

Q1 2023 Financial Summary for Investors and Analysts

Global diversification drives performance

- **Life Science:** +1% org. growth despite severe COVID-19 headwinds; core business¹ at +7% org. sales growth, mainly driven by LSS and SLS; +3% org. growth in PS core, despite inventory dynamics
- **Healthcare:** Launch business up +28% org., driving +5% org. growth; largest growth contribution to Group; Fertility and CM&E deliver +7% and +3% org. sales growth, respectively
- **Electronics:** +2% org. sales growth in Semiconductor Solutions, significantly outperforming double-digit MSI decline; overall Electronics sales decline (-7% org.), driven by low post-COVID utilization at LC customers, against tough comps
- **Q1 organic sales:** +1%
- **Q1 organic EBITDA pre:** -2%
- **Guidance:**
Net sales: €21.2 bn to €22.7 bn
EBITDA pre: €6.1 bn to €6.7 bn
EPS pre: €8.80 to €9.90
- Net financial debt to EBITDA pre: 1.3 on March 31, 2023

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

Overview Financials

Q1 2023 Overview

- Sales up +2%, driven largely by performance of Healthcare, supported by slight FX tailwinds
- Electronics and fading COVID-19 business primary drivers of organic EBITDA pre decline
- EPS pre down slightly, about in line with EBITDA pre
- Operating cash flow slightly up due to lower increase in working capital, related mainly to trade receivables
- Working capital up mainly on higher inventories and receivables, partly offset by payables
- Net financial debt increases, mainly due to short-term investments

Q1 2023 Cash Flow Statement

- Decline in profit after tax driven by decreased EBIT, partially offset by lower effective tax rate
- Delta in other assets & liabilities driven mainly by a pension related shift between provisions and other assets
- Change in working capital mainly due to positive effect from receivables driven by sales volumes
- Slight increase of operating cash flow, mainly driven by net working capital
- Delta in investing cash flow driven by Capex on PPE
- Financing cash flow up mainly due to changes in financial liabilities

Q1 2023 Balance Sheet

- Lower cash level largely driven by temporary excess cash investment
- Inventories increase due to fluctuations during Q1 across the business
- Receivables up due to higher sales volume at end of quarter
- Decrease in intangible assets primarily driven by FX and amortization
- Slight increase in financial debt mainly due to use of bilateral lines of credit
- Equity ratio stable at 54% in line with 2022 (54%)

Q1 2023 Business Overview

Life Science

- **Robust org. growth of +7% in core business, with Process Solutions core at +3% org.; sharp decline in COVID-19 business as expected**
- Net sales deviation YoY: organic +0.6%, FX +0.9%, portfolio +0.3%
- EBITDA pre deviation YoY: organic -1.4%, FX -1.0%, portfolio -0.5%
- Process Solutions: +3% org. growth in core business partially offsets sharp COVID-19 business decline; PS sales down -4% org.
- Life Science Services: Strong performance in core business (+35% org.), pronounced COVID-19 headwinds lead to decline of -7% org.
- Science & Lab Solutions: +6% org. growth driven by strong core business (+7% org.) with slight headwinds from fading COVID-19
- M&S slightly up in absolute terms mainly due to FX and about stable in % of sales; higher R&D in % of sales due to ongoing investments in high growth & emerging segments, e.g. novel modalities
- Temporary uplift in gross profit supported by production cost efficiencies
- EBITDA pre down slightly by -1% org. on lower COVID-19 sales and strategic growth investments, e.g. increasing capacities in PS and CDMO

* Marketing and selling expenses

Healthcare

- **Profitable growth driven by sales momentum of Bavencio® and Mavenclad® in line with the mid-term guidance**
- Net sales deviation YoY: organic +5.3%, FX +0.8%, portfolio 0.0%
- EBITDA pre deviation YoY: organic +10.5%, FX +0.9%, portfolio 0.0%
- Oncology up +15% org., driven by continuous growth of Bavencio® (+31% org.) across all regions and supported by Erbitux® (+4% org.)
- N&I softer at -2% org.: Mavenclad® growing +23% org., largely offsetting Q1 Rebif® decline (-25% org.), amplified by channel dynamics
- Stable established portfolio, driven by resilient Fertility (+7% org.) and CM&E (+3% org.)
- M&S declining in % of sales based on constant productivity efforts
- R&D up slightly in absolute terms, down in relative terms, in line with mid-term ambition of low twenties
- Strong organic EBITDA pre with profitable growth (+10%), driven by strong sales momentum, product mix, lower R&D in relative terms, and lower comps on gross profit

* Marketing and selling expenses

Electronics

- **Semi Solutions grows +2% org., ahead of a depressed market; decline in Display Solutions weighs on sales and profits**
- Net sales deviation YoY: organic -7.1%, FX +0.8%, portfolio 0.3%
- EBITDA pre deviation YoY: organic -19.8%, FX +2.3%, portfolio -0.4%
- Semiconductor Solutions: +2% org. growth, supported by DS&S large project and equipment business
- Display Solutions: down -28% org. with continued decline in Liquid Crystals against tough comps, driven by lower customer utilization
- Surface Solutions: down -5% org. driven by softer industrials and coatings, partially offset by strong Cosmetics business
- M&S* costs about stable in absolute terms; R&D stable in absolute terms due to ongoing investments, higher in % of sales due to lower topline
- EBITDA pre margin down mainly due to LC price and volume decrease amid inflationary developments (raw materials, energy), and gradual tightening of conditions among the semi-materials customer base

* Marketing and selling expenses

2023 guidance

Group:

- Net sales:
Organic: +1% to +4% YoY
(ex-COVID: +4% to +7%)
FX of -5% to -2% YoY
~€21.2 – €22.7 bn
- EBITDA pre:
Organic: -5% to 0% YoY
FX: -5% to -2% YoY
~€6.1 – €6.7 bn
- EPS pre:
~€8.80 to €9.90

2023 business sector guidance¹:

Life Science

- Net sales:
 - Organic: -2% to +2%; ex-COVID: +3% to +8%
 - FX: -5% to -1% YoY
 - ~€9.70 bn to €10.45 bn
 - All BUs to contribute to core growth
 - Total COVID-19 sales of ~€250 m (vs. ~€800 m in 2022)
- EBITDA pre:
 - Organic: -8% to -4% YoY
 - FX: -6% to -2% YoY
 - ~€3.20 bn to €3.50 bn

Healthcare

- Net sales:
 - Organic: +5% to +9%; FX: -6% to -3%
 - ~€7.75 bn to €8.30 bn
 - Driven by recent launches
 - Complemented by CME & Fertility
- EBITDA pre:
 - Organic: +8% to +12% YoY
 - FX: -13% to -9% YoY
 - ~€2.35 bn to €2.55 bn

Electronics

- Net sales:
 - Organic: -2% to +3%; FX: -6% to -3%
 - ~€3.70 bn to €4.00 bn
 - Based on industry consensus of a Semi Market recovery in late H2 2023
 - Semi expected to continuously outperform MSI
 - Continued low utilization at Display customers
- EBITDA pre:
 - Organic: -12% to -3% YoY
 - FX: -8% to -5% YoY
 - ~€950 m to €1,080 m

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

Additional financial guidance for 2023

- | | |
|--------------------------------|---|
| ▪ Corporate & Other EBITDA pre | Lower costs driven by hedging |
| ▪ Interest result | ~ €-90 to -130 m |
| ▪ Effective tax rate | ~ 21% to 23% |
| ▪ Capex on PPE ¹ | ~ €1.8 to 2.0 bn |
| ▪ Hedging / USD assumption | FY 2022 overall hedge ratio ~50% |
| | @ EUR/USD ~1.07 |
| ▪ 2023 Ø EUR/USD assumption | ~ 1.07 to 1.11 |

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 Q1 2023

€ m	Group			Life Science			Healthcare			Electronics			Corporate/Others		
	Q1 2022	Q1 2023	% YoY	Q1 2022	Q1 2023	%YoY	Q1 2022	Q1 2023	%YoY	Q1 2022	Q1 2023	% YoY	Q1 2022	Q1 2023	%YoY
Net sales	5,197.8	5,293.0	1.8%	2,445.4	2,486.8	1.7%	1,795.0	1,905.5	6.2%	957.4	900.7	-5.9%			
% organic			0.8%			0.6%			5.3%			-7.1%			
% FX			0.8%			0.9%			0.8%			0.8%			
% portfolio			0.2%			0.3%			0.0%			0.3%			
EBIT	1,173.4	1,035.0	-11.8%	723.3	672.4	-7.0%	453.9	519.7	14.5%	145.2	85.7	-41.0%	-148.9	-242.8	63.0%
Depreciation and amortization	429.6	455.5	6.0%	198.3	211.7	6.7%	71.7	72.9	1.7%	133.6	142.6	6.7%	25.9	28.4	9.5%
EBITDA	1,603.0	1,490.5	-7.0%	921.6	884.0	-4.1%	525.6	592.6	12.8%	278.8	228.2	-18.1%	-123.0	-214.4	74.3%
Adjustments in EBITDA	25.8	96.5	>100%	5.5	16.5	>100%	3.5	-3.0	n.m.	10.6	9.1	-13.7%	6.2	73.9	>100%
EBITDA pre	1,628.8	1,587.0	-2.6%	927.1	900.6	-2.9%	529.1	589.6	11.4%	289.3	237.3	-18.0%	-116.8	-140.5	20.3%
% organic			-1.7%			-1.4%			10.5%			-19.8%			
% FX			-0.5%			-1.0%			0.9%			2.3%			
% portfolio			-0.4%			-0.5%			0.0%			-0.4%			
	31st Dec, 2022	31st Mar, 2023													
Net financial debt	8,327.6	8,991.9	8.0%												
ND/EBITDA pre	1.2	1.3													

Group Net Sales details Q1 2023

€ m	Q1 2022	Q1 2023	% YoY	% YoY org.	% YoY FX	% YoY PF
Group	5,197.8	5,293.0	1.8%	0.8%	0.8%	0.2%
Life Science	2,445.4	2,486.8	1.7%	0.6%	0.9%	0.3%
Process Solutions	1053.3	1022.2	-3.0%	-4.1%	1.1%	0.1%
Life Science Services	193.4	188.4	-2.6%	-7.2%	1.7%	2.9%
Science & Lab Solutions	1198.7	1276.3	6.5%	5.9%	0.5%	0.0%
Healthcare	1,795.0	1,905.5	6.2%	5.3%	0.8%	0.0%
Rebif	201.4	153.6	-23.8%	-25.4%	1.6%	0.0%
Mavenclad	189.2	236.8	25.2%	23.0%	2.2%	0.0%
Erbitux	242.2	249.7	3.1%	3.7%	-0.6%	0.0%
Bavencio	127.7	166.9	30.7%	30.6%	0.0%	0.0%
Gonal-F	200.0	197.1	-1.4%	-2.1%	0.7%	0.0%
Glucophage	217.9	218.1	0.1%	-0.1%	0.2%	0.0%
All other products	616.5	683.3	10.8%	9.7%	1.1%	0.0%
Electronics	957.4	900.7	-5.9%	-7.1%	0.8%	0.3%
Semiconductor Solutions	580.8	604.5	4.1%	2.0%	1.6%	0.5%
Display Solutions	261.6	187.0	-28.5%	-28.1%	-0.4%	0.0%
Surface Solutions	115.0	109.2	-5.1%	-4.9%	-0.2%	0.0%

*acronyms: org. = organic; PF = portfolio

Group

P&L Group	Q1 2022	Q1 2023	% YoY
Net sales	5,197.8	5,293.0	1.8%
Cost of sales	-1,987.0	-1,972.5	-0.7%
thereof: intangibles amortization	-50.3	-48.2	-4.3%
Gross profit	3,210.8	3,320.4	3.4%
Marketing and selling expenses	-1,087.2	-1,109.1	2.0%
thereof: intangibles amortization	-144.8	-151.3	4.5%
Administration	-287.2	-357.9	24.6%
Impairment losses / reversals (IFRS9)	-5.0	-2.2	-56.3%
Other operating income/expenses	-72.4	-219.0	>100%
Research and development	-585.5	-597.3	2.0%
EBIT	1,173.4	1,035.0	-11.8%
Depreciation and amortization	429.6	455.5	6.0%
EBITDA	1,603.0	1,490.5	-7.0%
Adjustments in EBITDA	25.8	96.5	>100%
EBITDA pre	1,628.8	1,587.0	-2.6%
Financial result	-34.3	-22.7	-33.9%
Profit before tax	1,139.1	1,012.3	-11.1%
Income tax	-255.4	-212.6	-16.8%
Income tax rate	22.4%	21.0%	
Profit after tax	883.7	799.7	-9.5%
Non-controlling interests	-3.3	-3.5	6.3%
Net income	880.4	796.2	-9.6%
Number of theoretical shares in million	434.8	434.8	
EPS in €	2.02	1.83	-9.4%
EPS pre in €	2.41	2.36	-2.1%

Totals may not add up due to rounding

Life Science

P&L Life Science	Q1 2022	Q1 2023	% YoY
Net sales	2,445.4	2,486.8	1.7%
Cost of sales	-965.1	-999.2	3.5%
thereof: intangibles amortization	-13.5	-13.3	-1.0%
Gross profit	1,480.4	1,487.5	0.5%
Marketing and selling expenses	-552.0	-567.5	2.8%
thereof: intangibles amortization	-95.6	-101.4	6.1%
Administration	-91.5	-105.0	14.8%
Impairment losses / reversals (IFRS9)	-1.7	-1.1	-37.1%
Other operating income/expenses	-23.8	-37.8	58.4%
Research and development	-88.1	-103.8	17.8%
EBIT	723.3	672.4	-7.0%
Depreciation and amortization	198.3	211.7	6.7%
EBITDA	921.6	884.0	-4.1%
Adjustments in EBITDA	5.5	16.5	>100%
EBITDA pre	927.1	900.6	-2.9%

Totals may not add up due to rounding

Healthcare

P&L Healthcare	Q1 2022	Q1 2023	% YoY
Net sales	1,795.0	1,905.5	6.2%
Cost of sales	-460.7	-446.6	-3.1%
thereof: intangibles amortization	-1.2	-1.2	-0.9%
Gross profit	1,334.2	1,458.9	9.3%
Marketing and selling expenses	-375.6	-380.6	1.3%
thereof: intangibles amortization	-0.2	-0.3	29.8%
Administration	-71.2	-75.5	6.0%
Impairment losses / reversals (IFRS9)	-3.7	-1.0	-73.5%
Other operating income/expenses	-32.4	-86.8	>100%
Research and development	-397.4	-395.3	-0.5%
EBIT	453.9	519.7	14.5%
Depreciation and amortization	71.7	72.9	1.7%
EBITDA	525.6	592.6	12.8%
Adjustments in EBITDA	3.5	-3.0	n.m.
EBITDA pre	529.1	589.6	11.4%

Totals may not add up due to rounding

Electronics

P&L Electronics	Q1 2022	Q1 2023	% YoY
Net sales	957.4	900.7	-5.9%
Cost of sales	-560.0	-525.8	-6.1%
thereof: intangibles amortization	-35.7	-33.6	-5.7%
Gross profit	397.4	374.9	-5.7%
Marketing and selling expenses	-155.7	-158.2	1.6%
thereof: intangibles amortization	-48.9	-49.5	1.2%
Administration	-28.2	-33.0	16.9%
Impairment losses / reversals (IFRS9)	0.2	-0.1	n.m.
Other operating income/expenses	6.8	-23.8	n.m.
Research and development	-75.3	-74.1	-1.6%
EBIT	145.2	85.7	-41.0%
Depreciation and amortization	133.6	142.6	6.7%
EBITDA	278.8	228.2	-18.1%
Adjustments in EBITDA	10.6	9.1	-13.7%
EBITDA pre	289.3	237.3	-18.0%

Totals may not add up due to rounding

Consensus deviation Q1 2023

	Actual	Consensus (mean)	Difference to estimate	Consensus (median)	Difference to estimate
	[€m]	3.05.2023		03.05.2023	
	Q1 2023A	Q1 2023 E	%	Q1 2023E	%
Group					
Sales	5,293.0	5,273.0	0.4%	5,291.4	0.0%
EBITDA pre	1,587.0	1,536.7	3.3%	1,536.3	3.3%
EBITDA pre-margin (%)	30.0	29.1	0.8pp	29.2	0.8pp
EPS pre (€)	2.36	2.26	4.7%	2.22	6.4%
Life Science					
Sales	2,486.8	2,451.7	1.4%	2,473.3	0.5%
Process Solutions	1,022.2	1,020.1	0.2%	1,029.6	-0.7%
Life Science Services	188.4	197.8	-4.8%	200.8	-6.2%
Science & Lab Solutions	1,276.3	1,233.8	3.4%	1,239.0	3.0%
EBITDA pre	900.6	833.8	8.0%	820.3	9.8%
EBITDA pre-margin (%)	36.2	34.0	2.2pp	33.8	2.4pp
Healthcare					
Sales	1,905.5	1,906.6	-0.1%	1,906.7	-0.1%
Rebif	153.6	183.4	-16.3%	179.9	-14.7%
Mavenclad	236.8	223.6	5.9%	223.9	5.8%
Erbitux	249.7	247.4	0.9%	245.3	1.8%
Bavencio	166.9	174.9	-4.6%	174.0	-4.1%
Gonal-F	197.1	204.7	-3.7%	206.0	-4.3%
Glucophage	218.1	223.7	-2.5%	223.3	-2.3%
All other products	683.3	648.9	5.3%	654.3	4.4%
EBITDA pre	589.6	566.8	4.0%	572.3	3.0%
EBITDA pre-margin (%)	30.9	29.6	1.3pp	30.1	0.8pp
Electronics					
Sales	900.7	918.2	-1.9%	923.6	-2.5%
Display Solutions	187.0	209.6	-10.8%	206.2	-9.3%
Surface Solutions	109.2	112.8	-3.2%	115.6	-5.6%
Semiconductor Solutions	604.5	595.7	1.5%	604.9	-0.1%
EBITDA pre	237.3	248.7	-4.6%	247.3	-4.0%
EBITDA pre-margin (%)	26.4	27.1	-0.7pp	27.1	-0.7pp
Corporate/Other					
EBITDA pre	-140.5	-116.9	20.2%	-117.1	20.0%