

Q1 2022 Financial Summary for Investors and Analysts

Off to a strong start

- **Life Science:** 10% organic growth & sequential step-up driven by core business performance amid declining COVID-19 demand; largest growth contribution to group (org. +€207 m); all business units growing, Process & Applied key drivers
- **Healthcare:** +102% org. growth in Bavencio® and +25% org. growth in Mavenclad® drive +7% organic growth in sector (+€107 m); established portfolio stable, driven by solid Fertility and CM&E performance
- **Electronics:** +5% organic growth (+€45 m) mainly driven by ongoing strength in Semiconductor Solutions (+16% org.)
- **Q1 organic sales:** growth of +7.8%
- **Q1 organic EBITDA pre:** growing +1.6%
- **Guidance:**
Net sales: €21.6 bn to €22.8 bn
EBITDA pre: €6.6 bn to €7.1 bn
EPS pre: €9.60 to €10.50
- Net financial debt to EBITDA pre remains stable vs. 2021 at 1.4 on March 31, 2022

Overview Financials

Q1 2022 Overview

- Sales up +12%, driven by strong organic performance and FX tailwinds
- Life Science primary driver of organic EBITDA pre growth; FX upsides
- EPS pre growth driven by EBIT pre contribution, better financial result
- Operating cash flow decline driven by net working capital (favorable phasing in prior year payables) & tax payments
- Net financial debt increases, mainly driven by Exelead acquisition

Q1 2022 Cash Flow Statement

- +18% profit after tax growth driven by strong business performance, improved financial result and lower tax rate
- Delta in other assets & liabilities driven by elevated 2021 level from phasing in tax positions and a pension related shift between provisions and other assets
- Delta in working capital mainly explained by payables phasing (+ ~ €300 m in Q1 2021); higher inventories and receivables amid strong sales growth
- Higher investing cash flow driven by Exelead acquisition; higher PPE Capex supporting capacity expansions
- Financing cash flow driven by repayment of financial debt

Q1 2022 Balance Sheet

- Lower cash level driven largely by Exelead acquisition and capex investments, partially offset by strong operating cash flow
- Receivables & inventories driven by strong business growth and FX
- Higher intangible assets driven by Exelead acquisition and FX effects
- Reduction in provisions for employee benefits driven by actuarial gains from higher interest rates
- Equity ratio up further to 50% (vs. 47% in 2021) driven by retained earnings and translational FX effects

Q1 2022 Business Overview

Life Science

- **Core business drives sequential growth & another record quarter**
- Net sales deviation YoY: organic +9.7%, FX +4.8%, portfolio +0.2%
- EBITDA pre deviation YoY: organic +11.8%, FX +5.5%, portfolio -0.4%
- Process Solutions: +13% org. growth, driven by strong core business performance; COVID-19 business declining sequentially as anticipated
- Research Solutions: growing +2% organically against strong comps, elevated by Q1 2021 post lockdown rebound & COVID-19 business
- Applied Solutions: +13% org. growth with strong performance across all businesses and customer segments, particularly in analytics & diagnostics in the pharma & biotech customer segments
- M&S* in % of sales declining from 24% to 23% due to strong top line leverage, higher in absolute terms with logistics being the largest driver
- Higher R&D in absolute terms as well as in % of sales with continued investments in high growth & emerging segments, e.g. novel modalities
- EBITDA pre growing +12% org., 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

- **Doubling Bavencio® sales and continued Mavenclad® growth drive +6.5% organic growth in the sector**
- Net sales deviation YoY: organic +6.5%, FX +3.0%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -7.4%, FX +6.7%, portfolio 0.0%
- Oncology up +27% org., primarily driven by continuous strong uptake of Bavencio® (+102% org.) particularly in the EU and Japan; Erbitux® growing across all regions (+10% org.)
- Mavenclad® ramp-up (+25% org.) amid still depressed U.S. dynamic market more than offsets ongoing Rebif® decline (-15% org.)
- Stable established portfolio, driven by solid performance in Fertility (+4.3% org.) and CM&E (+2.5% org.)
- M&S* declining in % of sales; absolute increase mainly driven by increasing face-to-face activities, primarily in the U.S.

- Lower absolute R&D level mainly driven by termination of Bintrafusp study in Q3 2021
- EBITDA pre and margin decline driven by non-recurring income components of ~ €75 m in Q1 2021 (Bintrafusp deferred income & ~€50 m Bavencio® milestones)

*Marketing and selling expenses

Electronics

- **Strong Semi performance continues to drive sector growth**
- Net sales deviation YoY: organic +5.2%, FX +6.0%, portfolio 0.0%
- EBITDA pre deviation YoY: organic -6.0%, FX +11.9%, portfolio 0.0%
- Semiconductor Solutions: +16% org. growth fueled by mid teens growth in Materials further supported by DS&S project business
- Display Solutions: down -12% organically, driven by continued decline in Liquid Crystals (accelerated by lower utilization at Chinese customers)
- Surface Solutions: +1% org. growth driven by strong cosmetics business, more than offsetting softer industrials and coatings (automotive shortages)
- M&S* as a percentage of sales increasing by ~1pp driven entirely by higher logistics cost, while M&S w/o logistics is declining
- R&D increase in line with sales growth, fully driven by investments in Semiconductor Materials
- EBITDA pre margin remains at 30% amid inflationary developments (raw materials, energy & logistics); own pricing measures keep Semi margins intact

*Marketing and selling expenses

2022 guidance

Group:

- | | |
|---|--|
| ▪ Net sales: Organic: +6% to +9% YoY FX: 3% to 6% YoY ~€21.6 bn to €22.8 bn | ▪ EBITDA pre: Organic: +5% to +9% YoY FX: 4% to 8% YoY ~€6.6 bn to €7.1 bn |
| | ▪ EPS pre: ~ €9.60 to €10.50 |

2022 business sector guidance¹:

Life Science

- Net sales:
 - Organic: +7% to +10%
 - Strong core business, Process Solutions COVID-19 sales of up to ~€700 m
 - Process Solutions as main growth driver
- EBITDA pre:
 - Organic: +6% to +10% YoY
 - FX: 3% to 6% YoY
 - ~€3,600 m to €3,850 m

Healthcare

- Net sales:
 - Organic: +4% to +7%
 - Mainly driven by Mavenclad[®] and Bavencio[®]
 - CM&E back to growth post VBP²
- EBITDA pre:
 - Organic: +3% to +5% YoY
 - FX: 8% to 12% YoY
 - ~€2,350 m to €2,500 m

Electronics

- Net sales:
 - Organic: +5% to +8%
 - Underlying demand in key electronic end markets remains strong
 - Strong contribution by Semiconductor Solutions
- EBITDA pre:
 - Organic: 0% to +4% YoY
 - FX: 9% to 12% YoY
 - ~€1,200m to €1,300 m

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

²Volume Based Procurement

Additional financial guidance for 2022

- | | |
|--------------------------------|--|
| ▪ Corporate & Other EBITDA pre | -€510 m to -€570 m |
| ▪ Interest result | ~ -€110 m to -€150 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 | ~1.06 to 1.10 |

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

Merck KGaA

Darmstadt, Germany

Group Q1 2022

| € m | Group | | | Life Science | | | Healthcare | | | Electronics | | | Corporate/Others | | |
|-------------------------------|----------------|----------------|--------------|----------------|----------------|--------------|----------------|----------------|--------------|--------------|--------------|--------------|------------------|---------------|--------------|
| | Q1 2021 | Q1 2022 | % YoY | Q1 2021 | Q1 2022 | %YoY | Q1 2021 | Q1 2022 | %YoY | Q1 2021 | Q1 2022 | % YoY | Q1 2021 | Q1 2022 | %YoY |
| Net sales | 4,630.7 | 5,197.8 | 12.2% | 2,131.1 | 2,445.4 | 14.7% | 1,638.9 | 1,795.0 | 9.5% | 860.7 | 957.4 | 11.2% | | | |
| % organic | | | 7.8% | | | 9.7% | | | 6.5% | | | 5.2% | | | |
| % FX | | | 4.4% | | | 4.8% | | | 3.0% | | | 6.0% | | | |
| % portfolio | | | 0.1% | | | 0.2% | | | 0.0% | | | 0.0% | | | |
| EBIT | 1,043.1 | 1,173.4 | 12.5% | 593.5 | 723.3 | 21.9% | 444.7 | 453.9 | 2.1% | 125.3 | 145.2 | 15.9% | -120.4 | -148.9 | 23.7% |
| Depreciation and amortization | 423.7 | 429.6 | 1.4% | 186.0 | 198.3 | 6.6% | 78.4 | 71.7 | -8.5% | 134.2 | 133.6 | -0.5% | 25.1 | 25.9 | 3.3% |
| EBITDA | 1,466.9 | 1,603.0 | 9.3% | 779.6 | 921.6 | 18.2% | 523.1 | 525.6 | 0.5% | 259.5 | 278.8 | 7.4% | -95.3 | -123.0 | 29.1% |
| Adjustments in EBITDA | 43.7 | 25.8 | -41.0% | 14.1 | 5.5 | -60.7% | 9.8 | 3.5 | -64.2% | 13.9 | 10.6 | -24.2% | 6.0 | 6.2 | 4.1% |
| EBITDA pre | 1,510.6 | 1,628.8 | 7.8% | 793.6 | 927.1 | 16.8% | 532.9 | 529.1 | -0.7% | 273.4 | 289.3 | 5.8% | -89.3 | -116.8 | 30.7% |
| % organic | | | 1.6% | | | 11.8% | | | -7.4% | | | -6.0% | | | 14.5% |
| % FX | | | 6.4% | | | 5.5% | | | 6.7% | | | 11.9% | | | 16.2% |
| % portfolio | | | -0.2% | | | -0.4% | | | 0.0% | | | 0.0% | | | 0.0% |
| | Q1 2021 | Q1 2022 | | | | | | | | | | | | | |
| Net financial debt | 8,753.0 | 9,228.4 | 5.4% | | | | | | | | | | | | |
| ND/EBITDA pre | 1.8 | 1.4 | | | | | | | | | | | | | |

Group Net Sales details Q1 2022

| € m | Q1 2021 | Q1 2022 | % YoY | % YoY org. | % YoY FX | % YoY PF |
|-------------------------|----------------|----------------|--------------|-------------|-------------|-------------|
| Group | 4,630.7 | 5,197.8 | 12.2% | 7.8% | 4.4% | 0.1% |
| Life Science | 2,131.1 | 2,445.4 | 14.7% | 9.7% | 4.8% | 0.2% |
| Process Solutions | 1052.9 | 1250.9 | 18.8% | 13.1% | 5.2% | 0.5% |
| Research Solutions | 646.1 | 688.1 | 6.5% | 2.1% | 4.4% | 0.0% |
| Applied Solutions | 432.0 | 506.4 | 17.2% | 12.9% | 4.3% | 0.0% |
| Healthcare | 1,638.9 | 1,795.0 | 9.5% | 6.5% | 3.0% | 0.0% |
| Rebif | 227.3 | 201.4 | -11.4% | -14.8% | 3.4% | 0.0% |
| Mavenclad | 147.0 | 189.2 | 28.7% | 24.9% | 3.7% | 0.0% |
| Erbix | 219.2 | 242.2 | 10.5% | 9.5% | 1.0% | 0.0% |
| Bavencio | 61.6 | 127.7 | 107.3% | 102.3% | 5.0% | 0.0% |
| Gonal-F | 186.3 | 200.0 | 7.3% | 5.0% | 2.3% | 0.0% |
| Glucophage | 217.4 | 217.9 | 0.2% | -5.1% | 5.4% | 0.0% |
| All other products | 580.1 | 616.5 | 6.3% | 3.7% | 2.5% | 0.0% |
| Electronics | 860.7 | 957.4 | 11.2% | 5.2% | 6.0% | 0.0% |
| Semiconductor Solutions | 475.4 | 580.8 | 22.2% | 15.9% | 6.3% | 0.0% |
| Display Solutions | 274.5 | 261.6 | -4.7% | -11.5% | 6.8% | 0.0% |
| Surface Solutions | 110.6 | 115.0 | 4.0% | 0.9% | 3.0% | 0.0% |

*acronyms: org. = organic; PF = portfolio

Group

| P&L Group | Q1 2021 | Q1 2022 | % YoY |
|---|----------------|----------------|--------------|
| Net sales | 4,630.7 | 5,197.8 | 12.2% |
| Cost of sales | -1,720.6 | -1,987.0 | 15.5% |
| thereof: intangibles amortization | -53.9 | -50.3 | -6.7% |
| Gross profit | 2,910.1 | 3,210.8 | 10.3% |
| Marketing and selling expenses | -1,007.3 | -1,087.2 | 7.9% |
| thereof: intangibles amortization | -145.9 | -144.8 | -0.8% |
| Administration | -270.8 | -287.2 | 6.0% |
| Impairment losses / reversals (IFRS9) | -6.0 | -5.0 | -16.5% |
| Other operating income/expenses | -6.6 | -72.4 | >100% |
| Research and development | -576.3 | -585.5 | 1.6% |
| EBIT | 1,043.1 | 1,173.4 | 12.5% |
| Depreciation and amortization | 423.7 | 429.6 | 1.4% |
| EBITDA | 1,466.9 | 1,603.0 | 9.3% |
| Adjustments in EBITDA | 43.7 | 25.8 | -41.0% |
| EBITDA pre | 1,510.6 | 1,628.8 | 7.8% |
| Financial result | -59.1 | -34.3 | -41.9% |
| Profit before tax | 984.1 | 1,139.1 | 15.8% |
| Income tax | -236.2 | -255.4 | 8.1% |
| Income tax rate | 24.0% | 22.4% | |
| Profit after tax | 747.9 | 883.7 | 18.2% |
| Non-controlling interests | -1.3 | -3.3 | >100% |
| Net income | 746.6 | 880.4 | 17.9% |
| Number of theoretical shares in million | 434.8 | 434.8 | |
| EPS in € | 1.72 | 2.02 | 17.4% |
| EPS pre in € | 2.18 | 2.41 | 10.6% |

Totals may not add up due to rounding

Life Science

| P&L Life Science | Q1 2021 | Q1 2022 | % YoY |
|---------------------------------------|----------------|----------------|--------------|
| Net sales | 2,131.1 | 2,445.4 | 14.7% |
| Cost of sales | -849.1 | -965.1 | 13.7% |
| thereof: intangibles amortization | -13.8 | -13.5 | -2.2% |
| Gross profit | 1,282.0 | 1,480.4 | 15.5% |
| Marketing and selling expenses | -501.0 | -552.0 | 10.2% |
| thereof: intangibles amortization | -96.2 | -95.6 | -0.6% |
| Administration | -81.6 | -91.5 | 12.1% |
| Impairment losses / reversals (IFRS9) | -5.2 | -1.7 | -67.3% |
| Other operating income/expenses | -25.6 | -23.8 | -6.8% |
| Research and development | -75.0 | -88.1 | 17.4% |
| EBIT | 593.5 | 723.3 | 21.9% |
| Depreciation and amortization | 186.0 | 198.3 | 6.6% |
| EBITDA | 779.6 | 921.6 | 18.2% |
| Adjustments in EBITDA | 14.1 | 5.5 | -60.7% |
| EBITDA pre | 793.6 | 927.1 | 16.8% |

Totals may not add up due to rounding

Healthcare

| P&L Healthcare | Q1 2021 | Q1 2022 | % YoY |
|---------------------------------------|----------------|----------------|--------------|
| Net sales | 1,638.9 | 1,795.0 | 9.5% |
| Cost of sales | -388.3 | -460.7 | 18.7% |
| thereof: intangibles amortization | -5.2 | -1.2 | -77.4% |
| Gross profit | 1,250.6 | 1,334.2 | 6.7% |
| Marketing and selling expenses | -370.3 | -375.6 | 1.4% |
| thereof: intangibles amortization | -4.3 | -0.2 | -94.3% |
| Administration | -72.7 | -71.2 | -2.0% |
| Impairment losses / reversals (IFRS9) | -1.7 | -3.7 | >100% |
| Other operating income/expenses | 55.3 | -32.4 | n.m. |
| Research and development | -416.4 | -397.4 | -4.6% |
| EBIT | 444.7 | 453.9 | 2.1% |
| Depreciation and amortization | 78.4 | 71.7 | -8.5% |
| EBITDA | 523.1 | 525.6 | 0.5% |
| Adjustments in EBITDA | 9.8 | 3.5 | -64.2% |
| EBITDA pre | 532.9 | 529.1 | -0.7% |

Totals may not add up due to rounding

Electronics

| P&L Electronics | Q1 2021 | Q1 2022 | % YoY |
|---------------------------------------|--------------|--------------|--------------|
| Net sales | 860.7 | 957.4 | 11.2% |
| Cost of sales | -483.3 | -560.0 | 15.9% |
| thereof: intangibles amortization | -34.9 | -35.7 | 2.1% |
| Gross profit | 377.4 | 397.4 | 5.3% |
| Marketing and selling expenses | -135.3 | -155.7 | 15.1% |
| thereof: intangibles amortization | -45.4 | -48.9 | 7.7% |
| Administration | -34.4 | -28.2 | -18.1% |
| Impairment losses / reversals (IFRS9) | 0.2 | 0.2 | -2.9% |
| Other operating income/expenses | -15.8 | 6.8 | n.m. |
| Research and development | -66.8 | -75.3 | 12.7% |
| EBIT | 125.3 | 145.2 | 15.9% |
| Depreciation and amortization | 134.2 | 133.6 | -0.5% |
| EBITDA | 259.5 | 278.8 | 7.4% |
| Adjustments in EBITDA | 13.9 | 10.6 | -24.2% |
| EBITDA pre | 273.4 | 289.3 | 5.8% |

Totals may not add up due to rounding

Consensus deviation Q1 2022

| | Actual | Consensus (mean) | Difference to estimate | Consensus (median) | Difference to estimate |
|-------------------------|-----------|---------------------|---------------------------|-----------------------|---------------------------|
| | [€m] | 3.05.2022 | | 03.05.2022 | |
| | Q1 2022 A | Q1 2022 E | % | Q1 2022 E | % |
| Group | | | | | |
| Sales | 5,197.8 | 5,179.4 | 0.4% | 5,162.0 | 0.7% |
| EBITDA pre | 1,628.8 | 1,623.0 | 0.4% | 1,622.6 | 0.4% |
| EBITDA pre-margin (%) | 31.3 | 31.3 | 0.0pp | 31.3 | 0.0pp |
| EPS pre (€) | 2.41 | 2.36 | 2.3% | 2.35 | 2.4% |
| Life Science | | | | | |
| Sales | 2,445.4 | 2,413.8 | 1.3% | 2,412.5 | 1.4% |
| Research Solutions | 688.1 | 671.8 | 2.4% | 675.3 | 1.9% |
| Applied Solutions | 506.4 | 472.2 | 7.2% | 471.4 | 7.4% |
| Process Solutions | 1,250.9 | 1,272.3 | -1.7% | 1,265.0 | -1.1% |
| EBITDA pre | 927.1 | 891.1 | 4.0% | 890.3 | 4.1% |
| EBITDA pre-margin (%) | 37.9 | 36.9 | 1.0pp | 37.0 | 0.9pp |
| Healthcare | | | | | |
| Sales | 1,795.0 | 1,806.0 | -0.6% | 1,798.1 | -0.2% |
| Rebif | 201.4 | 213.7 | -5.7% | 215.7 | -6.6% |
| Mavenclad | 189.2 | 189.1 | 0.0% | 191.0 | -0.9% |
| Erbitux | 242.2 | 230.9 | 4.9% | 227.5 | 6.5% |
| Bavencio | 127.7 | 126.6 | 0.9% | 125.2 | 2.0% |
| Gonal-F | 200.0 | 198.5 | 0.7% | 198.9 | 0.5% |
| Glucophage | 217.9 | 219.5 | -0.7% | 217.0 | 0.4% |
| All other products | 616.5 | 627.6 | -1.8% | 622.8 | -1.0% |
| EBITDA pre | 529.1 | 548.2 | -3.5% | 546.2 | -3.1% |
| EBITDA pre-margin (%) | 29.5 | 30.4 | -0.9pp | 30.4 | -0.9pp |
| Electronics | | | | | |
| Sales | 957.4 | 963.1 | -0.6% | 952.0 | 0.6% |
| Display Solutions | 261.6 | 271.5 | -3.7% | 270.0 | -3.1% |
| Surface Solutions | 115.0 | 117.1 | -1.8% | 117.0 | -1.7% |
| Semiconductor Solutions | 580.8 | 575.5 | 0.9% | 571.0 | 1.7% |
| EBITDA pre | 289.3 | 298.7 | -3.1% | 297.8 | -2.8% |
| EBITDA pre-margin (%) | 30.2 | 31.0 | -0.8pp | 31.0 | -0.8pp |
| Corporate/Other | | | | | |
| EBITDA pre | -116.8 | -115.4 | 1.2pp | -119.0 | -1.8pp |