GROWTH ACROSS ALL BUSINESSES & REGIONS

Q3 2015 results

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Bernd Reckmann, Member of the Executive Board & CEO Life Science and Performance Materials
Rico Wiedenbruch, Head of Integrated Circuit Materials

November 12, 2015
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Risks and uncertainties relating to the proposed transaction with Sigma-Aldrich Corporation ("Sigma-Aldrich") include, but are not limited to: the risk that regulatory or other approvals required for the transaction are not obtained or are obtained subject to conditions that are not anticipated; competitive responses to the transaction; litigation relating to the transaction; uncertainty of the expected financial performance of the combined company following completion of the proposed transaction; the ability of Merck KGaA, Darmstadt, Germany, to achieve the cost-savings and synergies contemplated by the proposed transaction within the expected time frame; the ability of Merck KGaA, Darmstadt, Germany, to promptly and effectively integrate the businesses of Sigma-Aldrich and Merck KGaA, Darmstadt, Germany; the effects of the business combination of Merck KGaA, Darmstadt, Germany, and Sigma-Aldrich, including the combined company’s future financial condition, operating results, strategy and plans; the implications of the proposed transaction on certain employee benefit plans of Merck KGaA, Darmstadt, Germany, and Sigma-Aldrich; and disruption from the proposed transaction making it more difficult to maintain relationships with customers, employees or suppliers.

Additional risks and uncertainties include, but are not limited to: the risks of more restrictive regulatory requirements regarding drug pricing, reimbursement and approval; the risk of stricter regulations for the manufacture, testing and marketing of products; the risk of destabilization of political systems and the establishment of trade barriers; the risk of a changing marketing environment for multiple sclerosis products in the European Union; the risk of greater competitive pressure due to biosimilars; the risks of research and development; the risks of discontinuing development projects and regulatory approval of developed medicines; the risk of a temporary ban on products/production facilities or of non-registration of products due to non-compliance with quality standards; the risk of an import ban on products to the United States due to an FDA warning letter; the risks of dependency on suppliers; risks due to product-related crime and espionage; risks in relation to the use of financial instruments; liquidity risks; counterparty risks; market risks; risks of impairment on balance sheet items; risks from pension obligations; risks from product-related and patent law disputes; risks from antitrust law proceedings; risks from drug pricing by the divested Generics Group; risks in human resources; risks from e-crime and cyber attacks; risks due to failure of business-critical information technology applications or to failure of data center capacity; environmental and safety risks; unanticipated contract or regulatory issues; a potential downgrade in the rating of the indebtedness of Merck KGaA, Darmstadt, Germany, or Sigma-Aldrich; downward pressure on the common stock price of Merck KGaA, Darmstadt, Germany, or Sigma-Aldrich and its impact on goodwill impairment evaluations; the impact of future regulatory or legislative actions; and the risks and uncertainties detailed by Sigma-Aldrich with respect to its business as described in its reports and documents filed with the U.S. Securities and Exchange Commission (the "SEC").

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Agenda

01 Executive summary

02 Financial review

03 Excursus: Integrated Circuit Materials

04 Outlook and guidance
Highlights

Operations

- Organic growth in all businesses and regions
- Sigma: EU approval of transaction granted – closing scheduled for Nov. 18, 2015
- Avelumab: Phase III in 1st line NSCLC initiated; Orphan Drug and Fast Track designation for Merkel cell carcinoma

Financials

- Sales growth of 6.8% in Q3 2015
- EBITDA pre increases by 10.2% to €944 m
- FY 2015 guidance lifted for EBITDA pre
Sales and EBITDA pre growth driven by all businesses

### Q3 2015 YoY net sales

<table>
<thead>
<tr>
<th></th>
<th>Organic</th>
<th>Currency</th>
<th>Portfolio</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>1.9%</td>
<td>-0.5%</td>
<td>0.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Life Science</td>
<td>8.1%</td>
<td>6.8%</td>
<td>0.0%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Performance Materials</td>
<td>2.2%</td>
<td>11.2%</td>
<td>0.0%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Group</td>
<td>3.3%</td>
<td>3.5%</td>
<td>0.0%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

### Q3 YoY EBITDA pre contributors [€ m]

<table>
<thead>
<tr>
<th></th>
<th>Q3 2014</th>
<th>Healthcare</th>
<th>Life Science</th>
<th>Performance Materials</th>
<th>Corporate &amp; Other</th>
<th>Q3 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>857</td>
<td>+40</td>
<td>+41</td>
<td>+55</td>
<td>-48</td>
<td>944</td>
</tr>
</tbody>
</table>

- Fertility and General Medicine more than offsetting Rebif decline
- Life Science benefits from strong performance of Process Solutions
- Performance Materials driven by FX tailwinds, LC and OLED volume growth
- Healthcare benefits from organic growth and release of R&D termination provision
- Life Science increase supported by strong organic performance
- Performance Materials reflects FX benefits and favorable LC product mix
- Hedging losses and branding initiative burden Corporate EBITDA pre

Acronyms: LC = liquid crystals, OLED = organic light emitting diode
Totals may not add up due to rounding
Asia-Pacific largest region – China with strong growth momentum

Group Q3 2015 net sales by region [in %]

- North America (NA) 21%
- Latin America (LatAm) 9%
- Middle East & Africa (MEA) 4%
- Asia-Pacific (APAC) 34%
- Europe (EU) 32%
All regions contribute to organic growth

Regional development of net sales Q3 2015 [€ m]

Regional development

• Growth in EU and NA predominantly driven by Life Science and Fertility
• Organic growth in Asia-Pacific coming from China (esp. Fertility, GM)
• LatAm organically softer due to macro challenges, nominal decline mainly from change of VEN* FX rate

*Venezuelan Bolivar Total may not add up due to rounding
Q3 2015 overview

Q3 2015 – key figures

<table>
<thead>
<tr>
<th></th>
<th>Q3 2014</th>
<th>Q3 2015</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>2,921</td>
<td>3,120</td>
<td>6.8%</td>
</tr>
<tr>
<td>EBITDA pre</td>
<td>857</td>
<td>944</td>
<td>10.2%</td>
</tr>
<tr>
<td>Margin (in % of net sales)</td>
<td>29.3%</td>
<td>30.3%</td>
<td></td>
</tr>
<tr>
<td>EPS pre</td>
<td>1.15</td>
<td>1.32</td>
<td>14.8%</td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>726</td>
<td>872</td>
<td>20.1%</td>
</tr>
</tbody>
</table>

Comments – Q3 2015

• EBITDA pre increase driven by good organic performance, release of R&D termination provision and FX
• EPS pre and operating cash flow increase mainly due to higher EBITDA pre
• Net cash position reflects strong track record of deleveraging
Q3 2015 – good quarter with strong earnings growth

Q3 2015 – reported results

<table>
<thead>
<tr>
<th>[€m]</th>
<th>Q3 2014</th>
<th>Q3 2015</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT</td>
<td>429</td>
<td>564</td>
<td>31.4%</td>
</tr>
<tr>
<td>Financial result</td>
<td>-57</td>
<td>-81</td>
<td>42.3%</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>372</td>
<td>482</td>
<td>29.8%</td>
</tr>
<tr>
<td>Income tax</td>
<td>-122</td>
<td>-117</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Tax ratio [in %]</td>
<td>32.9%</td>
<td>24.2%</td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>249</td>
<td>364</td>
<td>46.3%</td>
</tr>
<tr>
<td>EPS [€]</td>
<td>0.57</td>
<td>0.84</td>
<td>47.4%</td>
</tr>
</tbody>
</table>

Comments – Q3 2015

- Strong EBIT increase reflects EBITDA pre progression; last year with higher D&A and exceptionals
- Financial result includes higher interest expenses from Sigma financing
- Tax ratio last year contained taxable gain from Sigma FX hedging
Healthcare: Slight sales growth driven by Fertility and General Medicine

Healthcare P&L

<table>
<thead>
<tr>
<th>[€m]</th>
<th>Q3 2014</th>
<th>Q3 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>1,684</td>
<td>1,708</td>
</tr>
<tr>
<td>Marketing and selling</td>
<td>-625</td>
<td>-683</td>
</tr>
<tr>
<td>Administration</td>
<td>-62</td>
<td>-60</td>
</tr>
<tr>
<td>Research and development</td>
<td>-416</td>
<td>-322</td>
</tr>
<tr>
<td>EBIT</td>
<td>279</td>
<td>349</td>
</tr>
<tr>
<td>EBITDA</td>
<td>481</td>
<td>538</td>
</tr>
<tr>
<td>EBITDA pre</td>
<td>497</td>
<td>537</td>
</tr>
</tbody>
</table>

Margin (in % of net sales)

<table>
<thead>
<tr>
<th></th>
<th>Q3 2014</th>
<th>Q3 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>Currency</td>
<td>-0.5%</td>
<td></td>
</tr>
<tr>
<td>Portfolio</td>
<td>0.0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29.5%</td>
<td>31.5%</td>
</tr>
</tbody>
</table>

Comments

- Sales growth impacted by change of Venezuelan FX rate and softer Latin American currencies
- Rebif organically lower as volume decline mainly due to competition from orals is only partially offset by price increases in the U.S.
- Erbitux burdened by EU pricing and lower volumes in LatAm
- Fertility with strong growth mainly driven by demand from China
- General Medicine remains largest contributor to organic growth
- LY’s R&D impacted by terminations; provision release in 2015 (€31 m)
- EBITDA pre expansion reflects organic growth & release of provision

Net sales bridge

Q3 2015 share of group net sales

55% Healthcare
Life Science: All businesses contribute to strong organic performance

Life Science P&L

<table>
<thead>
<tr>
<th></th>
<th>Q3 2014</th>
<th>Q3 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>661</td>
<td>759</td>
</tr>
<tr>
<td>Marketing and selling</td>
<td>-209</td>
<td>-238</td>
</tr>
<tr>
<td>Administration</td>
<td>-26</td>
<td>-30</td>
</tr>
<tr>
<td>Research and development</td>
<td>-42</td>
<td>-45</td>
</tr>
<tr>
<td>EBIT</td>
<td>72</td>
<td>97</td>
</tr>
<tr>
<td>EBITDA</td>
<td>150</td>
<td>180</td>
</tr>
<tr>
<td>EBITDA pre</td>
<td>161</td>
<td>201</td>
</tr>
<tr>
<td>Margin (in % of net sales)</td>
<td>24.3%</td>
<td>26.5%</td>
</tr>
</tbody>
</table>

Comments

- Process Solutions remains main organic growth contributor driven by strong performance in single-use & virus filtration
- Solid organic growth in Lab Solutions led by U.S. and Europe especially in biomonitoring and lab water products
- Bioscience sees continued soft demand for reagents & antibodies offset by sound volumes of cell biology and cell culture systems
- Margin progression driven by organic performance, manufacturing efficiencies, favorable product mix and pricing

Net sales bridge

Q3 2015 share of group net sales
**Performance Materials: All businesses yield profitable growth**

### Performance Materials P&L

<table>
<thead>
<tr>
<th></th>
<th>Q3 2014</th>
<th>Q3 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>576</td>
<td>653</td>
</tr>
<tr>
<td>Marketing and selling</td>
<td>-45</td>
<td>-54</td>
</tr>
<tr>
<td>Administration</td>
<td>-18</td>
<td>-16</td>
</tr>
<tr>
<td>Research and development</td>
<td>-46</td>
<td>-50</td>
</tr>
<tr>
<td>EBIT</td>
<td>152</td>
<td>233</td>
</tr>
<tr>
<td>EBITDA</td>
<td>218</td>
<td>292</td>
</tr>
<tr>
<td>EBITDA pre</td>
<td>243</td>
<td>298</td>
</tr>
</tbody>
</table>

*Margin (in % of net sales)*

- 42.2%
- 45.5%

### Comments

- Strong increase in sales reflecting FX tailwinds
- Further shift towards innovative liquid crystal technologies (esp. UB-FFS) supports volumes and profitability
- Display industry supply chain inventories remain at high level
- OLED and ICM* support growth with sound volume development
- Pigments slightly growing
- Profitability at high level mainly driven by FX and favorable product mix

### Net sales bridge

- €576 m
- 2.2%
- 11.2%
- 0.0%
- €653 m

### Q3 2015 share of group net sales

- 21%
- Performance Materials

*Integrated Circuits Materials*
Balance sheet reflects Sigma financing measures

- Issuance of USD & EUR bonds impacts cash and debt
- FX development accounts for ~€1 bn total balance sheet increase (~€700 m in equity)
## Strong operating cash flow reflecting cash generating nature of businesses

### Q3 2015 – cash flow statement

<table>
<thead>
<tr>
<th></th>
<th>Q3 2014</th>
<th>Q3 2015</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit after tax</td>
<td>250</td>
<td>366</td>
<td>116</td>
</tr>
<tr>
<td>D&amp;A</td>
<td>353</td>
<td>337</td>
<td>-16</td>
</tr>
<tr>
<td>Changes in provisions</td>
<td>89</td>
<td>11</td>
<td>-78</td>
</tr>
<tr>
<td>Changes in other assets/liabilities</td>
<td>115</td>
<td>153</td>
<td>38</td>
</tr>
<tr>
<td>Other operating activities</td>
<td>-4</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Changes in working capital</td>
<td>-77</td>
<td>-7</td>
<td>70</td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>726</td>
<td>872</td>
<td>146</td>
</tr>
<tr>
<td>Investing cash flow</td>
<td>-364</td>
<td>418</td>
<td>782</td>
</tr>
<tr>
<td>thereof Capex on PPE</td>
<td>-128</td>
<td>-130</td>
<td>-2</td>
</tr>
<tr>
<td>Financing cash flow</td>
<td>90</td>
<td>2,217</td>
<td>2,127</td>
</tr>
</tbody>
</table>

### Cash flow drivers

- Last year’s D&A included amortization for discontinued R&D project
- In 2014 provision built-up for R&D terminations, partial release in 2015
- Investing cash flow includes proceeds from Sigma FX hedging, payment of Intrexon upfront & cash management
- €2.1 bn eurobond issuance in August drives financing cash flow

Totals may not add up due to rounding
EXCURSUS: INTEGRATED CIRCUIT MATERIALS
**Integrated Circuit Materials – enabling solutions for the semiconductor market and adjacent industries**

<table>
<thead>
<tr>
<th>Dielectric Materials</th>
<th>Lithography Materials</th>
<th>Silica Materials</th>
<th>IC Process Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Spin-on silicon-based materials forming electrical insulation layers inside the microchips, displacing chemical vapor deposition (Spinfil®)</td>
<td>• Diverse portfolio of bespoke materials that improve resolution and performance and reduce costs in the IC lithography process</td>
<td>• Colloidal silica used in chemical mechanical planarization (CMP), substrate polishing and industrial applications (Klebosol®)</td>
<td>• Removers, developers and other solvents as well as polyimide raw materials</td>
</tr>
</tbody>
</table>
We have a strong position and will benefit further from complex technological advances and underlying market trends

Market drivers and technological trends

- **Miniaturization**: Devices are becoming smaller with better performance
  - Need for enabling materials to reduce size (Moore’s law)
- **Mobility**: Everyone is continuously connected without direct power supply
  - More chips needed for local energy production
  - Energy storage → smaller batteries with higher density
- **Internet of Things**: Everything is continuously connected
  - More gadgets and devices that include chips
  - Increasing amount of communication and sensor chips
- **Big Data**: Increasing need for intelligent data storage
  - Switch from hard disk drives (HDD) to solid state drives (SSD)

Selected competitors

- Tokyo Ohka Kogyo
- Nissan Chemicals
- Dow Electronic Materials
- JSR

Feature sizes develop as predicted by Moore’s law
Integrated Circuit Materials develops dedicated solutions for customer challenges, enabling cutting edge innovation

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PATTERN COLLAPSE</strong></td>
<td><strong>FIRM® RINSE MATERIALS</strong></td>
</tr>
<tr>
<td><img src="image1" alt="Pattern Collapse" /></td>
<td>As lines get narrower and closer together in advanced chip generation, they tend to “stick” due to surface tension.</td>
</tr>
<tr>
<td><strong>LITHOGRAPHY LIMITATION</strong></td>
<td><strong>DIRECTED SELF ASSEMBLY (DSA)</strong></td>
</tr>
<tr>
<td><img src="image2" alt="Lithography Limitation" /></td>
<td>Block Copolymer can generate small lines or contact holes by self-assembly. This allows miniaturization without expensive new equipment.</td>
</tr>
<tr>
<td><strong>WIDE FEATURES</strong></td>
<td><strong>RELACS® SHRINK MATERIALS</strong></td>
</tr>
<tr>
<td><img src="image3" alt="Wide Features" /></td>
<td>Shrink materials “shrink” the gap between lines and, hence, allow the manufacture of narrower features otherwise not possible.</td>
</tr>
</tbody>
</table>
Strategic rationale

- Broad and complementary product fit in attractive segments
- Expanding global reach and scale
- Leveraging operational excellence to deliver superior value to customers

Integration

- New organizational structure designed (Applied, Research and Process Solutions)
- Top 2 management levels already appointed
- Focus on seamless integration for customers and the organization

Financials

- Confirming synergies of €260 m p.a., realized by the third full year after closing
- Sigma to be consolidated for 43 days in 2015
Sigma-Aldrich – timeline update

- **Anti-trust**
  - Sigma shareholder approval (Dec. 5, 2014)
  - U.S. and other antitrust approvals (U.S. - Dec. 23, 2014)
  - Antitrust approvals from EU, China, Japan and Israel (June 15, 2015)
  - Antitrust approval from South Korea and Brazil
  - Asset sale to Honeywell; EU to approve transaction

- **Announcement**
  - (Sept. 22, 2014)

- **Financing**
  - Issuance of €1.5 bn EU hybrid bond (Dec. 8, 2014)
  - Issuance of $4 bn bond (March 16, 2015)
  - Issuance of €2.1 bn eurobond (August 27, 2015)

- **EU approval of conditions**
  - Nov. 10, 2015
  - Filing of “Certificate of Merger”
  - Trigger all cash transfers & obtain Sigma shares
  - Prepare delisting in accordance with NASDAQ & SEC
  - +5 business days

- **Closing**
  - Nov. 18, 2015
  - +10 days

- **Delisting**

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1Russia, Serbia, Ukraine, Taiwan, South Africa; 2Subject to conditions and commitments as agreed with the EU
Full-year 2015 guidance upgraded and updated for Sigma

Guidance for 2015, including Sigma-Aldrich for 43 days

**Net sales:** $\sim €12.6 - 12.8$ bn  
thereof Sigma: $\sim €300$ m

**EBITDA pre:** $\sim €3,580 - 3,650$ m  
thereof Sigma: $\sim €80 - 95$ m

**EPS pre:** $\sim €4.80 - 4.95$  
thereof Sigma: $\sim €0.10 - 0.15$
2015 business sector guidance without Sigma-Aldrich

**Healthcare**
- Net sales: Organically stable
- EBITDA pre: ~ €1.93 – 2.0 bn

**Life Science**
- Net sales: Solid organic growth
- EBITDA pre: ~ €0.76 – 0.78 bn

**Performance Materials**
- Net sales: Slight organic growth
- EBITDA pre: ~ €1.1 – 1.14 bn

*Without Sigma-Aldrich*
## Additional financial guidance 2015

### Further financial details

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group royalty, license and commission income in 2015</td>
<td>~€300 m</td>
</tr>
<tr>
<td>Corporate &amp; Other EBITDA pre</td>
<td>~€340 – ~360 m</td>
</tr>
<tr>
<td>Underlying tax ratio</td>
<td>~23% to 25%</td>
</tr>
<tr>
<td>Capex on PPE</td>
<td>~€550 m</td>
</tr>
<tr>
<td>Hedging/USD assumption</td>
<td>2015 &amp; 2016 hedge rate ~25-30%</td>
</tr>
<tr>
<td></td>
<td>at EUR/USD ~1.19 to 1.24</td>
</tr>
<tr>
<td>2015 Ø EUR/USD assumption</td>
<td>~1.10 – 1.15</td>
</tr>
</tbody>
</table>
Solid structure to finance Sigma-Aldrich transaction

Financing structure as of September 30, 2015

Total: US$17.4 bn

Use of funds

Source of funds

Cash
~US$2.4 bn

Loan A
(Bridge)
~US$11 bn
...of which a total
~US$8.5 bn replaced
as of Sept. 30, 2015

Loan B
(Term Loan)
approx. US$4 bn

Update on funding structure

• Acquisition 100% cash & debt financed
• The bridge has almost completely been replaced through various capital markets transactions
• Accomplished transactions:
  • Dec. 2014: ~US$1.9 bn EUR-hybrid bond
  • March 2015: US$4 bn USD bond
  • August 2015: ~US$2.6 bn EUR bond
• Strong combined cash flows available for rapid deleveraging
• Strong investment grade rating maintained
• Expected financing costs well below 2%
Well-balanced maturity profile reflects Sigma-Aldrich related capital markets transactions

Maturity profile as of Sept. 30, 2015 [in €m]

Additional loan arrangements exist that enable flexible and swift deleveraging
Growth driven by FX, AZ and organic performance of all segments

9M 2015 YoY net sales

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</tr>
<tr>
<td>Life Science</td>
<td>5.9%</td>
<td>9.3%</td>
<td>-0.3%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Performance Materials</td>
<td>1.2%</td>
<td>14.1%</td>
<td>13.7%</td>
<td>28.9%</td>
</tr>
<tr>
<td>Group</td>
<td>2.3%</td>
<td>7.5%</td>
<td>2.4%</td>
<td>12.2%</td>
</tr>
</tbody>
</table>

9M YoY EBITDA pre contributors [€ m]

- Rebirf and Erbitux declines more than offset by other franchises driving organic growth of Healthcare
- Life Science benefits from positive market trends (esp. biopharma)
- Performance Materials driven by FX tailwinds, AZ and volume growth
- Healthcare affected by Humira royalty loss and Rebirf decline
- Increase in Life Science driven by good organic growth and positive mix
- Performance Materials contains FX benefits, AZ and positive product mix
- Corporate EBITDA pre reflects hedging losses

Totals may not add up due to rounding
9M 2015: Overview

### 9M 2015 – key figures

<table>
<thead>
<tr>
<th></th>
<th>9M 2014</th>
<th>9M 2015</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net sales</strong></td>
<td>8,364</td>
<td>9,381</td>
<td>12.2%</td>
</tr>
<tr>
<td><strong>EBITDA pre</strong></td>
<td>2,509</td>
<td>2,696</td>
<td>7.5%</td>
</tr>
<tr>
<td>Margin (in % of net sales)</td>
<td>30.0%</td>
<td>28.7%</td>
<td></td>
</tr>
<tr>
<td><strong>EPS pre</strong></td>
<td>3.46</td>
<td>3.74</td>
<td>8.1%</td>
</tr>
<tr>
<td><strong>Operating cash flow</strong></td>
<td>1,564</td>
<td>1,477</td>
<td>-5.6%</td>
</tr>
</tbody>
</table>

### 9M 2015

- **Sales increase mainly driven by FX, AZ and organic performance**
- **EBITDA pre increases, while margin softens due to royalty loss and Rebif decline**
- **Operating cash flow burdened by higher tax and interest payments**
- **Net cash position driven by operating cash flow and cash-in from realization of Sigma FX hedging instrument**
- **Working capital increase mainly attributable to organic growth and FX**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net debt</strong></td>
<td>559</td>
<td>-1,304</td>
<td>n.m.</td>
</tr>
<tr>
<td><strong>Working capital</strong></td>
<td>2,356</td>
<td>2,614</td>
<td>10.9%</td>
</tr>
<tr>
<td><strong>Employees</strong></td>
<td>39,639</td>
<td>40,339</td>
<td>1.8%</td>
</tr>
</tbody>
</table>
9M 2015 – solid reported figures

9M 2015 YoY – reported results

<table>
<thead>
<tr>
<th></th>
<th>9M 2014</th>
<th>9M 2015</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT</td>
<td>1,338</td>
<td>1,545</td>
<td>15.5%</td>
</tr>
<tr>
<td>Financial result</td>
<td>-142</td>
<td>-223</td>
<td>56.7%</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>1,196</td>
<td>1,322</td>
<td>10.6%</td>
</tr>
<tr>
<td>Income tax</td>
<td>-313</td>
<td>-326</td>
<td>4.0%</td>
</tr>
<tr>
<td>Tax ratio (%)</td>
<td>26.2%</td>
<td>24.6%</td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>877</td>
<td>989</td>
<td>12.7%</td>
</tr>
<tr>
<td>EPS (€)</td>
<td>2.02</td>
<td>2.27</td>
<td>12.4%</td>
</tr>
</tbody>
</table>

Reported results

- EBIT reflects increased EBITDA pre and higher exceptionals last year
- Financial result impacted by higher interest expenses for Sigma financing (hybrid, USD and EUR bonds)
- Tax ratio in line with guidance range of 23-25%
Healthcare: Stability in base business and investments in future growth

9M 2015 YoY net sales

<table>
<thead>
<tr>
<th></th>
<th>9M 2014</th>
<th>9M 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>4,904</td>
<td>5,197</td>
</tr>
<tr>
<td>Marketing and selling</td>
<td>-1,894</td>
<td>-2,073</td>
</tr>
<tr>
<td>Administration</td>
<td>-184</td>
<td>-195</td>
</tr>
<tr>
<td>Research and development</td>
<td>-1,035</td>
<td>-1,027</td>
</tr>
<tr>
<td>EBIT</td>
<td>828</td>
<td>884</td>
</tr>
<tr>
<td>EBITDA</td>
<td>1,431</td>
<td>1,448</td>
</tr>
<tr>
<td>EBITDA pre Margin (in % of net sales)</td>
<td>1,470</td>
<td>1,478</td>
</tr>
</tbody>
</table>

Net sales bridge

€4,904 m 1.2% 4.7% 0.0% €5,197 m

9M 2015 share of group net sales

56% Healthcare

Comments

- Rebif decline due to competition partially mitigated by U.S. pricing
- Erbitux soft, as mandatory price cuts in Europe & lower private sector sales in Brazil outweigh volume increase in China
- General Medicine and Fertility remain key growth drivers
- Consumer Health with strong organic growth as new marketing approach fuels demand - especially for Neurobion in Latin America
- Investments in growth markets and FX drive higher M&S spending
- Steady ramp-up of avelumab program and other focus programs as well as promising earlier-stage pipeline candidates
- Lower profitability reflects investments and unfavorable product mix

Totals may not add up due to rounding
### Healthcare organic growth by franchise/product

**Q3 2015 organic sales growth [%] by key products [€ m]**

<table>
<thead>
<tr>
<th>Franchise/Product</th>
<th>Q3 2015</th>
<th>Q3 2014</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rebif</td>
<td>468</td>
<td>466</td>
<td>-7%</td>
</tr>
<tr>
<td>ERBITUX CETUXIMAB</td>
<td>223</td>
<td>232</td>
<td>-2%</td>
</tr>
<tr>
<td>Consumer Health</td>
<td>200</td>
<td>204</td>
<td>+6%</td>
</tr>
<tr>
<td>GONAL-f</td>
<td>167</td>
<td>147</td>
<td>+9%</td>
</tr>
<tr>
<td>Concor</td>
<td>106</td>
<td>117</td>
<td>-1%</td>
</tr>
<tr>
<td>Glucophage</td>
<td>103</td>
<td>104</td>
<td>+12%</td>
</tr>
</tbody>
</table>

**9M 2015 organic sales growth [%] by key products [€ m]**

<table>
<thead>
<tr>
<th>Franchise/Product</th>
<th>9M 2015</th>
<th>9M 2014</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rebif</td>
<td>1,358</td>
<td>1,389</td>
<td>-12%</td>
</tr>
<tr>
<td>ERBITUX CETUXIMAB</td>
<td>661</td>
<td>670</td>
<td>-3%</td>
</tr>
<tr>
<td>Consumer Health</td>
<td>644</td>
<td>569</td>
<td>+11%</td>
</tr>
<tr>
<td>GONAL-f</td>
<td>508</td>
<td>461</td>
<td>+4%</td>
</tr>
<tr>
<td>Concor</td>
<td>359</td>
<td>326</td>
<td>+8%</td>
</tr>
<tr>
<td>Glucophage</td>
<td>329</td>
<td>276</td>
<td>+21%</td>
</tr>
</tbody>
</table>

*Totals may not add up due to rounding*
Rebif: Defending the franchise – competitive pressure in the U.S. and Europe

Rebif sales evolution

North America

Europe

[€ m]

Reported results

- Rebif sales of €468 m in Q3 2015 benefit from FX tailwinds (USD)
- Organic decline of -7.0% due to lower volumes mitigated by U.S. pricing
- U.S. and European volume decline mainly due to competition from orals
- U.S. price increase in September supports performance

Q3 drivers
- Price
- Volume
- FX

Q3 drivers
-2.8% org.

-9.5% org.

- Price
- Volume
Erbitux: A challenging market environment

Erbitux sales by region

Erbitux performance

- Sales decrease to €223m due to negative pricing and FX
- Europe impacted by mandatory price cuts in various countries and increasing competition
- Latin America burdened by decline in private sector sales in Brazil
- APAC organically lower due to channel destocking outweighing strong volume growth in China
Strong growth in Fertility, General Medicine and Endocrinology

Q3 drivers

- Organic growth of Fertility driven by all major regions, especially China
- Endocrinology with strong growth across all regions and products; Saizen with market share gains in EU
- General Medicine sales affected by FX, organic performance remains good
- Thyroid products post sound volume development in Asia and Europe
- Glucophage shows ongoing strong growth, benefiting from Russia repatriation and supply issues LY

Sales evolution

Fertility

[€ m]

- Organic growth of Fertility driven by all major regions, especially China

Endocrinology

[€ m]

- Endocrinology with strong growth across all regions and products; Saizen with market share gains in EU

General Medicine*

[€ m]

- General Medicine sales affected by FX, organic performance remains good
- Thyroid products post sound volume development in Asia and Europe
- Glucophage shows ongoing strong growth, benefiting from Russia repatriation and supply issues LY

* includes "Cardiometabolic Care & General Medicine and Others*
Clinical pipeline

Phase I

Tepotinib – c-Met kinase inhibitor
Solid tumors
Evofosfamide (TH-302) – Hypoxia-activated prodrug
Hematologic malignancies and solid tumors
M2698 – p70S6K & Akt inhibitor
Solid tumors
M3814 – DNA-PK inhibitor
Solid tumors
Beigene-283 – BRAF inhibitor
Solid tumors
Beigene-290 – PARP inhibitor
Solid tumors
Avelumab1 – Anti-PD-L1 mAb
Solid tumors
M9241 (NHS-IL12)2 – Cancer immunotherapy
Solid tumors
M7824 – Bifunctional immunotherapy
Solid tumors
M1095 (ALX-0761) – Anti-IL-17 A/F nanobody
Psoriasis
M2951 – BTK inhibitor
Healthy volunteers

Phase II

M2736 (ATX-MS-1467) – Immune tolerizing agent
Multiple sclerosis
Pimasertib – MEK inhibitor
Melanoma
Evofosfamide (TH-302) – Hypoxia-activated prodrug
Melanoma
Evofosfamide (TH-302) – Hypoxia-activated prodrug
Non-small cell lung cancer
Tepotinib – c-Met kinase inhibitor
Non-small cell lung cancer
Tepotinib – c-Met kinase inhibitor
Hepatocellular cancer
Avelumab1 – Anti-PD-L1 mAb
Merkel cell carcinoma
Sprifermin – Fibroblast growth factor 18
Osteoarthritis
Atacicept – Anti-Blys/anti-APRIL fusion protein
Systemic lupus erythematosus

Phase III

Evofosfamide (TH-302) – Hypoxia-activated prodrug
Soft tissue sarcoma
Evofosfamide (TH-302) – Hypoxia-activated prodrug
Pancreatic cancer
Avelumab1 – Anti-PD-L1 mAb
Non-small cell lung cancer 1L2
Avelumab1 – Anti-PD-L1 mAb
Non-small cell lung cancer 2L4

In registration

Cladribine Tablets5 – Lymphocyte targeting agent
Relapsing-remitting multiple sclerosis

Pipeline as of November 5, 2015
Pipeline products are under clinical investigation and have not been proven to be safe and effective.
There is no guarantee any product will be approved in the sought-after indication.

1Avelumab is the proposed International Non-proprietary Name (INN) for the anti-PD-L1 monoclonal antibody (previously known as MSB 0010718C);
2Sponsored by the National Cancer Institute (USA); 3First Line treatment; 4Second Line treatment
5As announced on September 11th, 2015 Merck KGaA, Darmstadt, Germany is preparing a regulatory submission to the European Medicines Agency

Neurodegenerative Diseases
Oncology
Immunology
Immuno-Oncology
Next catalysts for focus projects

- **Avelumab**
  - Initiate up to 6 registrational trials
  - Data readout Phase II mMCC
  - End 2015
  - H1 2016

- **Evofosfamide**
  - Pancreatic Cancer Phase III results
  - Soft Tissue Sarcoma Phase III results
  - End 2015
  - End 2015

- **Atacicept**
  - Data readout Phase II
  - H1 2016
Life Science: Good organic performance fueled by ongoing demand for Process Solutions products

9M 2015 YoY net sales

<table>
<thead>
<tr>
<th></th>
<th>9M 2014</th>
<th>9M 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>1,976</td>
<td>2,270</td>
</tr>
<tr>
<td>Marketing and selling</td>
<td>-625</td>
<td>-715</td>
</tr>
<tr>
<td>Administration</td>
<td>-81</td>
<td>-88</td>
</tr>
<tr>
<td>Research and development</td>
<td>-119</td>
<td>-139</td>
</tr>
<tr>
<td>EBIT</td>
<td>234</td>
<td>266</td>
</tr>
<tr>
<td>EBITDA</td>
<td>464</td>
<td>514</td>
</tr>
<tr>
<td>EBITDA pre</td>
<td>496</td>
<td>585</td>
</tr>
<tr>
<td>Margin (in % of net sales)</td>
<td>25.1%</td>
<td>25.8%</td>
</tr>
</tbody>
</table>

Comments

- Process Solutions drives divisional growth mainly due to strong demand from biopharma for single-use and purification products
- Lab Solutions with moderate organic growth especially in lab water consumables and biomonitoring
- Bioscience slightly positive as good development of protein detection systems offsets softness for reagents and antibodies
- Ongoing investments in R&D – several product launches in 2015
- EBITDA pre benefits from FX tailwinds and organic growth, partially offset by investments in marketing and selling

Net sales bridge

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>€1,976 m</td>
<td>5.9%</td>
<td>9.3%</td>
<td>-0.3%</td>
<td>€2,270 m</td>
</tr>
</tbody>
</table>

9M 2015 share of group net sales

24% Life Science

Totals may not add up due to rounding
Performance Materials: Healthy trends & strong FX tailwinds drive growth

9M 2015 YoY net sales

<table>
<thead>
<tr>
<th></th>
<th>9M 2014</th>
<th>9M 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>1,484</td>
<td>1,914</td>
</tr>
<tr>
<td>Marketing and selling</td>
<td>-130</td>
<td>-154</td>
</tr>
<tr>
<td>Administration</td>
<td>-41</td>
<td>-48</td>
</tr>
<tr>
<td>Research and development</td>
<td>-122</td>
<td>-145</td>
</tr>
<tr>
<td>EBIT</td>
<td>441</td>
<td>685</td>
</tr>
<tr>
<td>EBITDA</td>
<td>574</td>
<td>864</td>
</tr>
<tr>
<td>EBITDA pre</td>
<td>656</td>
<td>870</td>
</tr>
</tbody>
</table>

Margin (in % of net sales)

- 44.2% for 9M 2014
- 45.4% for 9M 2015

Comments

- Strong sales mainly reflect portfolio effect and FX tailwinds
- Liquid crystals volume trend remains largest contributor to growth
- Shift towards flagship technologies like PS-VA and UB-FFS amid shrinking TN-TFT market benefits product mix
- Pigments flat – growth in attractive focus markets is offset by volume decline in less profitable areas
- Integrated Circuit Materials supports organic performance with sound volume development especially in dielectric materials
- Increase in EBITDA pre driven by FX, AZ and positive product mix

Net sales bridge

9M 2015 share of group net sales

- Performance Materials: 20%
Operating cash flow burdened by tax payment for Pfizer upfront

9M 2015 – cash flow statement

<table>
<thead>
<tr>
<th>[€m]</th>
<th>9M 2014</th>
<th>9M 2015</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit after tax</td>
<td>883</td>
<td>997</td>
<td>114</td>
</tr>
<tr>
<td>D&amp;A</td>
<td>980</td>
<td>1,006</td>
<td>26</td>
</tr>
<tr>
<td>Changes in provisions</td>
<td>0</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Changes in other assets/liabilities</td>
<td>-67</td>
<td>-348</td>
<td>-281</td>
</tr>
<tr>
<td>Other operating activities</td>
<td>-8</td>
<td>-6</td>
<td>2</td>
</tr>
<tr>
<td>Changes in working capital</td>
<td>-224</td>
<td>-204</td>
<td>20</td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>1,564</td>
<td>1,477</td>
<td>-87</td>
</tr>
<tr>
<td>Investing cash flow</td>
<td>-497</td>
<td>2,670</td>
<td>3,167</td>
</tr>
<tr>
<td>thereof Capex*</td>
<td>-270</td>
<td>-297</td>
<td>-27</td>
</tr>
<tr>
<td>Financing cash flow</td>
<td>-758</td>
<td>4,331</td>
<td>5,089</td>
</tr>
</tbody>
</table>

Cash flow drivers

- D&A increase due to AZ
- Changes in provisions reflect higher pension & litigation provisions
- Higher tax and interest payments main drivers of changes in other assets/liabilities
- Investing cash flow contains cash-in from Sigma hedging instrument as well as sale of financial assets
- Financing cash flow impacted by Sigma financing and repayment of eurobond; LY reflects part of purchase of AZ

*only property, plant and equipment without intangibles
Totals may not add up due to rounding
## Exceptionals in Q3 2015

### Exceptionals in EBIT

<table>
<thead>
<tr>
<th></th>
<th>Q3 2014</th>
<th></th>
<th>Q3 2015</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exceptionals</td>
<td>thereof D&amp;A</td>
<td>Exceptionals</td>
<td>thereof D&amp;A</td>
</tr>
<tr>
<td>Healthcare</td>
<td>17</td>
<td>0</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>Life Science</td>
<td>11</td>
<td>0</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Performance Materials</td>
<td>25</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Corporate &amp; Other</td>
<td>26</td>
<td>4</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>4</td>
<td>44</td>
<td>0</td>
</tr>
</tbody>
</table>
## Exceptionals in 9M 2015

### Exceptionals in EBIT

<table>
<thead>
<tr>
<th>[€m]</th>
<th>9M 2014</th>
<th>9M 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exceptionals</td>
<td>thereof D&amp;A</td>
</tr>
<tr>
<td>Healthcare</td>
<td>43</td>
<td>4</td>
</tr>
<tr>
<td>Life Science</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>Performance Materials</td>
<td>81</td>
<td>0</td>
</tr>
<tr>
<td>Corporate &amp; Other</td>
<td>42</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>198</td>
<td>8</td>
</tr>
</tbody>
</table>

Totals may not add up due to rounding.
# Financial calendar

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 10, 2015</td>
<td>M³ - Meet Management</td>
</tr>
<tr>
<td>March 8, 2016</td>
<td>Q4 2015 Earnings release</td>
</tr>
<tr>
<td>April 29, 2016</td>
<td>Annual General Meeting</td>
</tr>
<tr>
<td>May 19, 2016</td>
<td>Q1 2016 Earnings release</td>
</tr>
</tbody>
</table>
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