPS pre growth driven by EBIT pre contribution & better financial result
- OCF* decline despite higher EBITDA pre largely due to working capital
- Working capital increase driven by receivables from sales phasing, inventories from inflationary effects, higher safety stocks, & goods in transit
- Net financial debt increases, mainly driven by Exelead acquisition and temporary investment of excess cash

*Operating cash flow

Q2 2022 Cash Flow Statement

- +17% profit after tax; growth driven by strong business performance in Life Science, further boosted by favorable FX and improved financial result
- Delta in changes in provisions from lower LTIP¹ and a litigation provision in 2021
- Delta in other assets & liabilities driven primarily by phasing of tax payouts
- Delta in working capital driven primarily by receivables and inventories
- Higher investing cash flow reflects temporary investment of excess cash of -€500 m
- Financing cash flow impacted primarily by new bond issuance of ~ €1,000 m in June 2022

¹Long Term Incentive Plan

Q2 2022 Balance Sheet

- Lower cash level largely driven by temporary excess cash investment
- Receivables & inventories driven by strong sales, inflationary effects, higher safety stocks and FX
- Higher intangible assets driven by FX effects and Exelead acquisition
- Reduction in provisions for employee benefits driven by actuarial gains from higher interest rates
- Equity ratio up further to 53% (vs. 47% in 2021), driven by retained earnings, actuarial gains and translational FX effects

Q2 2022 Business Overview

Life Science

- **Core business drives 9th consecutive quarter of sequential growth and another record quarter**
- Net sales deviation YoY: organic +10.4%, FX +7.4%, portfolio +1.1%
- EBITDA pre deviation YoY: organic +14.5%, FX +6.2%, portfolio +0.6%
- Process Solutions: +12% org. growth, driven by strong core business performance despite challenges from lockdowns in China; COVID-19 business declining as anticipated (org. growth >20% excl. declining COVID-19)
- Science & Lab Solutions: growing +6% organically across the portfolio, supported by positive pricing amid inflationary pressures
- Life Science Services: scale-up mode with +25% org. growth and strong performance across all businesses
- M&S* about stable in % of sales despite steep increases in logistics costs; excluding logistics, M&S growing significantly below sales
- Higher R&D in absolute terms with continued investments in high growth & emerging segments, e.g. novel modalities
- EBITDA pre growing +14% org., still exceeding sales growth despite significant investment in future growth and inflationary environment; driven by operating leverage and favorable product mix in core business

* Marketing and selling expenses

Healthcare

- **Bavencio® and Mavenclad® growth more than offsets decline in established portfolio against elevated comps**
- Net sales deviation YoY: organic +1.4%, FX +6.2%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -9.5%, FX +13.4%, portfolio 0.0%
- Oncology up +8% org., driven by continuous strong uptake of Bavencio® (+61% org.); Erbitux® declining (-9% org.) against elevated comps including ~€50 m from temporary supply agreement with Eli Lilly
- Mavenclad® ramp-up (+27% org.) amid a depressed U.S. dynamic market about offsetting higher Rebif® decline (-19% org.)
- Established portfolio down -5% org. with solid CM&E performance (+3% org.) and Fertility down -3% org. (lockdowns in China); excl. 2021 Eli Lilly supply, established portfolio would have declined -1.4% org.

- M&S* declining in % of sales; absolute increase mainly driven by increasing activities, primarily in the U.S.
- Lower absolute R&D level mainly driven by termination of Bintrafusup studies in Q3 2021
- Organic EBITDA pre decline primarily driven by missing profit from temporary supply agreement with Eli Lilly

*Marketing and selling expenses

Electronics

- **Strong Semi performance amid inflationary environment**
- Net sales deviation YoY: organic +7.4%, FX +8.9%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -1.9%, FX +15.5%, portfolio 0.0%
- Semiconductor Solutions: +20% org. growth fueled by high teens growth in Materials, further supported by DS&S project business
- Display Solutions: down -16% organically, driven by continued decline in Liquid Crystals (amplified by lower utilization at Chinese customers)
- Surface Solutions: +2% org. growth driven by strong cosmetics business, more than offsetting softer coatings
- M&S* as a percentage of sales increasing by ~0.4pp driven primarily by higher logistics cost, while M&S w/o logistics is growing in line with sales
- R&D increase in line with sales growth, fully driven by investments in future growth of Semiconductor Materials
- Organic EBITDA pre declining amid inflationary pressures (raw materials, energy & logistics) and capacity ramp-up for future growth; own pricing keeps Semi margins intact

*Marketing and selling expenses

2022 guidance

Group:

- Net sales:
Organic: +6% to +9% YoY
FX: 5% to 8% YoY
~€21.90 bn to €23.00 bn
- EBITDA pre:
Organic: +5% to +9% YoY
FX: 6% to 10% YoY
~€6.75 bn to €7.25 bn
- EPS pre:
~ €9.85 to €10.75

2022 business sector guidance¹:

Life Science

- Net sales:
 - Organic: +7% to +10%; FX: 5% to 8% YoY
 - ~€10,150 m to €10,750 m
 - Strong core business, PS main growth driver
 - COVID-19 sales of up to ~€450 m in PS and up to ~€250 m in LSS
- EBITDA pre:
 - Organic: +7% to +10% YoY; FX: 4% to 7% YoY
 - ~€3,700 m to €3,900 m

Healthcare

- Net sales:
 - Organic: +4% to +7%; FX: 4% to 7%
 - ~€7,700 m to €8,050 m
 - Mainly driven by Mavenclad[®] and Bavencio[®]
 - CM&E growing in the mid-single digits
- EBITDA pre:
 - Organic: +3% to +5% YoY; FX: 12% to 15% YoY
 - ~€2,450 m to €2,550 m

Electronics

- Net sales:
 - Organic: +5% to +8%; FX: 6% to 9%
 - ~€ 4,050 m to € 4,250 m
 - Underlying demand in key electronic end markets remains strong
 - Strong contribution by Semiconductor Materials and Delivery Systems & Services
- EBITDA pre:
 - Organic: 0% to +3% YoY; FX: 12% to 15% YoY
 - ~€1,250 m to €1,300 m

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

Additional financial guidance for 2022

- | | |
|--------------------------------|--|
| ▪ Corporate & Other EBITDA pre | ~ -€560 m to -€610 m |
| ▪ Interest result | ~ -€140 m to -€180 m |
| ▪ Effective tax rate | ~ 22% to 24% |
| ▪ Capex on PPE ¹ | ~ €1.6 bn to €1.7 bn |
| ▪ Hedging / USD assumption | FY 2022 hedge ratio ~50%
at EUR/USD ~1.16 |
| ▪ 2022 Ø EUR/USD assumption | ~ 1.04 to 1.08 |

¹Based on gross additions to PPE on balance sheet in fiscal year, to reflect planned Capex expansion more accurately

Merck KGaA

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Group Q2 2022

€ m	Group			Life Science			Healthcare			Electronics			Corporate/Others		
	Q2 2021	Q2 2022	% YoY	Q2 2021	Q2 2022	%YoY	Q2 2021	Q2 2022	%YoY	Q2 2021	Q2 2022	% YoY	Q2 2021	Q2 2022	%YoY
Net sales	4,870.2	5,568.4	14.3%	2,225.5	2,647.8	19.0%	1,787.7	1,924.2	7.6%	856.9	996.4	16.3%			
% organic			6.6%			10.4%			1.4%			7.4%			
% FX			7.2%			7.4%			6.2%			8.9%			
% portfolio			0.5%			1.1%			0.0%			0.0%			
EBIT	1,049.3	1,177.0	12.2%	643.8	765.4	18.9%	500.7	438.7	-12.4%	118.2	148.5	25.6%	-213.5	-175.5	-17.8%
Depreciation and amortization	422.3	532.3	26.0%	191.3	209.9	9.7%	71.6	164.0	>100%	133.8	133.6	-0.2%	25.6	24.9	-2.6%
EBITDA	1,471.6	1,709.4	16.2%	835.2	975.3	16.8%	572.4	602.7	5.3%	252.0	282.0	11.9%	-187.9	-150.6	-19.9%
Adjustments in EBITDA	104.6	72.6	-30.5%	-6.1	30.4	n.m.	8.6	0.9	-89.2%	5.9	11.1	88.7%	96.1	30.2	-68.6%
EBITDA pre	1,576.2	1,782.0	13.1%	829.1	1,005.7	21.3%	581.0	603.6	3.9%	257.9	293.1	13.7%	-91.8	-120.3	31.1%
% organic			3.2%			14.5%			-9.5%			-1.9%			10.0%
% FX			9.5%			6.2%			13.4%			15.5%			21.2%
% portfolio			0.3%			0.6%			0.0%			0.0%			0.0%
	31 st Dec, 2021	30 th Jun, 2022													
Net financial debt	8,753.0	10,165.2	16.1%												
ND/EBITDA pre	1.4	1.6													

Group Net Sales details Q2 2022

€ m	Q2 2021	Q2 2022	% YoY	% YoY org.	% YoY FX	% YoY PF
Group	4,870.2	5,568.4	14.3%	6.6%	7.2%	0.5%
Life Science	2,225.5	2,647.8	19.0%	10.4%	7.4%	1.1%
Process Solutions	961.5	1,149.5	19.5%	12.4%	7.2%	0.0%
Life Sciences Services	177.7	265.7	49.5%	24.6%	10.8%	14.2%
Science & Lab Solutions	1,086.3	1,232.6	13.5%	6.4%	7.0%	0.0%
Healthcare	1,787.7	1,924.2	7.6%	1.4%	6.2%	0.0%
Rebif	247.4	217.3	-12.2%	-18.9%	6.7%	0.0%
Mavenclad	157.4	212.1	34.8%	26.6%	8.2%	0.0%
Erbix	273.3	257.5	-5.8%	-9.0%	3.2%	0.0%
Bavencio	86.8	146.1	68.3%	60.7%	7.6%	0.0%
Gonal-F	200.0	198.5	-0.8%	-5.0%	4.2%	0.0%
Glucophage	213.0	227.5	6.8%	-2.1%	8.9%	0.0%
All other products	609.9	665.2	9.1%	2.8%	6.3%	0.0%
Electronics	856.9	996.4	16.3%	7.4%	8.9%	0.0%
Semiconductor Solutions	500.4	653.0	30.5%	20.3%	10.2%	0.0%
Display Solutions	252.9	232.5	-8.1%	-15.9%	7.9%	0.0%
Surface Solutions	103.6	110.9	7.0%	2.0%	5.0%	0.0%

*acronyms: org. = organic; PF = portfolio

Group

P&L Group	Q2 2021	Q2 2022	% YoY
Net sales	4,870.2	5,568.4	14.3%
Cost of sales	-1,813.0	-2,108.6	16.3%
thereof: intangibles amortization	-49.0	-53.2	8.6%
Gross profit	3,057.2	3,459.8	13.2%
Marketing and selling expenses	-1,035.4	-1,193.6	15.3%
thereof: intangibles amortization	-145.7	-153.7	5.5%
Administration	-301.1	-330.5	9.8%
Impairment losses / reversals (IFRS9)	-0.1	-8.7	>100%
Other operating income/expenses	-80.2	-150.4	87.6%
Research and development	-591.1	-599.6	1.4%
EBIT	1,049.3	1,177.0	12.2%
Depreciation and amortization	422.3	532.3	26.0%
EBITDA	1,471.6	1,709.4	16.2%
Adjustments in EBITDA	104.6	72.6	-30.5%
EBITDA pre	1,576.2	1,782.0	13.1%
Financial result	-94.8	-55.1	-41.9%
Profit before tax	954.6	1,122.0	17.5%
Income tax	-207.8	-251.7	21.1%
Income tax rate	21.8%	22.4%	
Profit after tax	746.8	870.2	16.5%
Non-controlling interests	-1.6	-3.1	95.2%
Net income	745.2	867.1	16.4%
Number of theoretical shares in million	434.8	434.8	
EPS in €	1.71	1.99	16.4%
EPS pre in €	2.24	2.64	17.9%

Totals may not add up due to rounding

Life Science

P&L Life Science	Q2 2021	Q2 2022	% YoY
Net sales	2,225.5	2,647.8	19.0%
Cost of sales	-887.4	-1,052.3	18.6%
thereof: intangibles amortization	-13.9	-16.7	20.0%
Gross profit	1,338.1	1,595.5	19.2%
Marketing and selling expenses	-505.3	-608.8	20.5%
thereof: intangibles amortization	-96.1	-103.6	7.7%
Administration	-92.2	-102.8	11.4%
Impairment losses / reversals (IFRS9)	-1.3	-7.6	>100%
Other operating income/expenses	-8.4	-12.3	46.1%
Research and development	-87.0	-98.5	13.3%
EBIT	643.8	765.4	18.9%
Depreciation and amortization	191.3	209.9	9.7%
EBITDA	835.2	975.3	16.8%
Adjustments in EBITDA	-6.1	30.4	n.m.
EBITDA pre	829.1	1,005.7	21.3%

Totals may not add up due to rounding

Healthcare

P&L Healthcare	Q2 2021	Q2 2022	% YoY
Net sales	1,787.7	1,924.2	7.6%
Cost of sales	-420.2	-483.5	15.1%
thereof: intangibles amortization	-1.1	-1.2	2.7%
Gross profit	1,367.6	1,440.7	5.3%
Marketing and selling expenses	-390.7	-416.9	6.7%
thereof: intangibles amortization	-4.3	-0.2	-96.3%
Administration	-77.7	-81.1	4.3%
Impairment losses / reversals (IFRS9)	2.6	-0.5	n.m.
Other operating income/expenses	13.9	-102.9	n.m.
Research and development	-414.8	-400.7	-3.4%
EBIT	500.7	438.7	-12.4%
Depreciation and amortization	71.6	164.0	>100%
EBITDA	572.4	602.7	5.3%
Adjustments in EBITDA	8.6	0.9	-89.2%
EBITDA pre	581.0	603.6	3.9%

Totals may not add up due to rounding

Electronics

P&L Electronics	Q2 2021	Q2 2022	% YoY
Net sales	856.9	996.4	16.3%
Cost of sales	-505.5	-570.8	12.9%
thereof: intangibles amortization	-34.0	-35.4	4.2%
Gross profit	351.4	425.6	21.1%
Marketing and selling expenses	-137.1	-163.1	19.0%
thereof: intangibles amortization	-45.3	-50.0	10.4%
Administration	-29.6	-32.9	11.2%
Impairment losses / reversals (IFRS9)	-0.4	-0.2	-44.8%
Other operating income/expenses	0.6	-8.1	n.m.
Research and development	-66.7	-72.8	9.2%
EBIT	118.2	148.5	25.6%
Depreciation and amortization	133.8	133.6	-0.2%
EBITDA	252.0	282.0	11.9%
Adjustments in EBITDA	5.9	11.1	88.7%
EBITDA pre	257.9	293.1	13.7%

Totals may not add up due to rounding

Consensus deviation Q2 2022

	Actual	Consensus (mean)	Difference to estimate	Consensus (median)	Difference to estimate
	[€m]	25.07.2022		25.07.2022	
	Q2 2022 A	Q2 2022 E	%	Q2 2022 E	%
Group					
Sales	5,568.4	5,423.2	2.7%	5,431.1	2.5%
EBITDA pre	1,782.0	1,705.6	4.5%	1,711.1	4.1%
EBITDA pre-margin (%)	32.0	31.5	0.6pp	31.5	0.5pp
EPS pre (€)	2.64	2.52	4.7%	2.51	5.0%
Life Science					
Sales	2,647.8	2,545.0	4.0%	2,536.6	4.4%
EBITDA pre	1,005.7	942.9	6.7%	937.5	7.3%
EBITDA pre-margin (%)	38.0	37.0	0.9pp	37.0	1.0pp
Healthcare					
Sales	1,924.2	1,917.3	0.4%	1,916.5	0.4%
Rebif	217.3	225.0	-3.4%	227.2	-4.4%
Mavenclad	212.1	212.9	-0.4%	210.8	0.6%
Erbix	257.5	252.4	2.0%	245.8	4.7%
Bavencio	146.1	136.2	7.3%	141.6	3.2%
Gonal-F	198.5	207.0	-4.1%	208.4	-4.8%
Glucophage	227.5	218.7	4.1%	219.4	3.7%
All other products	665.2	665.1	0.0%	663.3	0.3%
EBITDA pre	603.6	599.9	0.6%	604.3	-0.1%
EBITDA pre-margin (%)	31.4	31.3	0.1pp	31.0	0.3pp
Electronics					
Sales	996.4	971.8	2.5%	972.6	2.4%
Display Solutions	232.5	254.1	-8.5%	252.6	-8.0%
Surface Solutions	110.9	110.3	0.5%	110.6	0.3%
Semiconductor Solutions	653.0	604.1	8.1%	605.1	7.9%
EBITDA pre	293.1	296.2	-1.0%	293.7	-0.2%
EBITDA pre-margin (%)	29.4	30.5	-1.1pp	30.4	-1.0pp
Corporate/Other					
EBITDA pre	-120.3	-133.4	-9.8%	-132.1	-8.9%

Consensus for products and sub-divisions might not always be available and is dependent on quarterly submission