Q4/FY 2023 Financial Summary for Investors and Analysts

Proven resilience during transitional year

- Life Science: Core business¹ sales -2% org., despite continued customer destocking, China macro weakness and SAP roll-out; Sales down -8% org. as COVID-19 fades, reducing from ~€800 m to ~€250 m
- Healthcare: +9% org. sales growth contributing +€668 m to Group, well above mid-term guidance; Wave 1 launches +21% org., growth in Established portfolio +6% org. boosted by competitor stock-outs in Fertility and Endocrinology
- Electronics: Electronics sales decline by -5% org. amid market downcycle; Semiconductor portfolio outperforms the market, delivering sequential QoQ growth in H2
- FY organic sales: -1.6%
- FY organic EBITDA pre: -9.0%
- Net financial debt to EBITDA pre: 1.3x on Dec. 31, 2023

¹The core business consists of net sales excluding the Covid-19 business

Overview Financials

Q4 2023 Overview

- Sales down -8% with FX headwinds and slight organic decline
- Healthcare partially compensates declines in Life Science and Electronics
- EPS pre down in line with EBITDA pre
- OCF improvement mainly driven by more favorable NWC outflow; inventory measures contributed to NWC outflow
- Net financial debt reduces due to stronger OCF

Acronym(s): OCF = Operating cash flow, NWC = Net Working Capital

Q4 2023 Cash Flow Statement

- Decline in profit after tax from reduced EBIT, partially compensated by lower tax rate
- Lower D&A as prior year included one-time impairments in relation to Healthcare R&D
- Changes in provisions mainly due to lower LY restructuring provisions
- Delta in other assets & liabilities related to lower LY prepayments received and non-income related tax
- Higher capex on PPE driven by capacity expansion in key portfolios
- Financing cash flow driven by bond repayment and bond buyback

Acronym(s): PPE = Property, Tax & Equipment, D&A = Depreciation & Amortization, R&D = Research & Development, LY = Last Year

FY 2023 Balance Sheet

- Inventories stable YoY, significant sequential reduction of -€0.4 bn mainly resulting from Life Science inventory measures
- Decrease in intangible assets primarily driven by amortization and FX
- Continued investment for mid-term growth increases PPE

- Reduction in net debt with increase of + €0.1 bn of cash and reduction of
 €0.5 bn of financial debt
- Other liabilities impacted by decreased deferred tax liabilities and lower accruals for bonuses and LTIP
- Equity ratio improved to 55% (Dec. 2022, 54%)

Acronym(s): LTIP = Long-term Incentive Plan, PPE = Property, Plant & Equipment

Q4 2023 Business Overview

Life Science

- Core business down -4% org. with customer destocking in Process Solutions; COVID-19 sales fading out as expected
- Net sales deviation YoY: organic -9.7%, FX -4.0%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -26.0%, FX -4.2%, portfolio -0.2%
- Process Solutions: -11% org. decline in core business; overall PS org. sales decline of -18% including anticipated pronounced COVID-19 decline
- Science & Lab Solutions: overall org. sales down -2% mainly due to suppressed demand, pronounced in China, and finalization of SAP roll-out; immaterial change to COVID-19 sales
- Life Science Services: Core org. growth of +14% driven by positive project phasing in CDMO; with COVID-19 headwinds org. growth overall down -8%
- Lower M&S, Admin, R&D expenses reflecting cost programs and efficiencies; operating expenses declining less than sales
- EBITDA pre down -26% org. mainly on lower volumes with negative mix effects (COVID vs non-COVID, core) amid underutilization impacting the gross margin

Acronym(s): M&S = Marketing and selling expenses, R&D = Research & Development, CDMO = contract development and manufacturing organization;

Healthcare

- Organic growth of +9% supported across franchises, strong quarter for Bavencio[®] (+17% org.) and Mavenclad (+12% org.)
- Net sales deviation YoY: organic +9.2%, FX -9.1%, portfolio 0.0%
- EBITDA pre deviation YoY: organic +9.6%, FX -20.4%, portfolio 0.0%
- Oncology up +18% org., driven by continuous growth of Bavencio® (+17% org.), supported by Erbitux® (+16% org.) and Tepmetko®
- N&I stable -1.3% org. as Mavenclad® (+12% org.) while Rebif® declining -15% org.
- Solid growth of established portfolio (+7%). CM&E (+4% org.), Saizen sales boosted by competitor stock-out in Endocrinology
- M&S in line due constant productivity efforts, compensating for full Bavencio commercialization¹
- R&D costs up reflecting Evobrutinib termination provision; mid-term ambition of low twenties % remains unchanged
- Negative FX development with largest contribution from Argentina²
- EBITDA pre margin of 27.8% impacted by one-time Evobrutinib termination provision of ~-€95 m

Acronym(s): M&S = Marketing and selling expenses, R&D = Research & Development; ¹Company regained exclusive worldwide rights, effective 1 July 2023; ²Caused by FY translation applying December closing rate. In addition, negative effect from APAC and North America currencies



Electronics

- Semi Solutions delivers sequential growth of +8%
- Net sales deviation YoY: organic -3.2%, FX -5.0%, portfolio +0.3%
- EBITDA pre deviation YoY: organic -25.3%, FX -6.8%, portfolio -1.1%
- Semiconductor Solutions: -3% org. decline, with resilient portfolio enabling outperforming of the market; +8% sequential growth, DS&S and Semi Materials both contributing
- Display Solutions: down -4% org., as volume growth offset by price pressure; overall sales normalizing towards mid-term guide
- Surface Solutions: down -6% org., driven by coatings growth; partially offset by weaker industrials and cosmetics demand
- M&S costs declining with strict cost discipline and efficiencies as logistics come down in line with volume development
- Sustained high level of R&D investment to drive mid-term growth in line with Level-up program; YoY down due to higher quarterly comp
- EBITDA pre margin down due to lower sales, negative mix effects, sustained inflationary costs and new site ramp-up costs

Acronym(s): M&S = Marketing and selling expenses, R&D = Research & Development, DS&S = Delivery Systems & Service;

2024 guidance

Group:

- Net sales: Slight to moderate organic growth Adverse FX of 0% to -3% YoY
- EBITDA pre: Slight to moderate organic growth Adverse FX of -1% to -4% YoY

2024 business sector guidance¹:

Life Science

- Net sales:
 - o Slight organic decline up to slight organic growth
 - o Gradual recovery during 2024
 - H2 stronger than H1; H1 declining against high base
 - COVID-19 sales to fall to negligible levels (~€250 m in 2023)
 - About stable to slight adverse FX
- EBITDA pre:
 - Moderate organic decline up to slight organic growth
 - About stable to slight adverse FX

Healthcare

- Net sales:
 - Moderate to solid organic growth
 - o Driven by Mavenclad®, supported by Oncology and CM&E
 - About stable to moderate adverse FX
- EBITDA pre:
 - Low teens organic growth
 - Slight to significant adverse FX

Electronics

- Net sales:
 - o Organically about stable up to moderate organic growth
 - Semi market inflection expected in early H2
 - Materials drives sequential quarterly growth
 - About stable to slight adverse FX
- EBITDA pre:
 - Moderate organic decline up to moderate organic growth
 - About stable to moderate adverse FX

¹Divisional guidances are only support to the group guidance and do not have to add up; Acronym(s): CM&E = Cardiology Metabolism & Endocrinology

Additional financial guidance for 2024

•	Corporate & Other EBITDA pre	Higher than last year, driven by lower hedging gains
•	Interest result	~ €-90 to -120 m
•	Effective tax rate	~ 21% to 23%
•	Capex on PPE ¹	~ €1.6 to 1.8 bn
•	Hedging	FY 2024 overall hedge ratio ~ 50% EUR/USD hedging @ ~ 1.10
∎ ¹Ba	2024 Ø EUR/USD assumption sed on gross additions to Property, Plant and Equipment (PPE)	~ 1.07 to 1.11) on balance sheet (excl. leasing) in fiscal year to reflect planned

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

Merck KGaA

Darmstadt, Germany

Group Q4 2023

		Group		Lif	e Science		Н	ealthcare			Electronics		Cor	porate/Others	s
€m	Q4 2022	Q4 2023	% YoY	Q4 2022	Q4 2023	%YoY	Q4 2022	Q4 2023	%YoY	Q4 2022	Q4 2023	% YoY	Q4 2022	Q4 2023	%YoY
Net sales	5,660.4	5,224.5	-7.7%	2,606.4	2,249.4	-13.7%	2,030.3	2,031.9	0.1%	1,023.7	943.2	-7.9%			
% organic			-1.7%			-9.7%			9.2%			-3.2%			
% FX			-6.0%			-4.0%			-9.1%			-5.0%			
% portfolio			0.1%			0.0%			0.0%			0.3%			
EBIT	889.6	621.5	-30.1%	600.2	326.2	-45.6%	396.1	435.9	10.1%	134.9	-0.5	n.m.	-241.6	-140.0	-42.0%
Depreciation and amortization	598.5	506.7	-15.3%	244.9	222.0	-9.3%	177.9	100.6	-43.4%	147.7	157.4	6.5%	28.0	26.7	-5.0%
EBITDA	1,488.1	1,128.2	-24.2%	845.0	548.2	-35.1%	573.9	536.5	-6.5%	282.7	156.9	-44.5%	-213.6	-113.4	-46.9%
Adjustments in EBITDA EBITDA pre	139.8 1,627.9	164.9 1,293.0	17.9% -20.6%	5.3 850.3	43.8 592.0	727.2% -30.4%	59.1 633.1	28.0 564.5	-52.6% -10.8%	25.5 308.2	49.2 206.0	92.8% -33.1%	49.9 -163.7	43.9 -69.5	-12.1% -57.5%
% organic			-13.7%			-26.0%			9.6%			-25.3%			
% FX			-6.5%			-4.2%			-20.4%			-6.8%			
% portfolio			-0.3%			-0.2%			0.0%			-1.1%			

Group FY 2023

-		Group		Life	e Science			Healthcare			Electronics		Cor	porate/Others	s
€m	FY 2022	FY 2023	% YoY	FY 2022	FY 2023	%YoY	FY 2022	FY 2023	%YoY	FY 2022	FY 2023	% YoY	FY 2022	FY 2023	%YoY
Net sales	22,232.3	20,992.9	-5.6%	10,380.3	9,280.5	-10.6%	7,838.7	8,053.2	2.7%	4,013.2	3,659.2	-8.8%			
% organic			-1.6%			-7.9%			8.5%			-5.1%			
% FX			-4.1%			-2.7%			-5.8%			-4.1%			
% portfolio			0.1%			0.1%			0.0%			0.3%			
EBIT	4,474.2	3,609.1	-19.3%	2,808.0	1,850.0	-34.1%	1,894.6	2,224.6	17.4%	572.5	247.5	-56.8%	-800.9	-713.0	-11.0%
Depreciation and amortization	2,030.1	1,879.7	-7.4%	869.7	881.4	1.3%	490.2	320.0	-34.7%	565.1	568.2	0.5%	105.1	110.2	4.9%
EBITDA	6,504.3	5,488.9	-15.6%	3,677.8	2,731.4	-25.7%	2,384.8	2,544.6	6.7%	1,137.6	815.7	-28.3%	-695.9	-602.8	-13.4%
Adjustments in EBITDA EBITDA pre	344.9 6,849.1	390.1 5,878.9	13.1% -14.2%	81.8 3,759.6	88.2 2,819.6	7.8% -25.0%	91.8 2,476.6	-1.5 2,543.1	n.m. 2.7%	54.6 1,192.2	97.3 913.0	78.1% -23.4%	116.7 -579.2	206.1 -396.7	76.6% -31.5%
% organic			-9.0%			-21.4%			17.1%			-17.1%			
% FX			-4.9%			-3.3%			-14.4%			-5.6%			
% portfolio			-0.3%			-0.3%			0.0%			-0.7%			
	31 Dec, 2022	31 Dec, 2023													
Net financial debt	8,327.6	7,500.0	-9.9%												
ND/EBITDA pre	1.2	1.3													

Group Net Sales details Q4 2023

€ m	Q4 2022	Q4 2023	% YoY	% YoY org.	% YoY FX	% YoY PF
Group	5,660.4	5,224.5	-7.7%	-1.7%	-6.0%	0.1%
Life Science	2,606.4	2,249.4	-13.7%	-9.7%	-4.0%	0.0%
Process Solutions	1138.9	893.1	-21.6%	-18.1%	-3.5%	0.0%
Life Science Services	246.9	220.0	-10.9%	-8.2%	-2.7%	0.0%
Science & Lab Solutions	1220.4	1136.7	-6.9%	-2.1%	-4.8%	0.0%
Healthcare	2,030.3	2,031.9	0.1%	9.2%	-9.1%	0.0%
Rebif	219.2	175.1	-20.1%	-14.7%	-5.4%	0.0%
Mavenclad	220.3	231.6	5.1%	12.1%	-7.0%	0.0%
Erbitux	249.0	244.5	-1.8%	15.8%	-17.6%	0.0%
Bavencio	171.6	182.9	6.6%	17.0%	-10.5%	0.0%
Gonal-F	205.4	218.8	6.5%	20.5%	-14.0%	0.0%
Glucophage	247.7	232.6	-6.1%	-1.4%	-4.7%	0.0%
All other products	717.1	746.4	4.1%	11.9%	-7.8%	0.0%
Electronics	1,023.7	943.2	-7.9%	-3.2%	-5.0%	0.3%
Semiconductor Solutions	710.8	659.7	-7.2%	-2.6%	-5.0%	0.5%
Display Solutions	205.2	185.8	-9.5%	-3.6%	-5.9%	0.0%
Surface Solutions *acronyms: org. = organic; PF = portfolio	107.7	97.7	-9.2%	-5.9%	-3.4%	0.0%

Group Net Sales details FY 2023

€ m	FY 2022	FY 2023	% YoY	% YoY org.	% YoY FX	% YoY PF
Group	22,232.3	20,992.9	-5.6%	-1.6%	-4.1%	0.1%
Life Science	10,380.3	9,280.5	-10.6%	-7.9%	-2.7%	0.1%
Process Solutions	4539.8	3782.2	-16.7%	-14.4%	-2.3%	0.0%
Life Science Services	942.7	792.4	-15.9%	-14.6%	-2.0%	0.6%
Science & Lab Solutions	4897.7	4706.0	-3.9%	-0.6%	-3.3%	0.0%
Healthcare	7,838.7	8,053.2	2.7%	8.5%	-5.8%	0.0%
Rebif	887.4	709.0	-20.1%	-17.2%	-2.9%	0.0%
Mavenclad	855.9	955.9	11.7%	15.9%	-4.3%	0.0%
Erbitux	1022.8	1025.5	0.3%	10.9%	-10.6%	0.0%
Bavencio	611.5	713.1	16.6%	23.4%	-6.8%	0.0%
Gonal-F	825.1	847.3	2.7%	10.5%	-7.8%	0.0%
Glucophage	929.7	882.4	-5.1%	-0.5%	-4.6%	0.0%
All other products	2706.3	2920.0	7.9%	12.9%	-5.0%	0.0%
Electronics	4,013.2	3,659.2	-8.8%	-5.1%	-4.1%	0.3%
Semiconductor Solutions	2674.1	2478.5	-7.3%	-3.9%	-3.9%	0.5%
Display Solutions	899.6	769.6	-14.5%	-9.2%	-5.3%	0.0%
Surface Solutions	439.4	410.9	-6.5%	-3.6%	-2.9%	0.0%

*acronyms: org. = organic; PF = portfolio

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Group

P&L Group	Q4 2022	Q4 2023	% YoY
Net sales	5,660.4	5,224.5	-7.7%
Cost of sales	-2,284.2	-2,327.3	1.9%
thereof: intangibles amortization	-51.3	-38.6	-24.8%
Gross profit	3,376.2	2,897.2	-14.2%
Marketing and selling expenses	-1,209.4	-1,157.5	-4.3%
thereof: intangibles amortization	-158.1	-149.3	-5.6%
Administration	-360.8	-377.4	4.6%
Impairment losses / reversals (IFRS9)	1.9	-10.3	n.m.
Other operating income/expenses	-224.6	-64.1	-71.5%
Research and development	-693.7	-666.5	-3.9%
EBIT	889.6	621.5	-30.1%
Depreciation and amortization	598.5	506.7	-15.3%
EBITDA	1,488.1	1,128.2	-24.2%
Adjustments in EBITDA	139.8	164.9	17.9%
EBITDA pre	1,627.9	1,293.0	-20.6%
Financial result	-50.5	19.1	n.m.
Profit before tax	839.1	640.6	-23.7%
Income tax	-179.7	-53.0	-70.5%
Income tax rate	21.4%	8.3%	
Profit after tax	659.3	587.6	-10.9%
Non-controlling interests	-4.4	-2.3	-47.2%
Net income	655.0	585.3	-10.6%
Number of theoretical shares in million	434.8	434.8	
EPS in €	1.51	1.35	-10.6%
EPS pre in €	2.32	1.85	-20.3%

Totals may not add up due to rounding

Life Science

P&L Life Science	Q4 2022	Q4 2023	% YoY
Net sales	2,606.4	2,249.4	-13.7%
Cost of sales	-1,192.1	-1,127.6	-5.4%
thereof: intangibles amortization	-15.1	-7.2	-52.4%
Gross profit	1,414.4	1,121.7	-20.7%
Marketing and selling expenses	-605.4	-555.3	-8.3%
thereof: intangibles amortization	-107.7	-99.5	-7.6%
Administration	-93.4	-114.6	22.7%
Impairment losses / reversals (IFRS9)	-0.9	0.3	n.m.
Other operating income/expenses	-7.7	-22.8	195.2%
Research and development	-106.8	-103.1	-3.5%
EBIT	600.2	326.2	-45.6%
Depreciation and amortization	244.9	222.0	-9.3%
EBITDA	845.0	548.2	-35.1%
Adjustments in EBITDA	5.3	43.8	727.2%
EBITDA pre	850.3	592.0	-30.4%

Totals may not add up due to rounding

Healthcare

P&L Healthcare	Q4 2022	Q4 2023	% YoY
Net sales	2,030.3	2,031.9	0.1%
Cost of sales	-499.4	-556.4	11.4%
thereof: intangibles amortization	-1.3	-1.1	-12.8%
Gross profit	1,530.8	1,475.5	-3.6%
Marketing and selling expenses	-438.9	-459.1	4.6%
thereof: intangibles amortization	1.1	-0.5	n.m.
Administration	-77.5	-80.2	3.5%
Impairment losses / reversals (IFRS9)	2.2	-3.0	n.m.
Other operating income/expenses	-155.8	-28.4	-81.8%
Research and development	-464.8	-469.0	0.9%
EBIT	396.1	435.9	10.1%
Depreciation and amortization	177.9	100.6	-43.4%
EBITDA	573.9	536.5	-6.5%
Adjustments in EBITDA	59.1	28.0	-52.6%
EBITDA pre	633.1	564.5	-10.8%

Totals may not add up due to rounding

Electronics

P&L Electronics	Q4 2022	Q4 2023	% YoY
Net sales	1,023.7	943.2	-7.9%
Cost of sales	-591.8	-641.9	8.5%
thereof: intangibles amortization	-34.9	-30.3	-13.3%
Gross profit	431.8	301.3	-30.2%
Marketing and selling expenses	-171.1	-141.3	-17.4%
thereof: intangibles amortization	-51.4	-49.3	-4.2%
Administration	-33.6	-39.1	16.3%
Impairment losses / reversals (IFRS9)	-0.1	0.0	-78.7%
Other operating income/expenses	-10.4	-47.5	356.7%
Research and development	-81.7	-74.0	-9.4%
EBIT	134.9	-0.5	n.m.
Depreciation and amortization	147.7	157.4	6.5%
EBITDA	282.7	156.9	-44.5%
Adjustments in EBITDA	25.5	49.2	92.8%
EBITDA pre	308.2	206.0	-33.1%

Totals may not add up due to rounding

Consensus deviation Q4 2023

		Actual	Consensus (mean)	Difference to estimate
			05.02.2024	
	[€m]	Q4 2023A	Q4 2023E	%
Group				
Sales		5,224.5	5,201.6	0.4%
EBITDA pre		1,293.0	1,278.6	1.1%
EBITDA pre-margin (%)		24.7	24.6	0.2pp
EPS pre (€)		1.85	1.80	2.7%
Life Science				
Sales		2,249.4	2,255.5	-0.3%
Process Solutions		893.1	891.4	0.2%
Life Science Services		220.0	208.4	5.6%
Science & Lab Solutions		1,136.7	1,161.2	-2.1%
EBITDA pre		592.0	618.5	-4.3%
EBITDA pre-margin (%)		26.3	27.4	-1.1pp
Healthcare				
Sales		2,031.9	2,034.4	-0.1%
Rebif		175.1	174.7	0.2%
Mavenclad		231.6	244.7	-5.4%
Erbitux		244.5	263.1	-7.1%
Bavencio		182.9	198.1	-7.7%
Gonal-F		218.8	211.6	3.4%
Glucophage		232.6	235.2	-1.1%
All other products		746.4	707.0	5.6%
EBITDA pre		564.5	568.7	-0.7%
EBITDA pre-margin (%)		27.8	28.0	-0.2pp
Electronics				
Sales		943.2	911.9	3.4%
Display Solutions		185.8	189.7	-2.0%
Surface Solutions		97.7	106.8	-8.6%
Semiconductor Solutions		659.7	617.7	6.8%
EBITDA pre		206.0	195.2	5.5%
EBITDA pre-margin (%)		21.8	21.4	0.4pp
Corporate/Other				
EBITDA pre		-69.5	-103.6	-32.9%

Consensus deviation FY 2023

		Actual	Consensus (mean)	Difference to estimate
			05.02.2024	
	[€m]	FY 2023	FY 2023E	%
Group				
Sales		20,992.9	20,969.8	0.1%
EBITDA pre		5,878.9	5,860.7	0.3%
EBITDA pre-margin (%)		28.0	28.0	0.1pp
EPS pre (€)		8.49	8.45	0.5%
Life Science				
Sales		9,280.5	9,286.5	-0.1%
Process Solutions		3,782.2	3,780.4	0.0%
Life Science Services		792.4	780.8	1.5%
Science & Lab Solutions		4,706.0	4,730.5	-0.5%
EBITDA pre		2,819.6	2,845.9	-0.9%
EBITDA pre-margin (%)		30.4	30.6	-0.3pp
Healthcare				
Sales		8,053.2	8,055.5	0.0%
Rebif		709.0	708.7	0.0%
Mavenclad		955.9	969.0	-1.4%
Erbitux		1,025.5	1,044.1	-1.8%
Bavencio		713.1	728.3	-2.1%
Gonal-F		847.3	840.2	0.8%
Glucophage		882.4	885.0	-0.3%
All other products		2,920.0	2,880.3	1.4%
EBITDA pre		2,543.1	2,545.3	-0.1%
EBITDA pre-margin (%)		31.6	31.6	0.0pp
Electronics				
Sales		3,659.2	3,627.8	0.9%
Display Solutions		769.6	773.6	-0.5%
Surface Solutions		410.9	419.9	-2.1%
Semiconductor Solutions		2,478.5	2,436.4	1.7%
EBITDA pre		913.0	900.4	1.4%
EBITDA pre-margin (%)		25.0	24.8	0.1pp
Corporate/Other				
EBITDA pre		-396.7	-430.8	-7.9%