

## 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**<sup>1</sup>: 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

<sup>1</sup>Previously: Performance Materials  
 \*Long Term Incentive Plan

- 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 Medicine<sup>1</sup> 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

<sup>1</sup>includes 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

### Merck Group:

- Net sales:  
Strong organic growth  
Adverse FX of -2% to -5% YoY
- EBITDA pre:  
Organic: high single-digit to low teens growth (excl. Biogen<sup>1</sup>)  
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®)

<sup>1</sup> 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 guidance<sup>1</sup>:

### Healthcare

- Net sales:
  - Strong organic growth
  - Mainly driven by Mavenclad® and Bavencio®
  - Base business organically around stable
- EBITDA pre:
  - Strong organic growth (excl. Biogen<sup>2</sup>)
  - Mainly driven by Mavenclad and Bavencio sales and continued cost discipline
  - Strong adverse FX

### Life Science

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

### Electronics

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

<sup>1</sup>Business Sector guidances are only support to the Group guidance and do not have to add up  
<sup>2</sup>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

### **Additional financial guidance for 2021**

- Corporate & Other EBITDA pre ~ -400 to -470 €m
- Interest result ~ -220 to -245 €m
- Effective tax rate ~24 % to 26%
- Capex on PPE ~1.4 bn – 1.5 €bn
- Hedging / USD assumption **FY 2021 hedge ratio ~ 70%**  
**at EUR/USD ~1.17**
- 2021 Ø EUR/USD assumption ~1.17 to 1.22



## Merck Group Q4 2020

| € m                           | Group        |              |            | Healthcare |            |            | Life Science |            |            | Performance Materials |            |           | Corporate/Others |             |            |
|-------------------------------|--------------|--------------|------------|------------|------------|------------|--------------|------------|------------|-----------------------|------------|-----------|------------------|-------------|------------|
|                               | 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%        |                  |             |            |
| <b>% organic</b>              |              |              | <b>11%</b> |            |            | <b>4%</b>  |              |            | <b>19%</b> |                       |            | <b>8%</b> |                  |             |            |
| % 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%      |
| <b>EBITDA pre</b>             | <b>1 206</b> | <b>1 245</b> | <b>3%</b>  | <b>561</b> | <b>525</b> | <b>-6%</b> | <b>549</b>   | <b>653</b> | <b>19%</b> | <b>243</b>            | <b>246</b> | <b>1%</b> | <b>-147</b>      | <b>-179</b> | <b>22%</b> |
| Net financial debt*           | 12 363       | 10 758       | -13%       |            |            |            |              |            |            |                       |            |           |                  |             |            |

\* as per 31 December

Totals may not add up due to rounding

## Merck Group FY 2020

| € m                           | Group        |              |            | Healthcare   |              |            | Life Science |              |            | Performance Materials |              |            | Corporate/Others |             |           |
|-------------------------------|--------------|--------------|------------|--------------|--------------|------------|--------------|--------------|------------|-----------------------|--------------|------------|------------------|-------------|-----------|
|                               | 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%        |                  |             |           |
| <b>% organic</b>              |              |              | <b>6%</b>  |              |              | <b>3%</b>  |              |              | <b>12%</b> |                       |              | <b>-3%</b> |                  |             |           |
| % 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%       |
| <b>EBITDA pre</b>             | <b>4 385</b> | <b>5 201</b> | <b>19%</b> | <b>1 922</b> | <b>2 267</b> | <b>18%</b> | <b>2 129</b> | <b>2 405</b> | <b>13%</b> | <b>803</b>            | <b>1 024</b> | <b>27%</b> | <b>-469</b>      | <b>-495</b> | <b>6%</b> |
| Net financial debt*           | 12 363       | 10 758       | -13%       |              |              |            |              |              |            |                       |              |            |                  |             |           |

\* as per 31 December

Totals may not add up due to rounding

## Merck Group

| P&L Group                                    | Q4 2019      | Q4 2020      | % YoY      |
|--|--------------|--------------|------------|
| <b>Net sales</b>                             | <b>4 381</b> | <b>4 599</b> | <b>5%</b>  |
| Cost of sales                                | -1 690       | -1 795       | 6%         |
| thereof: intangibles amortization            | -57          | -48          | -16%       |
| <b>Gross profit</b>                          | <b>2 690</b> | <b>2 803</b> | <b>4%</b>  |
| 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%         |
| <b>EBIT</b>                                  | <b>515</b>   | <b>611</b>   | <b>19%</b> |
| Depreciation and amortization                | 553          | 497          | -10%       |
| EBITDA                                       | 1 067        | 1 108        | 4%         |
| Adjustments in EBITDA                        | 138          | 137          | -1%        |
| <b>EBITDA pre</b>                            | <b>1 206</b> | <b>1 245</b> | <b>3%</b>  |
| Financial result                             | -76          | -52          | -32%       |
| <b>Profit before tax</b>                     | <b>439</b>   | <b>559</b>   | <b>27%</b> |
| 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%        |
| <b>Net income</b>                            | <b>318</b>   | <b>436</b>   | <b>37%</b> |
| 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%         |

Totals may not add up due to rounding

## Healthcare

| P&L Healthcare                        | Q4 2019      | Q4 2020      | % YoY       |
|---------------------------------------|--------------|--------------|-------------|
| <b>Net sales</b>                      | <b>1 800</b> | <b>1 738</b> | <b>-3%</b>  |
| Cost of sales                         | -441         | -428         | -3%         |
| thereof: intangibles amortization     | -1           | -1           | -21%        |
| <b>Gross profit</b>                   | <b>1 359</b> | <b>1 310</b> | <b>-4%</b>  |
| 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%          |
| <b>EBIT</b>                           | <b>351</b>   | <b>305</b>   | <b>-13%</b> |
| Depreciation and amortization         | 190          | 128          | -33%        |
| <b>EBITDA</b>                         | <b>541</b>   | <b>433</b>   | <b>-20%</b> |
| Adjustments in EBITDA                 | 20           | 92           | >100%       |
| <b>EBITDA pre</b>                     | <b>561</b>   | <b>525</b>   | <b>-6%</b>  |

Totals may not add up due to rounding

## Life Science

| P&L Life Science                      | Q4 2019      | Q4 2020      | % YoY      |
|---------------------------------------|--------------|--------------|------------|
| <b>Net sales</b>                      | <b>1 783</b> | <b>2 030</b> | <b>14%</b> |
| Cost of sales                         | -771         | -867         | 12%        |
| thereof: intangibles amortization     | -15          | -13          | -12%       |
| <b>Gross profit</b>                   | <b>1 012</b> | <b>1 163</b> | <b>15%</b> |
| 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%        |
| <b>EBIT</b>                           | <b>329</b>   | <b>451</b>   | <b>37%</b> |
| Depreciation and amortization         | 204          | 199          | -3%        |
| <b>EBITDA</b>                         | <b>534</b>   | <b>650</b>   | <b>22%</b> |
| Adjustments in EBITDA                 | 15           | 3            | -78%       |
| <b>EBITDA pre</b>                     | <b>549</b>   | <b>653</b>   | <b>19%</b> |

Totals may not add up due to rounding

## Performance Materials

| P&L Performance Materials             | Q4 2019    | Q4 2020    | % YoY           |
|---------------------------------------|------------|------------|-----------------|
| <b>Net sales</b>                      | <b>798</b> | <b>831</b> | <b>4%</b>       |
| Cost of sales                         | -477       | -501       | 5%              |
| thereof: intangibles amortization     | -41        | -34        | -18%            |
| <b>Gross profit</b>                   | <b>321</b> | <b>330</b> | <b>3%</b>       |
| Marketing and selling expenses        | -136       | -136       | 0%              |
| thereof: intangibles amortization     | -47        | -45        | -3%             |
| Administration                        | -39        | -41        | 3%              |
| Impairment losses / reversals (IFRS9) | 0          | 0          | >100%           |
| Other operating income/expenses       | -58        | -7         | -89%            |
| Research and development              | -73        | -68        | -6%             |
| <b>EBIT</b>                           | <b>14</b>  | <b>79</b>  | <b>&gt;100%</b> |
| Depreciation and amortization         | 135        | 149        | 10%             |
| <b>EBITDA</b>                         | <b>149</b> | <b>228</b> | <b>53%</b>      |
| Adjustments in EBITDA                 | 94         | 18         | -81%            |
| <b>EBITDA pre</b>                     | <b>243</b> | <b>246</b> | <b>1%</b>       |

Totals may not add up due to rounding

## Consensus deviation

|                              | Actual   | Consensus<br>(mean)     | Difference to<br>estimate |
|------------------------------|----------|-------------------------|---------------------------|
| [€m]                         | Q4 2020A | 08.02.2021<br>Q4 2020 E | %                         |
| <b>Group</b>                 |          |                         |                           |
| 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%                     |
| <b>Healthcare</b>            |          |                         |                           |
| 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                    |
| <b>Life Science</b>          |          |                         |                           |
| 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                    |
| <b>Performance Materials</b> |          |                         |                           |
| 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                    |
| <b>Corporate/Other</b>       |          |                         |                           |
| EBITDA pre                   | -179.1   | -135.1                  | 32.6%                     |

|                              | Actual   | Consensus<br>(mean)     | Difference to<br>estimate |
|------------------------------|----------|-------------------------|---------------------------|
| [€m]                         | FY 2020A | 08.02.2021<br>FY 2020 E | (mean)<br>%               |
| <b>Group</b>                 |          |                         |                           |
| 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%                     |
| <b>Healthcare</b>            |          |                         |                           |
| 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                    |
| <b>Life Science</b>          |          |                         |                           |
| 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                    |
| <b>Performance Materials</b> |          |                         |                           |
| 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                    |
| <b>Corporate/Other</b>       |          |                         |                           |
| EBITDA pre                   | -495.1   | -451.1                  | 9.8%                      |