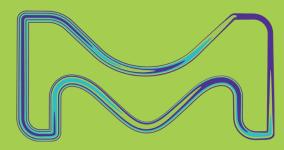
Top Line reflects covid-19 impact, bottom line well managed

Q2 2020 results

Presentation for the media

Stefan Oschmann, CEO Marcus Kuhnert, CFO

August 6, 2020







Disclaimer

Cautionary Note Regarding Forward-Looking Statements and financial indicators

This communication may include "forward-looking statements." Statements that include words such as "anticipate," "expect," "should," "would," "intend," "plan," "project," "seek," "believe," "will," and other words of similar meaning in connection with future events or future operating or financial performance are often used to identify forward-looking statements. All statements in this communication, other than those relating to historical information or current conditions, are forward-looking statements. We intend these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements in the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to a number of risks and uncertainties, many of which are beyond control of Merck KGaA, Darmstadt, Germany, which could cause actual results to differ materially from such statements.

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 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 and its impact on goodwill impairment evaluations as well as the impact of future regulatory or legislative actions.

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This presentation contains certain financial indicators such as EBITDA pre adjustments, net financial debt and earnings per share pre adjustments, which are not defined by International Financial Reporting Standards (IFRS). These financial indicators should not be taken into account in order to assess the performance of the Group in isolation or used as an alternative to the financial indicators presented in the consolidated financial statements and determined in accordance with IFRS. The figures presented in this statement have been rounded. This may lead to individual values not adding up to the totals presented.

Agenda

Executive summary

O2 Financial overview





Executive Summary



Highlights





Healthcare: Oncology and General Medicine growing despite pandemic, Fertility demand lowered as anticipated, recovery of Mavenclad[®] ramp-up started in June, Bavencio[®] U.S. launch in UC 1L; M5049 Covid-19 study initiated

Life Science: supporting fight against Covid-19, Process Solutions growing 20%, Research & Applied end markets continue to be negatively impacted but recovery started in June

Performance Materials: Semiconductor Solutions growing 12% organically not yet offsetting Display and Surface Solutions decline; Versum performance & integration on track Q2 organic sales: decline of -2.5%;

Q2 organic EBITDA pre: decline of -11.5% (against elevated comps)

EBITDA pre guidance slightly upgraded:

Net sales: €16.9 – 17.7 bn EBITDA pre: €4,450 – 4,850 m EPS pre: €5.60 – 6.25

Net financial debt to EBITDA pre at 2.8 on June 30, 2020 – continued focus on deleveraging

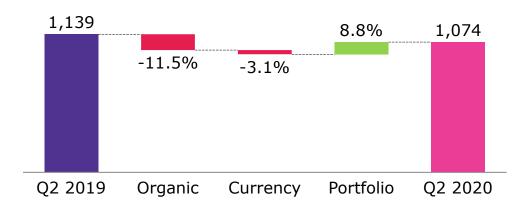


Versum portfolio effect and Process Solutions drive sales growth despite Covid-19 related organic decline in Healthcare and Performance Materials

Q2 YoY Net Sales	Organic	Currency	Portfolio	Total
Healthcare	-7.4%	-2.3%	-0.9%	-10.6%
Life Science	6.3%	-0.4%	0.0%	5.9%
Performance Materials	-13.7%	1.8%	50.1%	38.1%
Group	-2.5%	-0.9%	7.1%	3.7%

- Healthcare decline largely driven by Covid-19 impact on Fertility; Covid-19 also slowing down growth of Mavenclad[®] as well as General Medicine & Endocrinology (incl. destocking post Q1 pull-in)
- Process Solutions growing 20% and overcompensating flat Applied Solutions and declining Research Solutions where demand was impacted by Covid-19 related lockdowns
- Semiconductor Solutions organic growth continues at an even higher pace – however, Covid-19 impact on Display and Surface Solutions results in overall organic decline

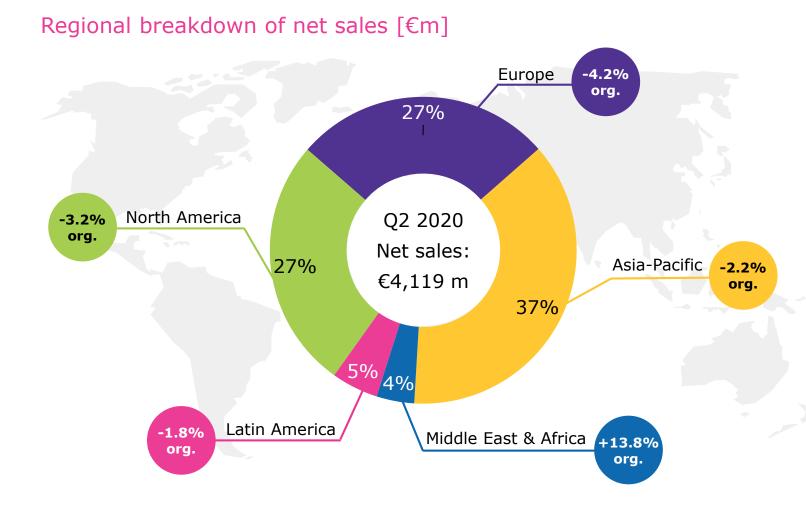
Q2 YoY EBITDA pre



- EBITDA pre declining faster than sales organically, largely due to non-recurring Healthcare income (~ €165 m higher in Q2 2019)
- Margin accretive Versum portfolio effect
- FX tailwinds from U.S. and Taiwan dollar did not offset currency headwinds from some emerging markets



All regions impacted by Covid-19; signs of recovery in APAC dragged down by Display Solutions & Fertility



Regional organic development

- Moderate decline in APAC as doubledigit growth in Life Science and Semiconductor Solutions offset a large part of Covid-19-driven decline in Display, Fertility and Surface Solutions
- In Europe Neurology & Immunology as well as Research Solutions were also declining due to Covid-19
- North America saw significant declines in Research Solutions and Fertility, also Applied Solutions slightly down
- Strong General Medicine & Endocrinology growth in MEA and LATAM (where it could not fully offset effects of Covid-19 in Fertility)



Financial





Q2 2020: Overview

Key figures

[€m]	Q2 2019	Q2 2020	Δ
Net sales	3,971	4,119	3.7%
EBITDA pre	1,139	1,074	-5.7%
Margin (in % of net sales)	28.7%	26.1%	-2.6pp
EPS pre	1.54	1.30	-15.6%
Operating cash flow	743	502	-32.4%
[€m]	Dec. 31, 2019	June 30, 2020	Δ

[€III]	Dec. 31, 2019	June 30, 2020	Δ
Net financial debt	12,363	12,560	1.6%
Working capital	3,944	4,474	13.4%
Employees	57,071	57,523	0.8%

- Versum portfolio effect and strong growth in Process Solutions drive sales above last year, despite materializing Covid-19 impact across most business units
- EBITDA pre and margin decline driven by lower non-recurring income components and under absorption of fixed costs due to lower sales from the Covid-19 impact
- EPS pre declining due to a lower financial result and EBITDA pre
- Lower operating cash flow driven primarily by GSK upfront payment in 2019 and higher working capital in 2020



Reported figures

Reported results

[€m]	Q2 2019	Q2 2020	Δ
EBIT	618	491	-20.6%
Financial result	-61	-102	67.4%
Profit before tax	557	389	-30.2%
Income tax	-136	-100	-26.7%
Effective tax rate	24.4%	25.7%	1.2pp
Net income	471	290	-38.5%
EPS (€)	1.08	0.67	-38.0%

- EBIT decline driven by lower nonrecurring income, higher depreciation & amortization from Versum PPA and impairments in Performance Materials
- Financial result impacted by LTIP and higher interest expenses related to Versum financing
- Effective tax rate within guidance range of ~24-26%
- Lower net income and EPS reflects lower EBIT and higher negative financial result



Healthcare: Savings in M&S and R&D offset impact from lowered Fertility demand and Mavenclad[®] drag amid Covid-19

Healthcare P&L			Net sales bri	dge			
[€m]	Q2 2019	Q2 2020	€1,677 m				€1,499 n
Net sales	1,677	1,499		-7.4%	-2.3%	-0.9%	
Marketing and selling	-599	-409					
Administration	-84	-81	Q2 2019	Organic	Currency	Portfolio	Q2 2020
Research and development	-395	-366	EBITDA pre l	bridge			
EBIT	345	269	€528 m			0.00/	6274 m
EBITDA	523	359		-25.9%	-4.1%	0.9%	€374 m
EBITDA pre	528	374		23.770	-4.170		
Margin (in % of net sales)	31.5%	24.9%	Q2 2019	Organic	Currency	Portfolio	Q2 2020

- Mavenclad[®] 36% growth versus Q2 2019, especially in U.S.; however demand declines versus Q1 2020 due to Covid-19 as expected; Rebif® returning to the anticipated underlying trajectory
- Fertility heavily impacted across all regions due to temporary shutdown
 R&D reflecting ongoing stringent cost control of a majority of clinics
- Erbitux[®] organically slightly growing; Bavencio[®] growing strongly versus last year, but sequentially impacted by Covid-19
- M&S decrease due to rigorous cost management, further supported by significant reduction of in person face-to-face activities during pandemic, last year elevated by now expired amortization of Rebif[®]
- EBITDA pre declining faster than sales, driven largely by tough comps from Peg-Pal and Bavencio® milestones in Q2 2019



Life Science: Strong resilience continues in Q2; Process growing 20%, **Applied & Research impacted by Covid-19 but recovery visible in June**

Life Science P&L

[€m]	Q2 2019	Q2 2020	€1,705 m
Net sales	1,705	1,806	
Marketing and selling	-490	-488	
Administration	-68	-100	Q2 2019
Research and development	-69	-75	EBITDA pro
EBIT	322	386	€533 m
EBITDA	518	584	
EBITDA pre	533	569	
Margin (in % of net sales)	31.3%	31.5%	Q2 2019

Net sales bridge 0.0% €1,806 m 6.3% -0.4% Q2 2020 Organic Currency Portfolio e bridge 9.7% €569 m -2.4% -0.6% Organic Currency Portfolio 02 2020

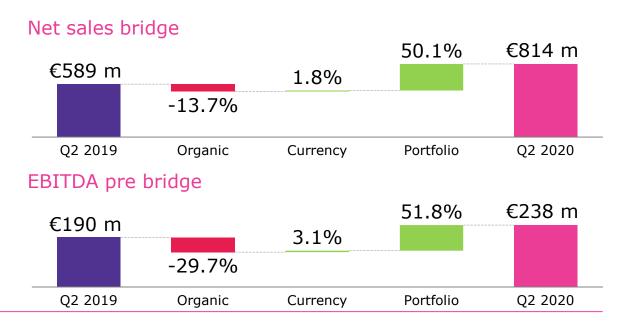
- 19.8% organic growth of Process Solutions mainly driven by downstream
 Lower M&S from overall cost-consciousness and lower travel expenses, and single use, with Covid-19 demand contributing
- Applied Solutions about stable due to Covid-19-related effects across the Admin increase largely driven by EBITDA pre adjustments (€12 m) and full portfolio albeit clear signs of recovery in June
- Research Solutions impacted significantly mainly due to temporary slowdown in academia from Covid-19-related lab closures, also showing clear signs of recovery in June
- partially offset by increased freight costs
- Covid-19-related cost for additional safety precautions
- Increased R&D driven by investments in strategic projects
- EBITDA pre growing faster than sales, reflecting operational leverage from strong top-line growth



Performance Materials: Versum portfolio effect and accelerating Semi growth more than offset declining Display and Surface amid Covid-19

Performance Materials P&L

[€m]	Q2 2019	Q2 2020
Net sales	589	814
Marketing and selling	-66	-134
Administration	-25	-44
Research and development	-74	-68
EBIT	100	-30
EBITDA	161	219
EBITDA pre	190	238
Margin (in % of net sales)	32.3%	29.3%



Comments

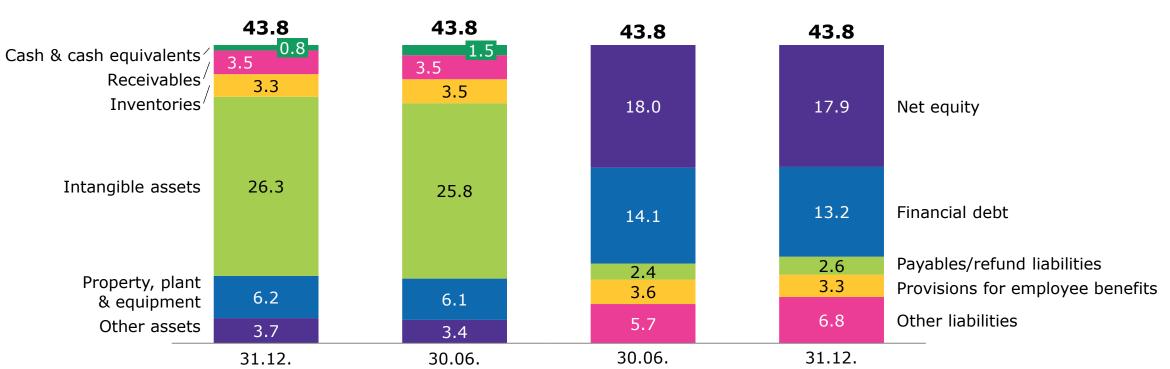
- Sales growth of 38% reflects portfolio effect from Versum and positive FX, overcompensating organic decline
- Semiconductor Solutions: further accelerating strong organic growth, cyclical recovery and outperformance continuing
- Display Solutions: Covid-19 weighs on LC's negative underlying trajectory against still elevated comps in Q2 2019; OLED also impacted
- Surface Solutions: declining significantly amid a heavy Covid-19 impact on automotive and cosmetic end markets

- M&S reflects consolidation of Versum acquisition and diligent underlying cost management as part of the Bright Future transformation and countermeasures to Covid-19
- R&D declining from an elevated Q2 2019 base including Bright Future provisions (EBITDA pre adjustments); Q2 2020 includes Versum consolidation and shows underlying Bright Future cost management
- Increase in EBITDA pre largely reflects portfolio effect from Versum



13 Q2 20 Results Presentation | Aug 6th, 2020

Balance sheet



Assets [€bn]

Stable balance sheet since Dec. 31, 2019

- Continuously higher cash level in order to secure liquidity in the face of Financial debt increase reflects bonds issued in January (€1.5 bn) and the Covid-19 pandemic
- Equity ratio of 41.1%

Liabilities [€bn]

utilization of available credit lines to increase liquidity reserve; bond repayments in March (€2.0 bn)



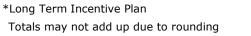
Cash flow statement

Q2 2020 – cash flow statement

[€m]	Q2 2019	Q2 2020	Δ
Profit after tax	471	289	-182
D&A	453	559	106
Changes in provisions	-47	-54	-7
Changes in other assets/liabilities	-26	-166	-141
Other operating activities	-51	-13	37
Changes in working capital	-58	-112	-54
Operating cash flow	743	502	-240
Investing cash flow	-870	-216	654
thereof Capex on PPE	-162	-194	-33
Financing cash flow	1,244	-302	-1,546

Cash flow drivers

- Profit after tax driven by lower EBIT
- Higher depreciation & amortization from Versum PPA and impairments in Performance Materials
- Provisions reflect reduced litigation provisions and fluctuations in LTIP*
- Changes in other assets and liabilities primarily driven by GSK upfront payment in Q2 2019 that was deferred
- Increased working capital driven by Versum consolidation, higher inventories to secure supply in the face of Covid-19 and growing receivables
- Investing and financing cash flows returning to normal levels



guidance

03



Our assumptions on the development of the Covid-19 pandemic have remained largely the same since May



Impact across all regions

Previous assumptions

(communicated in May)



Cases expected to **peak in Q2** Situation eases in H2 Pandemic crisis lasts for FY



Stressed health systems Some countries have less effective response than China



However, no major resurgences



Some countries **struggle to contain** virus resulting in stressed health systems Effective **vaccines** not broadly available



Additional flares, but **not triggering** new widespread lockdowns

Recovery progressing during H2

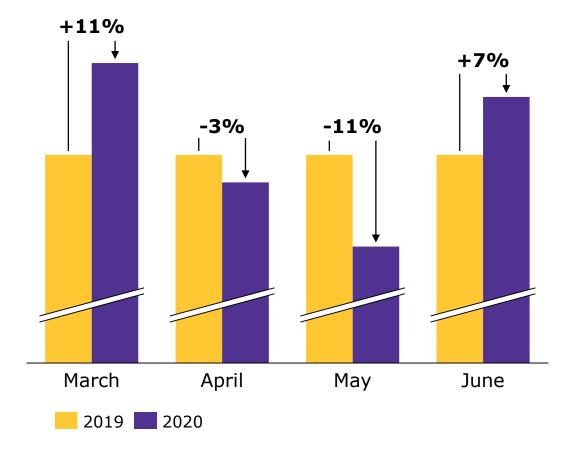
Current assumptions

Impact across all regions

(communicated in August)



Active crisis management and resilient product portfolio allowed quick 8-week recovery time



Organic sales growth - Group

Increased visibility of Covid-19 impact

- Strongest correlation with mandatory workplace closures
 - Fertility: closure of clinics
 - **N&I**: closure of practices, limited visits
 - **Research Solution**: closure of research labs
 - **Display Solutions**: closure of electronic retail
- Company well positioned in essential industries:
 - Governments moved from mandatory workplace closures to mandatory workplace measures
 - Immediate restoration of business
- Other changes of a longer-lasting nature (Display or Automotive end markets)



Covid-19 guidance given in May overall accurate, improved visibility warrants slight upgrade

Group:

- Up to mid single-digit percentage sales impact full year
- Countermeasures in place: confirm 50 to 60% of net sales impact to hit EBITDA pre
- Recovery visible in June, expected to continue in Q3 and Q4



Healthcare assumptions:

- Biggest impact in Fertility behind, as clinics are opening up again
- Mavenclad[®] recovery visible in June
- Other businesses normalizing

Life Science assumptions:

- **Net upside** from Covid-19-related demand in Process Solutions
- Recovery as of June in Applied Solutions
- **Research** showed **largest impact**, recovering in June as well

Performance Materials assumptions:

- Strong growth in Semiconductor expected to continue despite Covid-19
- Some ease of impact from Covid-19 in Display versus Q2
- Slight ease on Surface's end markets expected versus Q2

Group Full-year 2020 guidance

Net sales:

Slight to moderate organic growth, Versum growth contribution in mid single-digit percentage range; FX between 0% to -2% YoY; ~€16.9 – 17.7 bn

EBITDA pre: Slight to moderate organic growth, mid single-digit percentage range growth from Versum; FX headwinds of -2% to -4% YoY; ~€4,450 – 4,850 m

> EPS pre: ~€5.60 - 6.25



Group 2020 business sector guidance¹

