

Q3 2022 Financial Summary for Investors and Analysts

Strong growth despite challenging macro environment – FY guidance confirmed

- **Life Science:** +9% organic sales growth backed by mid-teens growth in core¹ business with Process Solutions as key driver (core business growth at +31%); largest growth contribution (org. +€196 m); all business units growing
- **Healthcare:** Recent launches up +26% org. driving strong growth of 9% and record quarterly sales. Established portfolio up mid-single digit supported by lower comps and channel dynamics; significant growth contribution (org. +€155 m)
- **Electronics:** Semi solutions growing in the mid teens, significantly above softer market, driving net Electronics growth contribution (org. +€4 m) despite significant decline in Display; Semi margins remain intact despite inflationary pressures
- **Q3 organic sales:** growth of +7.1%
- **Q3 organic EBITDA pre:** growth of +7.5%
- **Guidance:**
Net sales: €22.00 bn to €22.90 bn
EBITDA pre: €6.80 bn to €7.20 bn
EPS pre: €9.90 to €10.70
- Net financial debt to EBITDA pre 1.4 on Sept. 30, 2022

¹Core business is defined as total sales excluding COVID-19 related business

Overview Financials

Q3 2022 Overview

- Life Science and Healthcare drive EBITDA pre growth organically, further boosted by FX tailwinds
- EPS pre growth fueled by EBIT pre contribution & better financial result
- OCF* mainly powered by EBITDA pre performance, more than offsetting higher tax cash-out and higher NWC**
- Net financial debt increases, mainly due to temporary investment of excess cash, significant deleveraging vs. Q2 (~€1 bn)
- Working capital increase primarily driven by higher inventories from inflationary effects, higher safety stocks and FX effects

*Operating cash flow

**Net working capital

Q3 2022 Cash Flow Statement

- +21% profit after tax driven by strong performance in Life Science and Healthcare, further boosted by favorable FX and improved financial result
- Delta in changes in provisions from LY bintrafusp termination and lower LTIP¹ provision this year
- Delta in other assets & liabilities driven primarily by LY bintrafusp termination
- Delta in working capital driven primarily by inventories while receivables and payables balance out

- Higher capex on PPE driven by capacity expansion in key portfolios
- Financing cash flow reflects higher net repayment of LY financial liabilities

¹Long Term Incentive Plan

Q3 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 56% (vs. 47% in 2021), driven by retained earnings, actuarial gains and translational FX effects

Q3 2022 Business Overview

Life Science

- **Core business (+16% org.) as key growth driver fueled by strong underlying demand and ongoing capacity expansions**
- Net sales deviation YoY: organic +8.7%, FX +9.2%, portfolio +1.3%
- EBITDA pre deviation YoY: organic +10.8%, FX +6.9%, portfolio +0.9%
- Process Solutions: +11% org. growth, driven by excellent core business performance (+31%), esp. bioprocessing with lead times improving further; COVID-19 business declining as anticipated vs. tough comps
- Science & Lab Solutions: growing +8% org. across majority of the portfolio, supported by positive pricing and slight pull-forward effects
- Life Science Services: +3% org. growth amid tough comps and near-term volatility, while mid-term prospects remain fully intact
- M&S* about stable as a % of sales despite steep increases in logistics costs; excluding logistics, M&S growing significantly below sales
- Higher R&D in absolute terms mainly driven by FX effects with continued investments in high growth & emerging segments, e.g. novel modalities
- EBITDA pre growing +11% org., still exceeding sales growth despite significant investment in future growth and inflationary environment; supported by pricing, op. leverage and product mix in core business

*Marketing and selling expenses

Healthcare

- **Record sales quarter with +9% org. growth; strong contribution from recent launches and established portfolio**
- Net sales deviation YoY: organic +8.7%, FX +8.2%, portfolio 0.0%
- EBITDA pre deviation YoY: organic +11.0%, FX +20.4%, portfolio 0.0%
- Oncology up +25% org., driven by continued strong Bavencio® ramp-up (+51% org.) across regions as well as Erbitux® growth (+14% org.)
- Mavenclad® continued to grow +10% org., more than offsetting muted Rebif® decline -4% org. amid one-off channel dynamics and softer comps
- Established portfolio up +5% org. with solid CM&E performance of +6% org. and Fertility growth of +3% org.

- M&S* declining in % of sales; absolute increase mainly driven by increasing activities and rise in physical congress attendance
- Lower absolute R&D level largely driven by LY bintrafusp termination provision partly offset by unfavorable FX effects
- Strong organic EBITDA pre with profitable growth (+11%) supported by controlled cost development and one-off channel dynamics with low- to mid double-digit € million contribution

*Marketing and selling expenses

Electronics

- **Semi Solutions offsetting significant decline in Display amid softening markets**
- Net sales deviation YoY: organic +0.4%, FX +10.2%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -14.8%, FX +16.5%, portfolio 0.0%
- Semiconductor Solutions: +15% org. growth fueled by high teens growth in Materials; DS&S large project business now included in comps
- Display Solutions: down -32% organically, driven by high decline in Liquid Crystals (amplified by lower utilization across customers)
- Surface Solutions: +4% org. growth driven by strong coatings and cosmetics business, more than offsetting softer industrials
- M&S* slightly up as a % of sales, mainly due to higher logistics cost
- R&D increase in line with sales growth, largely driven by FX; investments continue to focus on future growth of Semi Materials
- Organic EBITDA pre decline primarily driven by Display Solutions amid inflationary pressures (raw materials, energy & logistics) and capacity ramp-up for future growth; Semi margins remain intact

*Marketing and selling expenses

2022 guidance

Group:

- | | |
|--|---|
| <ul style="list-style-type: none"> ▪ Net sales:
Organic: +6% to +8% YoY
FX: 5% to 8% YoY
~€22.00 bn to €22.90 bn | <ul style="list-style-type: none"> ▪ EBITDA pre:
Organic: +5% to +9% YoY
FX: 6% to 10% YoY
~€6.80 bn to €7.20 bn ▪ EPS pre:
~ €9.90 to €10.70 |
|--|---|

2022 business sector guidance¹:

Life Science

- Net sales:
 - Organic: +7% to +10%; FX: 5% to 8% YoY
 - ~€10,200 m to €10,700 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: +8% to +11% 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: +2% to +5%; FX: 6% to 9%
 - ~€ 4,000 m to € 4,150 m
 - Continuously strong Semiconductor Materials and DS&S amid first signs of market slowdown
 - Display Solutions decline driven by significantly lower customer fab utilization post COVID-19
- EBITDA pre:
 - Organic: -10% to -7% YoY; FX: 13% to 16% YoY
 - ~€1,190 m to €1,240 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 | ~ -€570 m to -€600 m |
| ▪ Interest result | ~ -€130 m to -€150 m |
| ▪ Effective tax rate | ~ 22% to 24% |
| ▪ Capex on PPE ¹ | ~ €1.6 bn |
| ▪ Hedging / USD assumption | FY 2022 hedge ratio ~50%
at EUR/USD ~1.16 |
| ▪ 2022 Ø EUR/USD assumption | ~ 1.02 to 1.06 |

¹Based on gross additions to PPE on balance sheet (excl. leasing) in fiscal year to reflect planned Capex expansion more accurately

Merck KGaA

Darmstadt, Germany

Group Q3 2022

€ m	Group			Life Science			Healthcare			Electronics			Corporate/Others		
	Q3 2021	Q3 2022	% YoY	Q3 2021	Q3 2022	%YoY	Q3 2021	Q3 2022	%YoY	Q3 2021	Q3 2022	% YoY	Q3 2021	Q3 2022	%YoY
Net sales	4,972.7	5,805.7	16.8%	2,248.8	2,680.7	19.2%	1,787.6	2,089.3	16.9%	936.3	1,035.7	10.6%			
% organic			7.1%			8.7%			8.7%			0.4%			
% FX			9.0%			9.2%			8.2%			10.2%			
% portfolio			0.6%			1.3%			0.0%			0.0%			
EBIT	1,047.4	1,234.2	17.8%	614.1	719.2	17.1%	453.2	606.0	33.7%	125.0	143.9	15.1%	-144.9	-234.9	62.1%
Depreciation and amortization	447.4	469.7	5.0%	191.9	216.6	12.9%	78.5	76.7	-2.3%	151.5	150.2	-0.9%	25.5	26.2	2.8%
EBITDA	1,494.8	1,703.9	14.0%	806.0	935.9	16.1%	531.7	682.6	28.4%	276.6	294.1	6.3%	-119.5	-208.7	74.7%
Adjustments in EBITDA	57.1	106.6	86.7%	17.6	40.5	>100%	9.1	28.2	>100%	20.1	7.5	-62.7%	10.2	30.3	>100%
EBITDA pre	1,551.9	1,810.5	16.7%	823.6	976.4	18.6%	540.8	710.9	31.4%	296.7	301.6	1.6%	-109.3	-178.4	63.3%
% organic			7.5%			10.8%			11.0%			-14.8%			-10.1%
% FX			8.8%			6.9%			20.4%			16.5%			73.4%
% portfolio			0.5%			0.9%			0.0%			0.0%			0.0%
	31 st Dec, 2021	30 th Sep, 2022													
Net financial debt	8,753.0	9,214.6	5.3%												
ND/EBITDA pre	1.4	1.4													

Group Net Sales details Q3 2022

€ m	Q3 2021	Q3 2022	% YoY	% YoY org.	% YoY FX	% YoY PF
Group	4,972.7	5,805.7	16.8%	7.1%	9.0%	0.6%
Life Science	2,248.8	2,680.7	19.2%	8.7%	9.2%	1.3%
Process Solutions	992.8	1190.3	19.9%	10.7%	9.2%	0.0%
Life Sciences Services	188.6	244.3	29.5%	3.1%	11.1%	15.3%
Science & Lab Solutions	1067.4	1246.1	16.7%	7.9%	8.8%	0.0%
Healthcare	1,787.6	2,089.3	16.9%	8.7%	8.2%	0.0%
Rebif	233.6	249.5	6.8%	-3.9%	10.8%	0.0%
Mavenclad	197.0	234.2	18.9%	9.8%	9.2%	0.0%
Erbitux	233.3	274.1	17.5%	13.5%	4.0%	0.0%
Bavencio	103.8	166.0	59.9%	51.0%	8.9%	0.0%
Gonal-F	190.7	221.2	16.0%	8.2%	7.8%	0.0%
Glucophage	209.0	236.5	13.2%	3.1%	10.1%	0.0%
All other products	620.1	707.7	14%	6.2%	7.9%	0.0%
Electronics	936.3	1,035.7	10.6%	0.4%	10.2%	0.0%
Semiconductor Solutions	573.2	729.5	27.3%	14.8%	12.5%	0.0%
Display Solutions	266.9	200.4	-24.9%	-32.0%	7.0%	0.0%
Surface Solutions	96.2	105.8	10.0%	4.2%	5.9%	0.0%

*acronyms: org. = organic; PF = portfolio

Group

P&L Group	Q3 2021	Q3 2022	% YoY
Net sales	4,972.7	5,805.7	16.8%
Cost of sales	-1,858.8	-2,147.5	15.5%
thereof: intangibles amortization	-50.9	-52.3	2.8%
Gross profit	3,113.9	3,658.2	17.5%
Marketing and selling expenses	-1,066.3	-1,223.5	14.7%
thereof: intangibles amortization	-144.7	-159.9	10.5%
Administration	-304.9	-327.9	7.5%
Impairment losses / reversals (IFRS9)	0.7	6.2	>100%
Other operating income/expenses	-29.5	-237.2	>100%
Research and development	-666.5	-641.7	-3.7%
EBIT	1,047.4	1,234.2	17.8%
Depreciation and amortization	447.4	469.7	5.0%
EBITDA	1,494.8	1,703.9	14.0%
Adjustments in EBITDA	57.1	106.6	86.7%
EBITDA pre	1,551.9	1,810.5	16.7%
Financial result	-54.2	-47.0	-13.2%
Profit before tax	993.2	1,187.2	19.5%
Income tax	-229.4	-261.2	13.8%
Income tax rate	23.1%	22.0%	
Profit after tax	763.8	926.0	21.2%
Non-controlling interests	-3.0	-2.8	-7.4%
Net income	760.8	923.2	21.3%
Number of theoretical shares in million	434.8	434.8	
EPS in €	1.75	2.12	21.1%
EPS pre in €	2.24	2.68	19.6%

Totals may not add up due to rounding

Life Science

P&L Life Science	Q3 2021	Q3 2022	% YoY
Net sales	2,248.8	2,680.7	19.2%
Cost of sales	-900.7	-1,070.5	18.9%
thereof: intangibles amortization	-14.3	-15.2	6.4%
Gross profit	1,348.1	1,610.2	19.4%
Marketing and selling expenses	-528.7	-633.9	19.9%
thereof: intangibles amortization	-93.1	-107.5	15.5%
Administration	-93.2	-112.0	20.2%
Impairment losses / reversals (IFRS9)	-0.1	1.7	n.m.
Other operating income/expenses	-23.9	-41.1	72.0%
Research and development	-88.2	-105.7	19.9%
EBIT	614.1	719.2	17.1%
Depreciation and amortization	191.9	216.6	12.9%
EBITDA	806.0	935.9	16.1%
Adjustments in EBITDA	17.6	40.5	>100%
EBITDA pre	823.6	976.4	18.6%

Totals may not add up due to rounding

Healthcare

P&L Healthcare	Q3 2021	Q3 2022	% YoY
Net sales	1,787.6	2,089.3	16.9%
Cost of sales	-427.5	-481.3	12.6%
thereof: intangibles amortization	-1.1	-1.2	3.3%
Gross profit	1,360.0	1,608.1	18.2%
Marketing and selling expenses	-386.3	-412.9	6.9%
thereof: intangibles amortization	-4.3	-0.1	-98.0%
Administration	-78.8	-83.5	6.1%
Impairment losses / reversals (IFRS9)	0.5	4.5	>100%
Other operating income/expenses	43.6	-78.7	n.m.
Research and development	-485.8	-431.4	-11.2%
EBIT	453.2	606.0	33.7%
Depreciation and amortization	78.5	76.7	-2.3%
EBITDA	531.7	682.6	28.4%
Adjustments in EBITDA	9.1	28.2	>100%
EBITDA pre	540.8	710.9	31.4%

Totals may not add up due to rounding

Electronics

P&L Electronics	Q3 2021	Q3 2022	% YoY
Net sales	936.3	1,035.7	10.6%
Cost of sales	-530.3	-591.0	11.4%
thereof: intangibles amortization	-35.5	-35.9	1.3%
Gross profit	406.0	444.7	9.5%
Marketing and selling expenses	-146.8	-172.6	17.6%
thereof: intangibles amortization	-47.4	-52.3	10.3%
Administration	-39.0	-33.1	-15.1%
Impairment losses / reversals (IFRS9)	0.2	-0.2	n.m.
Other operating income/expenses	-23.4	-16.5	-29.6%
Research and development	-71.9	-78.4	9.1%
EBIT	125.0	143.9	15.1%
Depreciation and amortization	151.5	150.2	-0.9%
EBITDA	276.6	294.1	6.3%
Adjustments in EBITDA	20.1	7.5	-62.7%
EBITDA pre	296.7	301.6	1.6%

Totals may not add up due to rounding

Consensus deviation Q3 2022

Group	Actual	Consensus (mean)	Difference to estimate	Consensus (median)	Difference to estimate
	[€m]	2.11.2022		2.11.2022	
	Q3 2022 A	Q3 2022 E	%	Q3 2022 E	%
Group					
Sales	5,805.7	5,715.2	1.6%	5,722.5	1.5%
EBITDA pre	1,810.5	1,784.0	1.5%	1,790.8	1.1%
EBITDA pre-margin (%)	31.2	31.2	0.0pp	31.1	0.0pp
EPS pre (€)	2.68	2.62	2.4%	2.63	2.0%
Life Science					
Sales	2,680.7	2,644.8	1.4%	2,638.6	1.6%
Process Solutions*	1,190.3	1,177.6	1.1%	1,171.7	1.6%
Life Science Services*	244.3	250.5	-2.5%	248.3	-1.6%
Science & Lab Solutions*	1,246.1	1,221.7	2.0%	1,218.7	2.2%
EBITDA pre	976.4	964.0	1.3%	960.9	1.6%
EBITDA pre-margin (%)	36.4	36.4	0.0pp	36.7	-0.3pp
Healthcare					
Sales	2,089.3	2,016.8	3.6%	2,015.7	3.7%
Rebif	249.5	220.9	12.9%	222.9	11.9%
Mavenclad	234.2	239.5	-2.2%	242.2	-3.3%
Erbix	274.1	259.7	5.5%	257.6	6.4%
Bavencio	166.0	163.9	1.3%	164.6	0.9%
Gonal-F	221.2	215.2	2.8%	215.4	2.7%
Glucophage	236.5	227.0	4.2%	225.7	4.8%
All other products	707.7	690.6	2.5%	687.3	3.0%
EBITDA pre	710.9	651.4	9.1%	651.0	9.2%
EBITDA pre-margin (%)	34.0	32.3	1.7pp	32.5	1.5pp
Electronics					
Sales	1,035.7	1,052.2	-1.6%	1,050.4	-1.4%
Display Solutions	200.4	251.5	-20.3%	249.1	-19.5%
Surface Solutions	105.8	109.5	-3.4%	109.7	-3.6%
Semiconductor Solutions	729.5	689.1	5.9%	691.0	5.6%
EBITDA pre	301.6	316.9	-4.8%	316.5	-4.7%
EBITDA pre-margin (%)	29.1	30.1	-1.0pp	30.6	-1.5pp
Corporate/Other					
EBITDA pre	-178.4	-148.2	20.4%	-145.7	22.5%

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