

Q4/FY 2020 Financial Summary for Investors and Analysts

Strong performance in a turbulent year

- Healthcare: Mavenclad® 71% org. growth; Bavencio® 57% org. growth post Q3 U.S. launch in UC 1L; Fertility back to growth in Q4 post COVID-19 hit in Q2
- Life Science: record 12% org. growth, fueled by 22% org. growth in Process Solutions amid COVID-19, Research (+5% FY; +16% in Q4) and Applied Solutions (+3% FY; +10% in Q4) at elevated year-end levels post COVID-19 dip in Q2
- **Electronics**¹: Semi above strong market (+14% org.); even stronger finish of +20% in Q4 marking first quarter of post-trough Electronics growth (+8% org.); Display and Surface decline slowing further to -5% and -3% in Q4
- **FY organic sales**: growth of +6.0%
- **FY organic EBITDA pre**: growing +16.8% (+8.4% org. excluding release of Biogen provision)
- Guidance delivered:

Net sales: €17.5 bn

EBITDA pre: €5.2 bn (incl. Biogen €365 m)

EPS pre: €6.70 (incl. Biogen €0.63)

 Net financial debt to EBITDA pre further down to 2.1 on December 31,2020 – continued focus on deleveraging

Overview Financials Q4 2020 Overview

- 11% organic sales growth driven by all three sectors muted by -5% FX headwinds
- EBITDA pre growing 3% despite significant FX burden of -8% which is also slightly impacting group margin
- EPS pre growing slower than EBITDA pre driven by less favorable financial result and ~€45 m non-adj. Healthcare impairments
- Operating cash flow nearly doubling driven by other assets & liabilities, changes in provisions and favorable working capital
- Net financial debt significantly reduced in line with deleveraging commitments

Q4 2020 Cash Flow Statement

- Q4 operating cash flow nearly doubling from a depressed Q4 2019 level
- Lower D&A largely driven by reduced amortization of intangibles (Rebif®)
- Changes in provisions reflect Healthcare restructuring accruals & LTIP* effects
- Q4 19 other assets & liabilities elevated by cash neutral tax receivables
- Working Capital contribution mainly driven by lower trade receivables across all sectors



- Q4 2019 elevated investing cash flow reflects Versum acquisition while Q4 2020 is reduced due to reversal of Q3 temporary investment of excess cash
- Financing cash flow reflects strong deleveraging in reduced bank loans and commercial papers

YE 2020 Balance Sheet

- Significant decline in intangible assets, primarily driven by FX
- Higher cash level in order to secure liquidity in the face of the COVID-19 pandemic and related uncertainties, driven by strong operating cashflow
- Stable equity ratio of 41%
- Strong operating cash flow in 2020 drives financial debt reduction of more than €1 bn

Q4 2020 Business Overview

Healthcare

- 4% organic growth driven by Mavenclad® and Bavencio® while base business about stable following Fertility recovery
- Net sales deviation YoY: organic +4.1%, FX -6.1%, portfolio -1.5%
- EBITDA pre deviation YoY: organic +7.7%, FX -12.7%, portfolio -1.4%
- Mavenclad® growing 48% organically, further expanding shares in still suppressed dynamic market; Rebif® declining 12% in Q4, better than the underlying trajectory
- Oncology up 20%, Bavencio® +90% post U.S. launch in UC 1L; Erbitux® at +13% supported by temporary supply agreement with Eli Lilly for U.S.
- Fertility returns to growth (+1%) against strong Q4 2019; regional picture remains mixed with Europe and ME&A still impacted and declining
- General Medicine¹ growing 3% despite China VBP impact
- Strong cost savings in M&S further supported by reduced face-to-face activities and lower amortization of intangibles
- Significant savings in R&D coming from continued prioritization; all projects on track despite COVID-19
- EBITDA pre and margin burdened by FX effect of -13%

Life Science

- Up 19% with unprecedented growth in Process Solutions further boosted by acceleration in Research and Applied
- Net sales deviation YoY: organic +19.3%, FX -5.4%, portfolio 0.0%
- EBITDA pre deviation YoY: organic +25.5%, FX -6.4%, portfolio -0.1%
- 27% growth in Process Solutions driven by downstream and single use, strong underlying demand further elevated by fight against COVID-19
- Research Solutions accelerating to 16% organic growth, driven by COVID-19 diagnostics and year-end recovery
- Applied Solutions accelerating to 10% growth across the full portfolio driven by additional COVID-19 demand and year-end recovery

¹includes CardioMetabolic Care & General Medicine and others



- Declining M&S in % sales, despite higher logistics cost due to pandemic
- Flat R&D in % of sales with continued focused investments in strategic projects in high growth & emerging segments
- Business performance, operational leverage and favorable mix drive strong EBITDA pre and margin expansion

Electronics

- Organic growth in Semi overcompensates COVID-19 impact, underlying Display decline and FX headwinds
- Net sales deviation YoY: organic +8.0%, FX -3.9%, portfolio 0.0%
- EBITDA pre deviation YoY: organic +7.8%, FX -6.5%, portfolio 0.0%
- Semiconductor Solutions: 20% organic growth, now fully including Versum;
 strong underlying demand further supported by DS&S phasing
- Display Solutions: decline further tapering down to -5% with Liquid Crystals closer to the underlying trajectory
- Surface Solutions: stabilizing further at -3% with COVID-19 impact easing but still weighing on cosmetics end markets
- Year-end inventory management post COVID-19 impact on Display and Surface drives lower gross margin from underabsorption of fixed costs
- M&S, Admin and R&D all down amid growing sales, continuing to reflect diligent underlying cost management as part of Bright Future
- Increase in EBITDA pre driven by sales growth and stringent cost management while EBITDA pre margin burdened by FX headwinds

2021 guidance

Group:

Net sales:

Strong organic growth Adverse FX of -2% to -5% YoY

EBITDA pre:

Organic: high single-digit to low teens growth (excl. Biogen¹) Adverse FX of -2% to -5% YoY

- EBITDA pre supporting factors:
 - Increasing Mavenclad® & Bavencio® contribution
 - Ongoing strength in Life Science with robust base business and additional COVID-19 demand
 - Continued strong outlook in Semiconductor Solutions with above-market organic sales growth
 - High level of cost consciousness across all sectors
 - Milestone payments (e.g. Bavencio®)

¹ Q3 20 Reversal of the provisions for the patent dispute proceedings for Rebif in the amount of ~€365m; Guidance incl. Biogen: slight to moderate organic growth



- EBITDA pre reducing factors:
 - Glucophage® impacted by VBP in China
 - Continued decline of liquid crystals and Rebif®

2021 business sector guidance1:

Healthcare

- Net sales:
 - Strong organic growth
 - Mainly driven by Mavenclad[®] and Bavencio[®]
 - o Base business organically around stable
- EBITDA pre:
 - Strong organic growth (excl. Biogen²)
 - Mainly driven by Mavenclad and Bavencio sales and continued cost discipline
 - Strong adverse FX

Life Science

- Net sales:
 - Organic growth in the low teens
 - o Process Solutions as main growth driver
- EBITDA pre:
 - Organic growth in the low teens
 - o Slight adverse FX

Electronics

- Net sales:
 - Solid organic growth
 - Strong contribution from Semiconductor Solutions
 - o OLED with high growth
- EBITDA pre:
 - Solid to strong organic growth
 - Significant to strong adverse FX

¹Business Sector guidances are only support to the Group guidance and do not have to add up ²Q3 20 Reversal of the provisions for the patent dispute proceedings for Rebif in the amount of ~€365m; Guidance incl. Biogen: slight to moderate organic growth



Additional financial guidance for 2021

Corporate & Other EBITDA pre

Interest result

Effective tax rate

Capex on PPE

Hedging / USD assumption

■ 2021 Ø EUR/USD assumption

~ -400 to -470 €m

~ -220 to -245 €m

~24 % to 26%

~1.4 bn – 1.5 €bn

FY 2021 hedge ratio ~ 70%

at EUR/USD ~1.17

~1.17 to 1.22

Merck KGaA Darmstadt, Germany

Group Q4 2020

		Group		F	lealthcare		Li	fe Science		Perforn	nance Mat	erials	Corp	orate/Oth	ers
€ m	Q4 2019	Q4 2020	% YoY	Q4 2019	Q4 2020	% YoY	Q4 2019	Q4 2020	% YoY	Q4 2019	Q4 2020	% YoY	Q4 2019	Q4 2020	% YoY
Net sales	4 381	4 599	5%	1 800	1 738	-3%	1 783	2 030	14%	798	831	4%			
% organic			11%			4%			19%			8%			
% FX			-5%			-6%			-5%			-4%			
% portfolio			-1%			-1%			0%			0%			
EBIT	515	611	19%	351	305	-13%	329	451	37%	14	79	>100%	-180	-223	24%
Depreciation and amortization	553	497	-10%	190	128	-33%	204	199	-3%	135	149	10%	23	22	-7%
EBITDA	1 067	1 108	4%	541	433	-20%	534	650	22%	149	228	53%	-157	-202	29%
Adjustments in EBITDA	138	137	-1%	20	92	>100%	15	3	-78%	94	18	-81%	10	23	>100%
EBITDA pre	1 206	1 245	3%	561	525	-6%	549	653	19%	243	246	1%	-147	-179	22%
Net financial debt*	12 363	10 758	-13%												

^{*} as per 31 December

Totals may not add up due to rounding

Group FY 2020

		Group		F	lealthcare		Li	fe Science	;	Perforn	nance Mat	terials	Corp	orate/Oth	ers
€ m	FY 2019	FY 2020	% YoY	FY 2019	FY 2020	% YoY	FY 2019	FY 2020	% YoY	FY 2019	FY 2020	% YoY	FY 2019	FY 2020	% YoY
Sales	16 152	17 534	9%	6 714	6 639	-1%	6 864	7 515	9%	2 574	3 380	31%			
% organic			6%			3%			12%			-3%			
% FX			-3%			-4%			-2%			-1%			
% portfolio			5%			-1%			0%			35%			
EBIT	2 120	2 985	41%	1 149	1 804	57%	1 280	1 599	25%	307	240	-22%	-617	-658	7%
Depreciation and amortization	1 946	1 938	0%	747	381	-49%	789	789	0%	330	684	>100%	80	84	5%
EBITDA	4 066	4 923	21%	1 896	2 184	15%	2 070	2 387	15%	637	925	45%	-537	-573	7%
Adjustments in EBITDA	318	279	-13%	25	83	>100%	59	18	-70%	166	99	-40%	68	78	16%
EBITDA pre	4 385	5 201	19%	1 922	2 267	18%	2 129	2 405	13%	803	1 024	27%	-469	-495	6%
Net financial debt*	12 363	10 758	-13%												
* as per 31 December															

Group

P&L Group	Q4 2019	Q4 2020	% YoY
Net sales	4 381	4 599	5%
Cost of sales	-1 690	-1 795	6%
thereof: intangibles amortization	-57	-48	-16%
Gross profit	2 690	2 803	4%
Marketing and selling expenses	-1 228	-1 122	-9%
thereof: intangibles amortization	-257	-153	-40%
Administration	-334	-322	-4%
Impairment losses / reversals (IFRS9)	-5	-6	26%
Other operating income/expenses	22	-85	n.m.
Research and development	-630	-658	4%
EBIT	515	611	19%
Depreciation and amortization	553	497	-10%
EBITDA	1 067	1 108	4%
Adjustments in EBITDA	138	137	-1%
EBITDA pre	1 206	1 245	3%
Financial result	-76	-52	-32%
Profit before tax	439	559	27%
Income tax	-103	-119	16%
Income tax rate	23%	21%	
Profit after tax from continuing operations	336	440	31%
Profit after tax from discontinued operation	-15	0	-100%
Profit after tax	321	440	37%
Non-controlling interests	-3	-4	40%
Net income	318	436	37%
Number of theoretical shares in million	434.8	434.8	
EPS in €	0.73	1.00	37%
EPS pre in €	1.54	1.57	2%

Healthcare

P&L Healthcare	Q4 2019	Q4 2020	% YoY
Net sales	1 800	1 738	-3%
Cost of sales	-441	-428	-3%
thereof: intangibles amortization	-1	-1	-21%
Gross profit	1 359	1 310	-4%
Marketing and selling expenses	-595	-449	-24%
thereof: intangibles amortization	-107	-10	-90%
Administration	-90	-84	-6%
Impairment losses / reversals (IFRS9)	-1	-5	>100%
Other operating income/expenses	140	12	-91%
Research and development	-462	-479	4%
EBIT	351	305	-13%
Depreciation and amortization	190	128	-33%
EBITDA	541	433	-20%
Adjustments in EBITDA	20	92	>100%
EBITDA pre	561	525	-6%

Totals may not add up due to rounding

Life Science

P&L Life Science	Q4 2019	Q4 2020	% YoY
Net sales	1 783	2 030	14%
Cost of sales	-771	-867	12%
thereof: intangibles amortization	-15	-13	-12%
Gross profit	1 012	1 163	15%
Marketing and selling expenses	-490	-531	8%
thereof: intangibles amortization	-103	-97	-6%
Administration	-102	-76	-25%
Impairment losses / reversals (IFRS9)	-4	0	-91%
Other operating income/expenses	-9	-17	89%
Research and development	-78	-87	12%
EBIT	329	451	37%
Depreciation and amortization	204	199	-3%
EBITDA	534	650	22%
Adjustments in EBITDA	15	3	-78%
EBITDA pre	549	653	19%

Performance Materials

Q4 2019	Q4 2020	% YoY
798	831	4%
-477	-501	5%
-41	-34	-18%
321	330	3%
-136	-136	0%
-47	-45	-3%
-39	-41	3%
0	0	>100%
-58	-7	-89%
-73	-68	-6%
14	79	>100%
135	149	10%
149	228	53%
94	18	-81%
243	246	1%
	798 -477 -41 321 -136 -47 -39 0 -58 -73 14 135 149 94	798 831 -477 -501 -41 -34 321 330 -136 -136 -47 -45 -39 -41 0 0 -58 -7 -73 -68 14 79 135 149 149 228 94 18

Consensus deviation

	Actual	Consensus (mean)	Difference to estimate
		08.02.2021	ooaco
[€m]	Q4 2020A	Q4 2020 E	%
Group			
Sales	4 598.5	4 527.9	1.6%
EBITDA pre	1 245.2	1 238.8	0.5%
EBITDA pre-margin (%)	27.1	27.4	-0.3 pp
EPS pre (€)	1.57	1.58	-0.5%
Healthcare			
Sales	1 738.0	1 752.0	-0.8%
Rebif	267.6	267.7	0.0%
Bavencio	51.3	56.6	-9.4%
Mavenclad	177.4	172.5	2.8%
All other products	1 241.8	1 255.3	-1.1%
EBITDA pre	525.1	518.4	1.3%
EBITDA pre-margin (%)	30.2	29.6	0.6 pp
Life Science			
Sales	2 029.9	1 960.1	3.6%
EBITDA pre	653.1	619.0	5.5%
EBITDA pre-margin (%)	32.2	31.6	0.6 pp
Performance Materials			
Sales	830.7	815.7	1.8%
EBITDA pre	246.1	236.5	4.1%
EBITDA pre-margin (%)	29.6	29.0	0.6 pp
Corporate/Other			
EBITDA pre	-179.1	-135.1	32.6%

	Actual	Consensus (mean) 08.02.2021	Difference to estimate (mean)
[€m]	FY 2020A	FY 2020 E	%
Group			
Sales	17 534.4	17 463.9	0.4%
EBITDA pre	5 201.4	5 194.9	0.1%
EBITDA pre-margin (%)	29.7	29.8	-0.1 pp
EPS pre (€)	6.70	6.71	-0.1%
Healthcare			
Sales	6 639.2	6 653.3	-0.2%
Rebif	1 131.3	1 131.8	0.0%
Bavencio	156.4	161.6	-3.2%
Mavenclad	530.7	525.5	1.0%
All other products	4 820.8	4 834.3	-0.3%
EBITDA pre	2 267.3	2 260.5	0.3%
EBITDA pre-margin (%)	34.1	34.0	0.1 pp
Life Science			
Sales	7 514.9	7 445.1	0.9%
EBITDA pre	2 405.0	2 371.0	1.4%
EBITDA pre-margin (%)	32.0	31.8	0.2 pp
Performance Materials			
Sales	3 380.3	3 365.3	0.4%
EBITDA pre	1 024.2	1 014.5	1.0%
EBITDA pre-margin (%)	30.3	30.1	0.2 pp
Corporate/Other			
EBITDA pre	-495.1	-451.1	9.8%