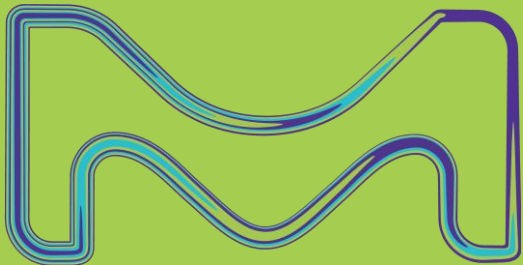


BIG 3 drive strong start into the year, Mobilizing for future growth

Q1 2021 results

Belén Garijo, CEO
Marcus Kuhnert, CFO

May 12, 2021





Disclaimer

Publication of Merck KGaA, Darmstadt, Germany. In the United States and Canada the group of companies affiliated with Merck KGaA, Darmstadt, Germany operates under individual business names (EMD Serono, Millipore Sigma, EMD Performance Materials). To reflect such fact and to avoid any misconceptions of the reader of the publication certain logos, terms and business descriptions of the publication have been substituted or additional descriptions have been added. This version of the publication, therefore, slightly deviates from the otherwise identical version of the publication provided outside the United States and Canada.



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 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; downward pressure on the common stock price of Merck KGaA, Darmstadt, Germany and its impact on goodwill impairment evaluations as well as the impact of future regulatory or legislative actions.

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included elsewhere, including the Report on Risks and Opportunities Section of the most recent annual report and quarterly report of Merck KGaA, Darmstadt, Germany. Any forward-looking statements made in this communication are qualified in their entirety by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, us or our business or operations. Except to the extent required by applicable law, we undertake no obligation to update publicly or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

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 Merck KGaA, Darmstadt, Germany 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

01 Executive summary

02 Financial overview

03 Outlook



EXECUTIVE SUMMARY

01

Highlights: BIG 3 drive growth, especially Process Solutions



Operations

Healthcare: Fertility organic growth accelerating to 22%; 20% organic growth of Oncology as Bavencio® sales double while Erbitux® is growing 10%; Mavencic® up 26% organically amid continued depression in dynamic market

Life Science: Record 27% organic growth, fueled by 38% in Process Solutions as additional capacities support fight against COVID-19 and 24% in Research Solutions; Applied Solutions growing strongly as well

Electronics: Solid Semiconductor Materials growth (partially offset by tough comps from unfavorable DS&S project phasing); Surface Solutions back to growth (+5% org.) post COVID-19 trough



Financials

Q1 organic sales: +12.2%

Q1 organic EBITDA pre: +36.3%

Guidance:

Net sales: €18.5 – 19.5 bn

EBITDA pre: €5.4 – 5.8 bn

EPS pre: €7.50 – 8.20

Net financial debt to EBITDA pre ratio at 1.8 on March 31, 2021



27% organic growth in Life Science, moderate Healthcare growth & stable Electronics drive very strong organic Group sales and EBITDA pre growth

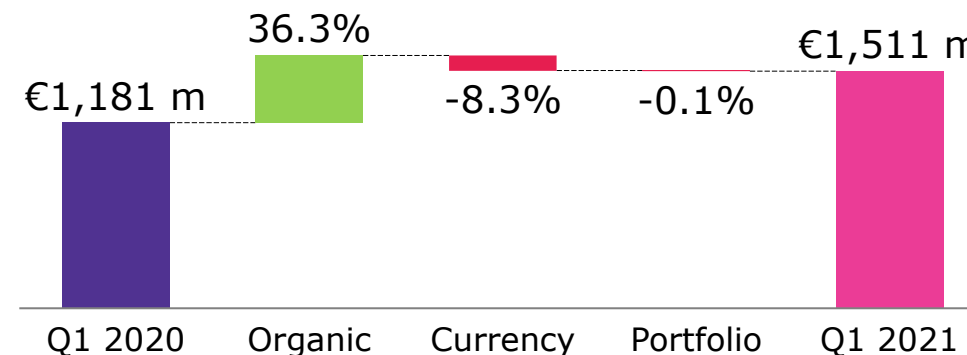
Q1 YoY Net Sales

	Organic	Currency	Portfolio	Total
Healthcare	3.5%	-5.9%	-1.2%	-3.6%
Life Science	26.7%	-6.2%	0.0%	20.4%
Electronics	0.2%	-4.5%	0.0%	-4.3%
Group	12.2%	-5.8%	-0.4%	6.0%

- 22% org. growth in Fertility and 20% org. growth in Oncology more than compensate for N&I decline (-4% org.) amid depressed dynamic market and VBP impact in CM&E¹ (-4% org.)
- Record Life Science organic growth driven by all business units with Process Solutions up +38%; Research elevated to +24%; Applied Solutions delivers 8% organic growth
- Electronics about stable as Semiconductor Solutions growth (+4% org.) and recovering Surface Solutions (+5% org.) are offsetting decline in Display (-7% org.)

¹ Cardiovascular, Metabolism and Endocrinology (new Franchise name as of Q1 2021)

Q1 YoY EBITDA pre

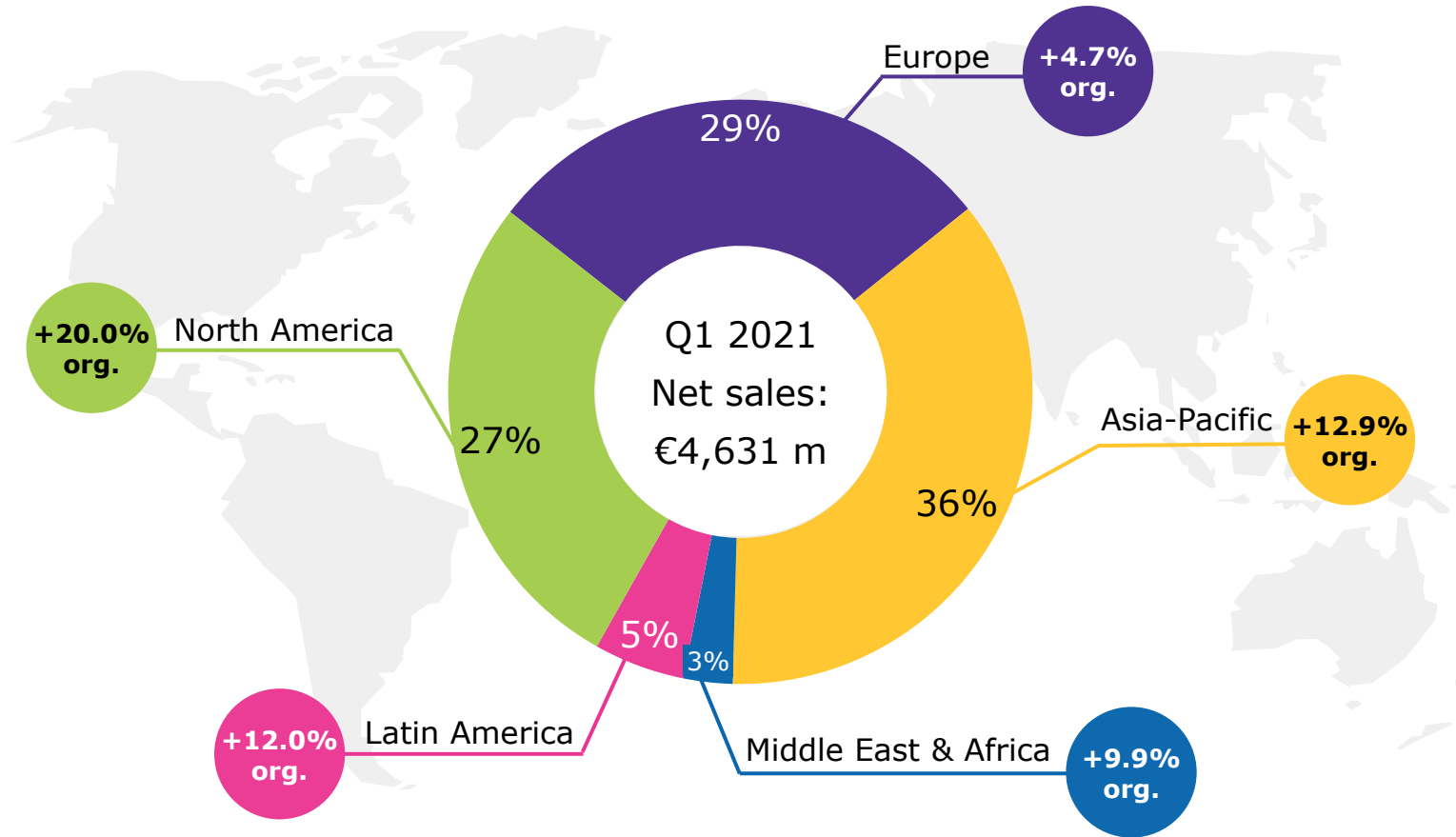


- Organic EBITDA pre growth three times faster than sales growth
- Strong Life Science gross profit further boosted by Bavencio[®] milestones and continued cost discipline in all sectors
- FX burden of -8% across various currencies with largest negative impact from USD, BRL and JPY; partly mitigated by hedging



Life Science demand drives particularly strong growth in North America and Asia-Pacific

Regional breakdown of net sales [€m]



Regional organic development

- APAC: strong Life Science and Healthcare growth while Electronics ~ stable with Semi offsetting Display
- Europe: Growth in Process & Research Solutions more than compensates Healthcare decline largely in CM&E
- North America: growth across all three sectors, particularly strong Life Science and Bavencio[®] performance
- LATAM growth driven foremost by Fertility and Bavencio[®]
- CM&E is the largest growth driver in ME&A



Financial Overview

02

Q1 2021: Overview

Key figures

[€m]	Q1 2020	Q1 2021	Δ
Net sales	4,370	4,631	6.0%
EBITDA pre	1,181	1,511	27.9%
Margin (in % of net sales)	27.0%	32.6%	
EPS pre	1.50	2.18	45.3%
Operating cash flow	516	1,216	135.4%

[€m]	Dec. 31, 2020	March 31, 2021	Δ
Net financial debt	10,758	10,081	-6.3%
Working capital	3,938	4,231	7.4%
Employees	58,096	57,933	0.0%

Comments

- Net sales growth of 6% driven by 12% organic growth and FX burden of -6%
- EBITDA pre increase, driven particularly by operating leverage in Life Science further boosted by Bavencio[®] milestones
- EPS pre driven by EBIT pre growth, supported by better financial result & lower effective tax rate
- Operating cash flow more than doubles, largely driven by strong EBITDA pre growth and favorable net working capital
- Significant reduction of net financial debt



Q1 2021: Reported figures

Reported results

[€m]	Q1 2020	Q1 2021	Δ
EBIT	716	1,043	45.7%
Financial result	-98	-59	-40.0%
Profit before tax	617	984	59.4%
Income tax	-159	-236	48.1%
<i>Effective tax rate</i>	25.8%	24.0%	
Net income	456	747	63.7%
EPS (€)	1.05	1.72	63.8%

Comments

- Strong performance across all sectors particularly in Life Science drives 46% EBIT growth
- Reduced interest expense and lower LTIP provisions drive improved financial result
- Effective tax rate at the higher end of the new guidance range
- EBIT growth, improved financial result and lower tax rate drive higher net income & EPS



Healthcare: strong Fertility & Oncology performance, while Mavenclad® remains impacted by depressed dynamic market

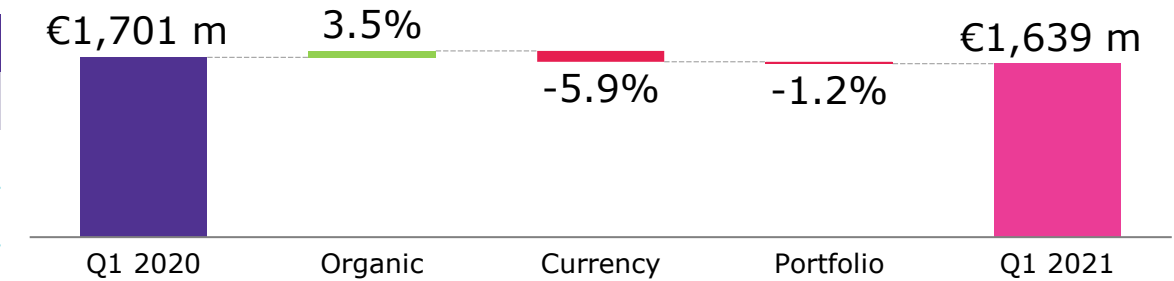
Healthcare P&L

[€m]	IFRS		Pre	
	Q1 2020	Q1 2021	Q1 2020	Q1 2021
Net sales	1,701	1,639	1,701	1,639
M&S*	-423	-370	-423	-365
Admin	-79	-73	-78	-69
R&D	-417	-416	-417	-415
EBIT	422	445	395	455
EBITDA	501	523	-	-
EBITDA pre	472	533	472	533
(in % of net sales)	27.8%	32.5%	27.8%	32.5%

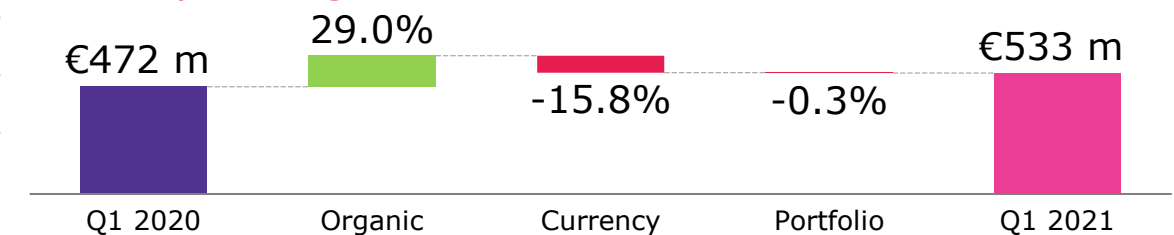
Comments

- Mavenclad® growing +26 % organically to €147 m, amid still depressed dynamic market; Rebif® decline -17% in Q1 due to tough comps related to tender win in Q1 2020
- Oncology up +20%, Bavencio® sales doubled post UC 1L launch in U.S. and initial contribution from EU & JP¹; Erbitux® up +10% largely driven by China growth
- Base business about stable, strong Fertility growth (+22% org.) compensating for Rebif® and CM&E decline (-4% org.)
- Strong savings in M&S from continuous rigorous cost discipline, supported by reduced face-to-face activities amid pandemic
- R&D flat as a result of continued prioritization; no significant COVID-19 related project delays
- EBITDA pre and margin significantly supported by Bavencio® milestones (~ €50 m)

Net sales bridge



EBITDA pre bridge



Life Science: strong core business and rising COVID-19 demand fuel record growth, particularly in Process and Research Solutions

Life Science P&L

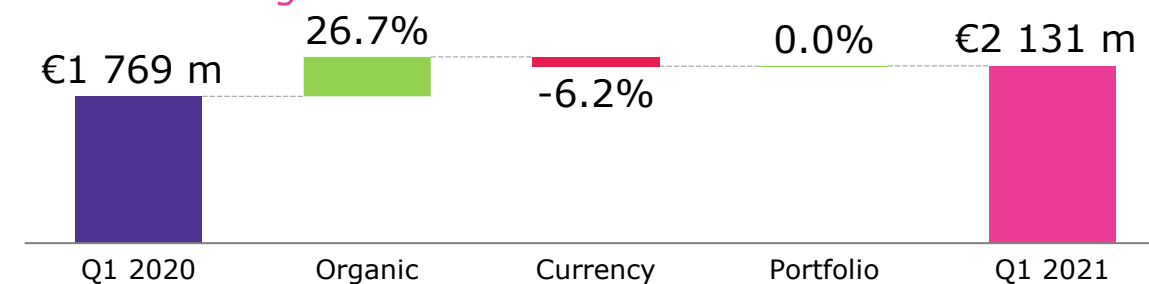
[€m]	IFRS		Pre	
	Q1 2020	Q1 2021	Q1 2020	Q1 2021
Net sales	1,769	2,131	1,769	2,131
M&S*	-498	-501	-497	-500
Admin	-89	-82	-80	-74
R&D	-75	-75	-75	-75
EBIT	345	593	357	607
EBITDA	541	779	-	-
EBITDA pre	553	793	553	793
(in % of net sales)	31.2%	37.2%	31.2%	37.2%

Comments

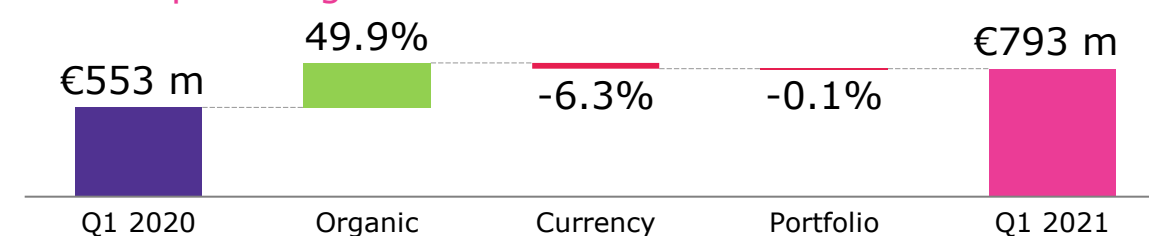
- Process Solutions org. growth of +38% driven by downstream & single use for COVID-19 projects; strong underlying demand supported by acceleration of capacity expansions
- Research Solutions speeding up further to an exceptional +24% organic growth, driven by recovery in base business and additional COVID-19 opportunities, mainly in diagnostics and pharma
- Applied Solutions growth (+8% org.) driven by APAC recovery against low Q1 2020

* Marketing and selling expenses

Net sales bridge



EBITDA pre bridge



- Declining M&S in % of sales from 28% to 23% despite higher logistics cost amid pandemic
- Flat R&D spend with continued focused investments in strategic projects in high growth & emerging segments
- Business performance, operational leverage & favorable mix continue to drive strong EBITDA pre and margin expansion despite 6% FX drag



Electronics: year-over-year and vs. Q4 2020 Semi growth as well as recovering Surface compensate Display Solutions decline

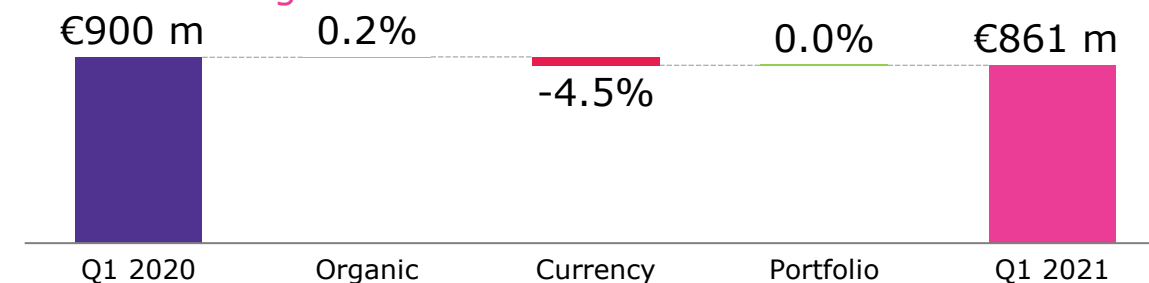
Electronics P&L

[€m]	IFRS		Pre	
	Q1 2020	Q1 2021	Q1 2020	Q1 2021
Net sales	900	861	900	861
M&S*	-136	-135	-134	-135
Admin	-38	-34	-38	-33
R&D	-71	-67	-73	-66
EBIT	116	126	151	142
EBITDA	251	260	-	-
EBITDA pre	286	274	286	274
(in % of net sales)	31.7%	31.8%	31.7%	31.8%

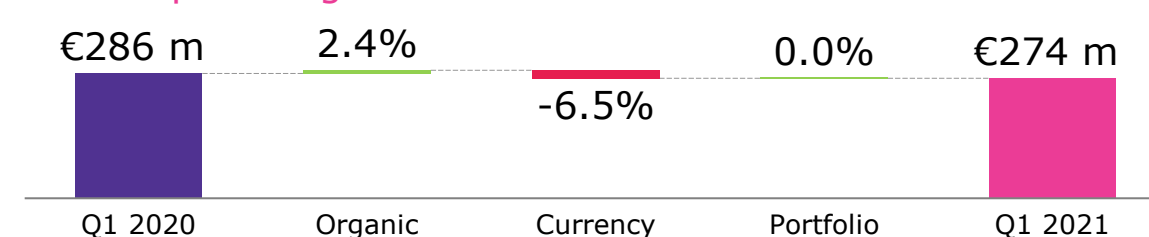
Comments

- Semiconductor Solutions: solid Semiconductor Materials growth across all product categories muted by DS&S project launch phasing; continued confidence in strong outlook for FY 2021
- Display Solutions: down -7% organically as OLED growth not yet compensating for Liquid Crystals decline
- Surface Solutions: returning to 5% organic growth, mainly supported by recovery in the automotive industry
- Stable M&S despite higher logistic costs, while Admin and R&D are declining
- All P&L lines continue to reflect diligent cost management amid Bright Future transformation and Versum integration synergies
- EBITDA pre (+2% org.) exceeds sales growth but burdened by -7% FX headwinds

Net sales bridge



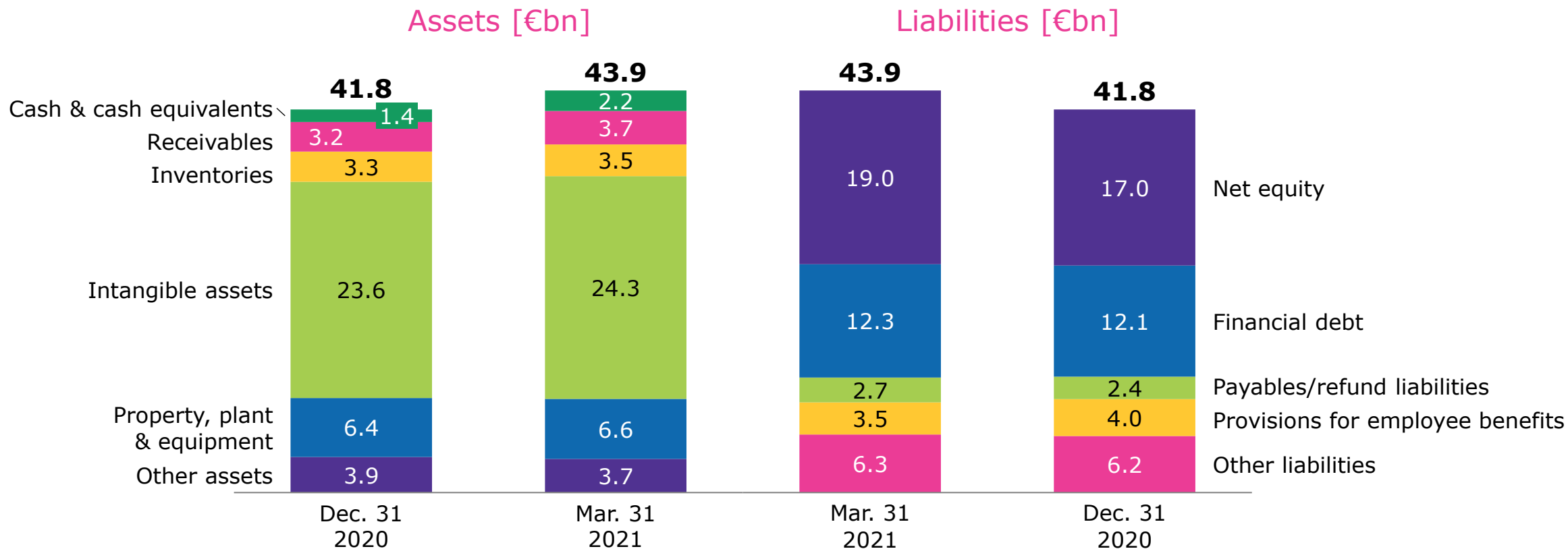
EBITDA pre bridge



* Marketing and selling expenses



Balance sheet



- Increase in intangible assets primarily driven by FX
- Higher cash level driven by strong operating cash flow
- Higher receivables and inventories - growing slower than sales

- Reduction in provisions for employee benefits driven by actuarial gains from higher interest rates
- Reduced financial debt and higher retained earnings drive equity ratio of 43.2%



Cash flow statement

Q1 2021 – cash flow statement

[€m]	Q1 2020	Q1 2021	Δ
Profit after tax	458	748	290
D&A	431	424	-7
Changes in provisions	16	-34	-50
Changes in other assets/liabilities	-23	160	183
Other operating activities	-10	6	16
Changes in working capital	-356	-88	267
Operating cash flow	516	1,216	700
Investing cash flow	-288	-346	-58
thereof Capex on PPE	-337	-309	29
Financing cash flow	542	6	-536

Cash flow drivers

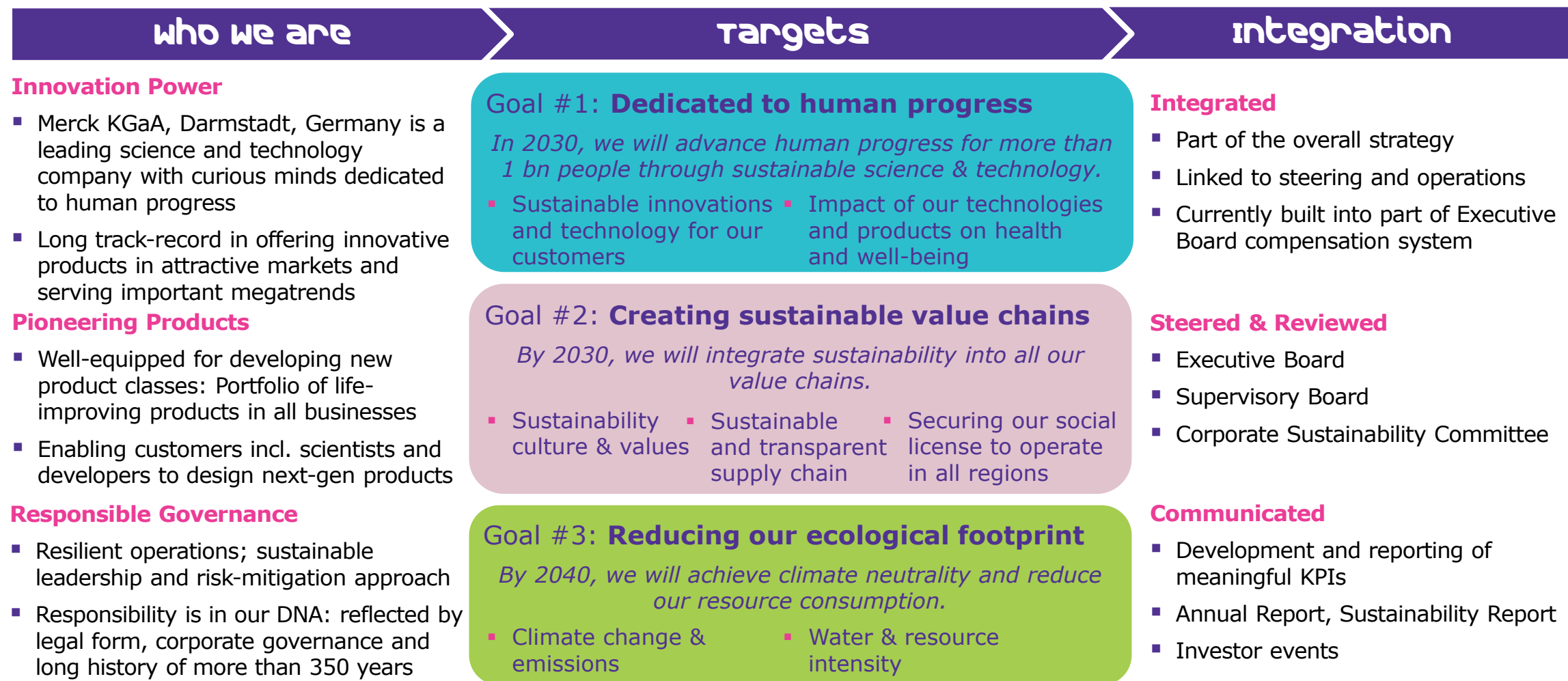
- Strong increase in profit after tax driven particularly by Life Science, further boosted by Bavencio[®] milestones
- Provisions largely reflect various favorable developments in litigation positions
- Contribution from other assets/liabilities largely explained by tax positions
- Working capital upside mainly driven by higher payables (Q4 2020 phasing effect)
- Delta in investing cash flow primarily explained by divestment of Allergopharma in Q1 2020
- Capex driven foremost by Life Science capacity expansions



outlook

03

Sustainability strategy enhanced, leveraging strengths with clear commitment to new targets



Latest COVID-19 assumptions for 2021

Overarching assumptions

- **Increasing vaccination penetration** across large populations **in all major regions** as of summer
- **Global gradual easing of lockdowns to continue; vaccination efforts expected to keep up** with virus mutations
- **Overall improvement** in the course of 2021 to continue; **however, higher degree of forecast uncertainty**

Healthcare assumptions

- **Confirm ~ stable organic base business & pipeline sales target**, despite higher uncertainty
- Pandemic **impact on ramp-ups** (particularly still depressed MS dynamic & high efficacy market in Q1 2021) **remains a watch out; recent vaccination data expected to accelerate market position of Mavenclad[®]**
- **Fertility to continue recovery**

Life Science assumptions

- **Continued strong additional demand & capacity expansions to support strong growth in Process Solutions**
- **Research and Applied** more volatile and differentiated across customer and product segments; **tailwinds for Research, about neutral effect in Applied**

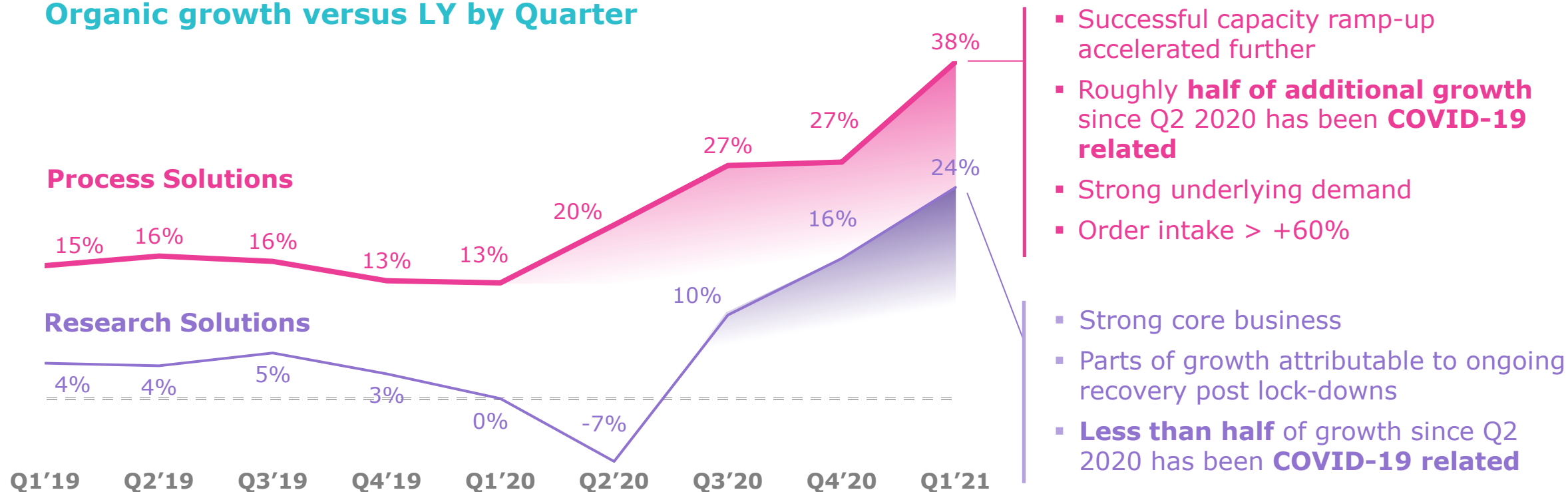
Electronics assumptions

- **Neutral to positive impact on Semiconductor Solutions** end markets
- **Display and Surface Solutions to return to underlying trajectories**



Life Science: Upside potential for Process Solutions materializing amid increasing capacity; Research Solutions gaining momentum as well

Organic growth versus LY by Quarter



Key factors for 2021 guidance remain:

- Further progress of capacity expansions & optimizations
- Sustainable demand growth; both Covid-19 and underlying

Shaded areas represent COVID-19 growth contributions



Independent real-world data (RWD) differentiates Mavenclad®

- A high-efficacy DMT that demonstrates **full antibody response to COVID-19 vaccination**
- **Differentiated vs. other high-efficacy therapies** in light of COVID-19 vaccinations for MS patients

Patient population		Total N=125	Protective humoral immunity ^a
DMT treated patients	Mavenclad®	23	100% ($p = 0.99$) ^b
	Ocrelizumab	44	22.7% ($p < 0.0001$) ^b
	Fingolimod	26	3.8% ($p < 0.0001$) ^b
Untreated MS patients		32	100%
Healthy subjects		47	97.9%



In the first-ever real-world data study of its type **all patients on Mavenclad® who received a mRNA COVID-19 vaccine were able to mount a full antibody response**, similar to healthy subjects and untreated people with MS, irrespective of lymphocyte counts¹

DMT = disease-modifying therapy

1. Achiron et al. Ther Adv Neurol Disord <https://doi.org/10.1177/17562864211012835>

^aProtective humoral immunity defined as a index value higher than 1.1 using EUROIMMUN semiquantitative ELISA for IgG specific for the recombinant S1 subunit of SARS-CoV-2 spike protein

^bFisher's exact test to detect differences in categorical variables between DMT-treated patients with MS and untreated patients with MS



Full-year 2021 guidance

Net sales:

Organic: +10% to +12% YoY
FX: -2% to -4% YoY
~€18.5 – 19.5 bn

EBITDA pre:

Organic: +16% to +20% YoY (*excl Biogen¹*)
FX: -2% to -4% YoY
~€5.4 – 5.8 bn

EPS pre:

~€7.50 – 8.20

¹ Q3 20 reversal of the provisions for the patent litigation proceedings for Rebif in the amount of ~€365 m; Guidance including Biogen – organic: +9% to +12%



2021 business sector guidance¹

Healthcare



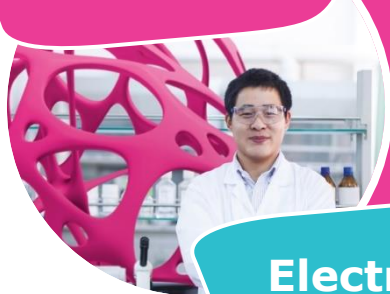
Net sales

- Organic: +7% to +10%
- Mainly driven by Mavenclad[®], Bavencio[®] and recovery of Fertility
- Base business organically around stable

EBITDA pre

- Organic: +12% to +15% YoY (excl Biogen²)
- FX: -5% to -7% YoY
- ~€2,000 – 2,100 m

Life Science



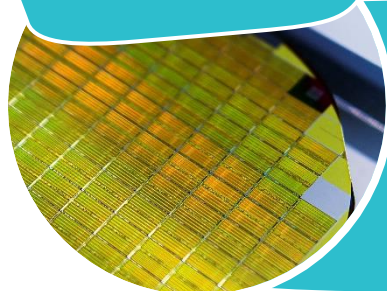
Net sales

- Organic: +15% to +18%
- Process Solutions as main growth driver

EBITDA pre

- Organic: +22% to +26% YoY
- FX: -1% to -3% YoY
- ~€2,850 – 3,000 m

Electronics



Net sales

- Organic: +5% to +7%
- Strong Semiconductor Solutions contribution, subject to quarterly DS&S project phasing
- OLED with high growth

EBITDA pre

- Organic: +9% to +12% YoY
- FX: -3% to -5% YoY
- ~€1,050 – 1,130 m

Appendix

Additional financial guidance 2021

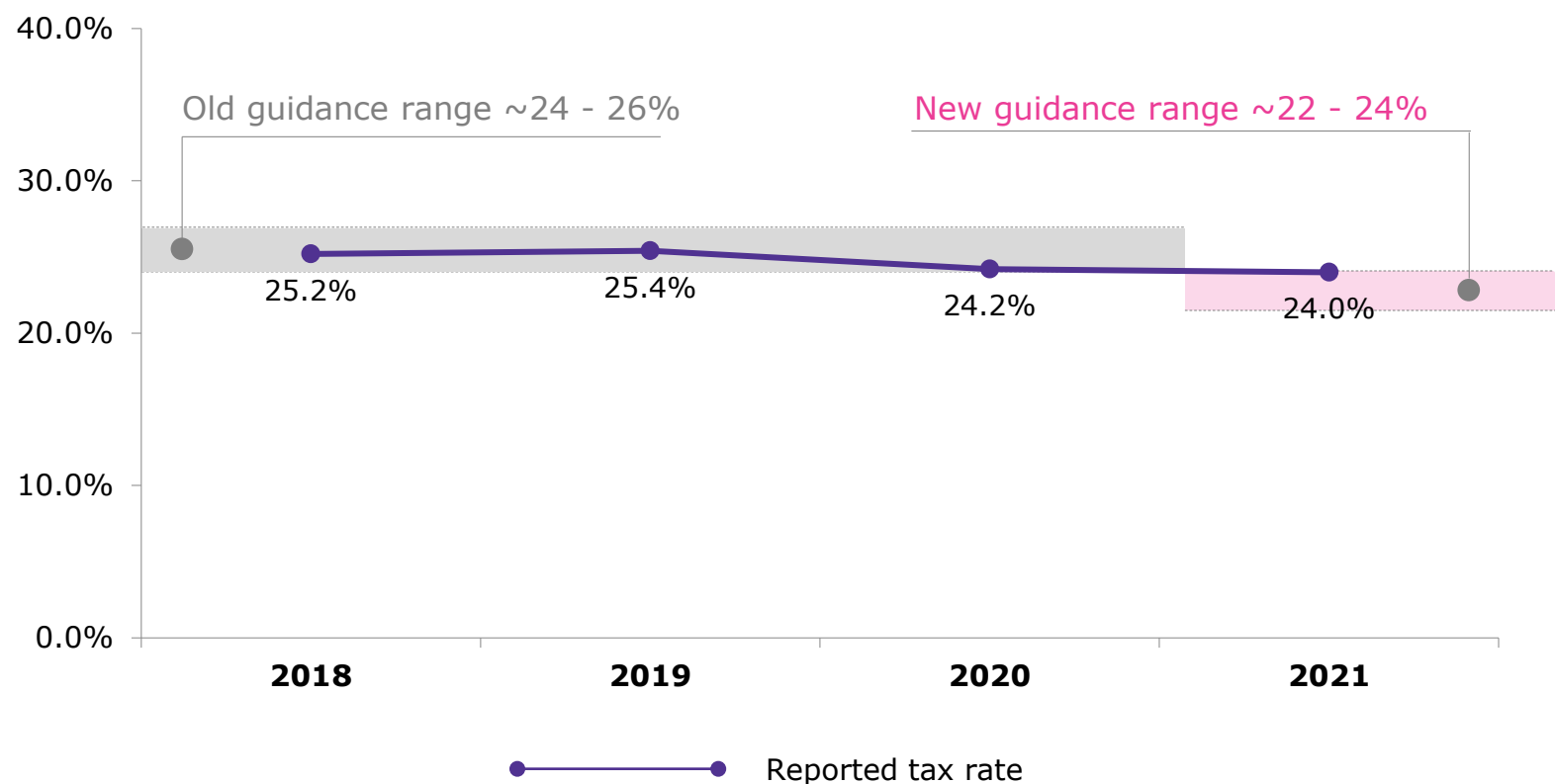
Further financial details

Corporate & Other EBITDA pre	~ €-440 to -490 m
Interest result	~ €-220 to -245 m
Effective tax rate	~ 22% to 24%
Capex on PPE	~ €1.4 to 1.5 bn
Hedging/USD assumption	FY 2021 hedge ratio ~70% at EUR/USD ~1.17
2021 Ø EUR/USD assumption	~ 1.19 to 1.23



Underlying tax rate guidance lowered to new range of 22% to 24%

Tax rate development 2018-2020 and from 2021 onwards



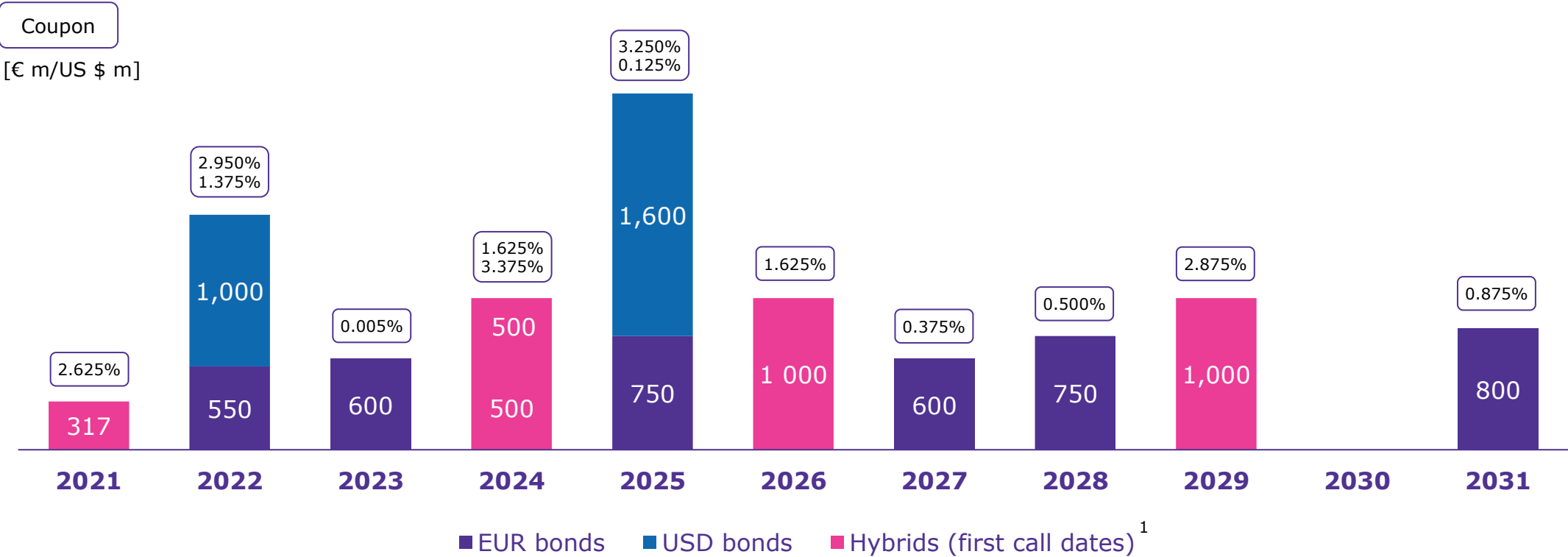
Rationale for update

Strong profit growth in Life Science results in different profit contributions worldwide, leading to a lower overall tax rate



Balanced maturity profile: Lower refinancing risks & higher flexibility

Maturity profile as of March 31, 2021

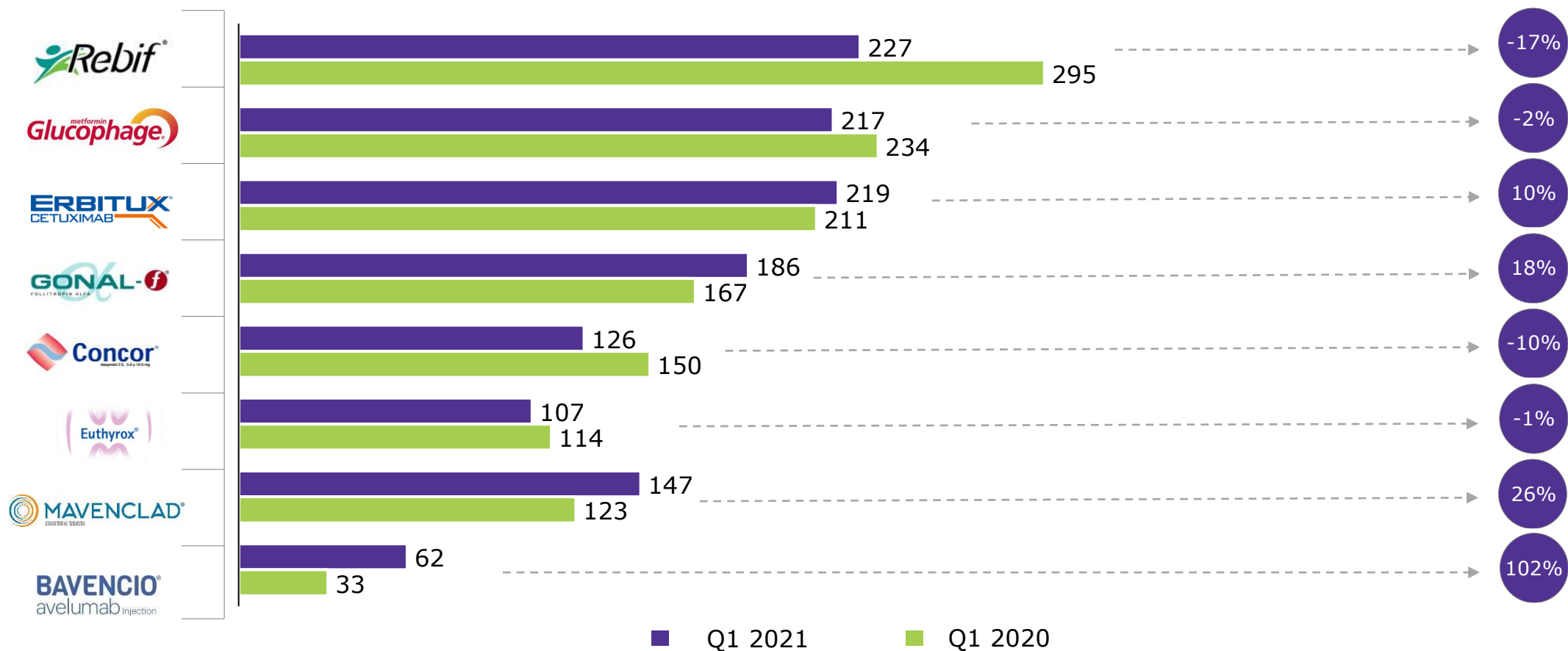


¹No decision on call rights taken yet



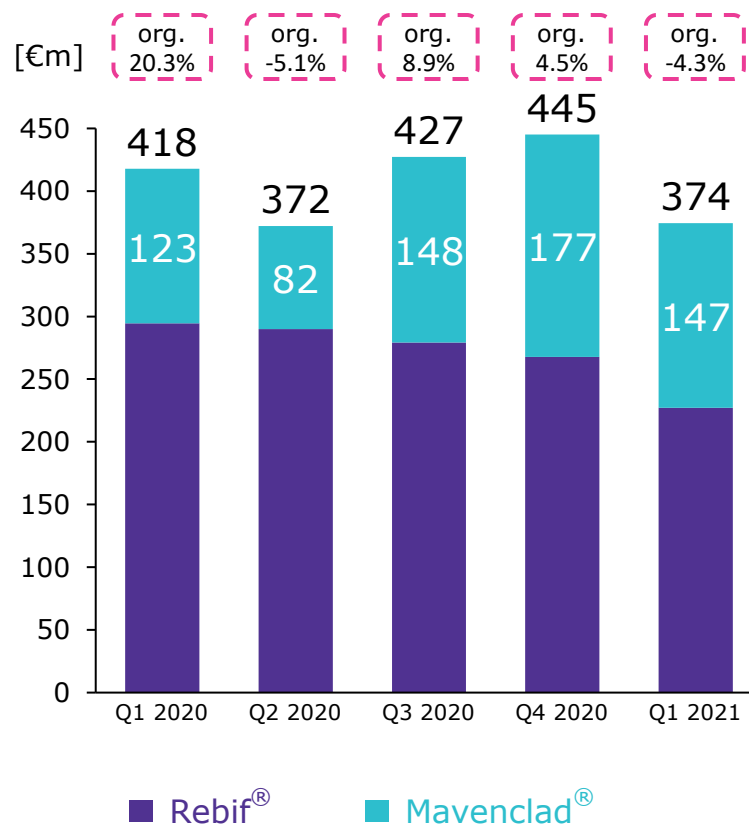
Healthcare organic growth by franchise/product

Q1 2021 organic sales growth [%] by key product [reported €m]

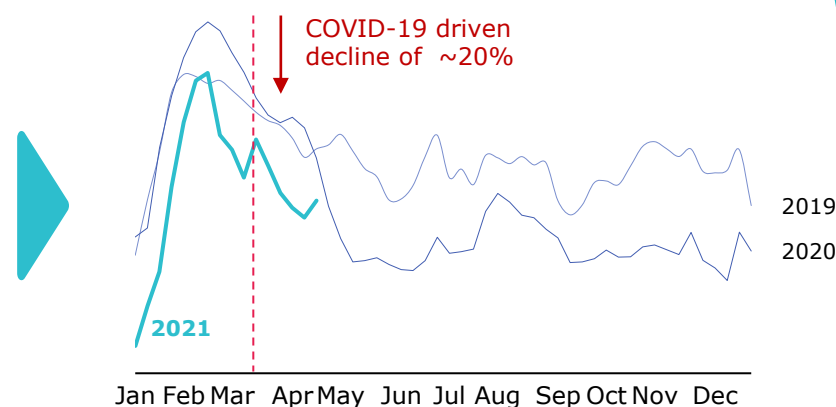


Neurology & Immunology: Mavenclad® sales +26% (org.) YoY, sequential decline of ~4% (org.) driven by third COVID-19 wave

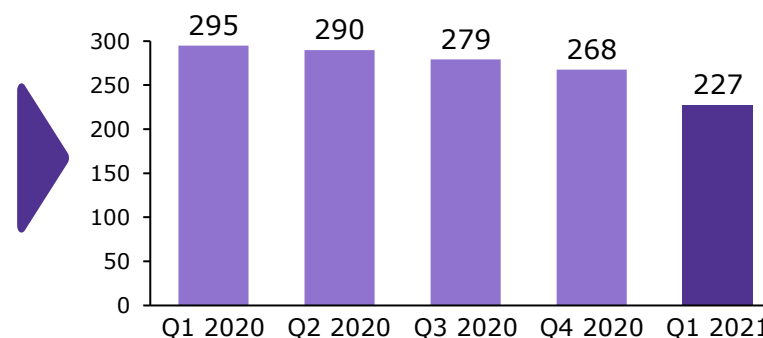
Sales development NDI, [€m]



Dynamic market volume [R3W] ¹



Rebif® net sales, [€m]



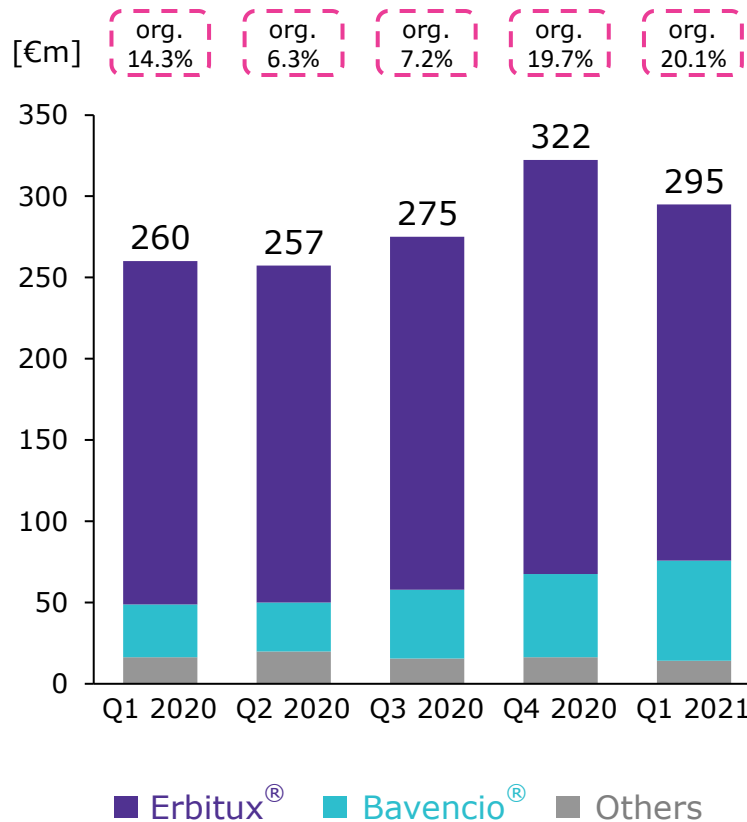
- **Market share:** Mavenclad® share continues to grow within HE segment, with COVID-19 vaccine response data positioning Mavenclad® for additional share growth
- **Dynamic market volume:** Still lags pre-pandemic levels by ~20% but increased vaccination likely to drive market recovery and Q2 growth

- Rebif® outperforms interferon market in the US
- Decline accelerated (-17 % org.) due to tough comps from tender win in Q1 2020, and further muted by FX (-6%)

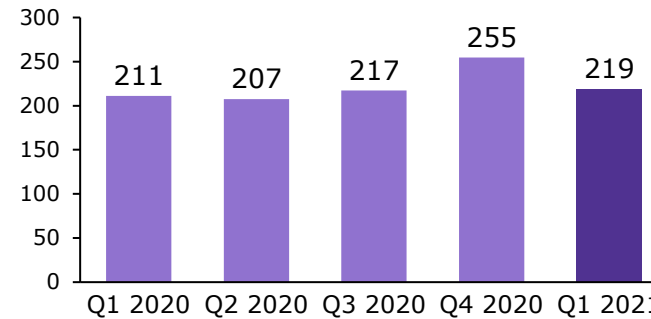


Oncology: Bavencio® showing strong YoY and sequential growth post UC 1L approvals; Erbitux growing 10% organically

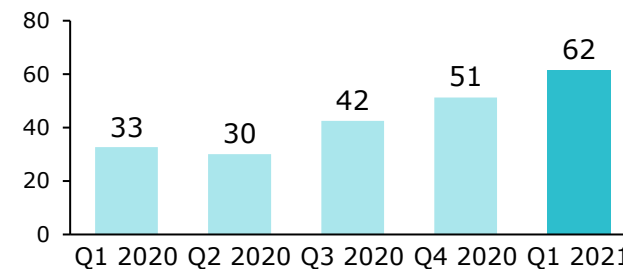
Sales development Oncology, [€m]



Erbitux® net sales, [€m]



Bavencio® net sales, [€m]



- 10% organic growth in Q1, despite supply agreement with Eli Lilly for U.S. demand falling into Q2
- China main growth driver
- Overall, continuously limited negative impact from COVID-19

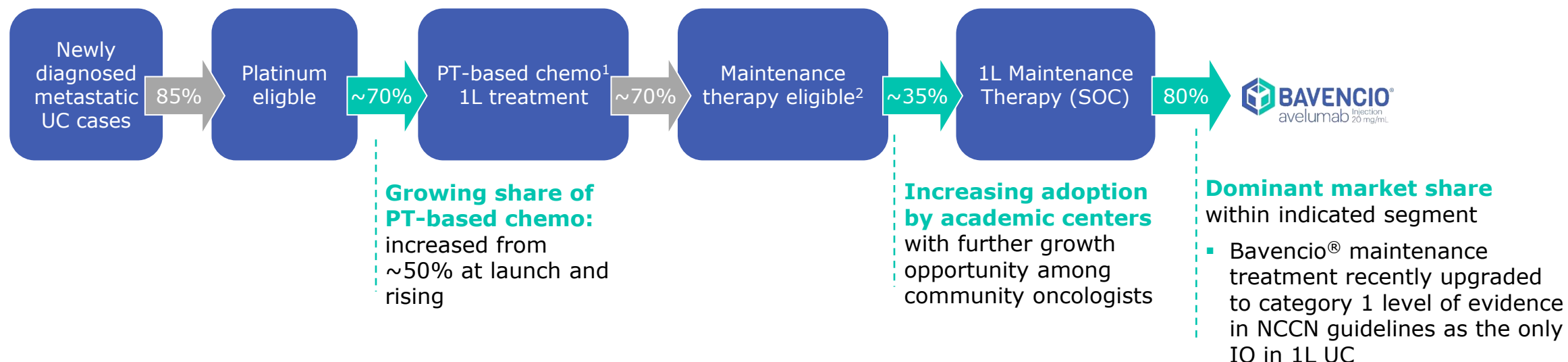
- Bavencio® more than doubling sales (103% organic growth)
- >20% QoQ growth driven by 1L UC launch in the U.S., and initial contribution by EU and JP



Bavencio® UC 1L launch update: Significant opportunity to drive further growth by increasing the adoption of 1L maintenance therapy



U.S. - ~10 months into launch, on track to changing the SOC:



Europe & Japan – Recently approved, promising early signals:

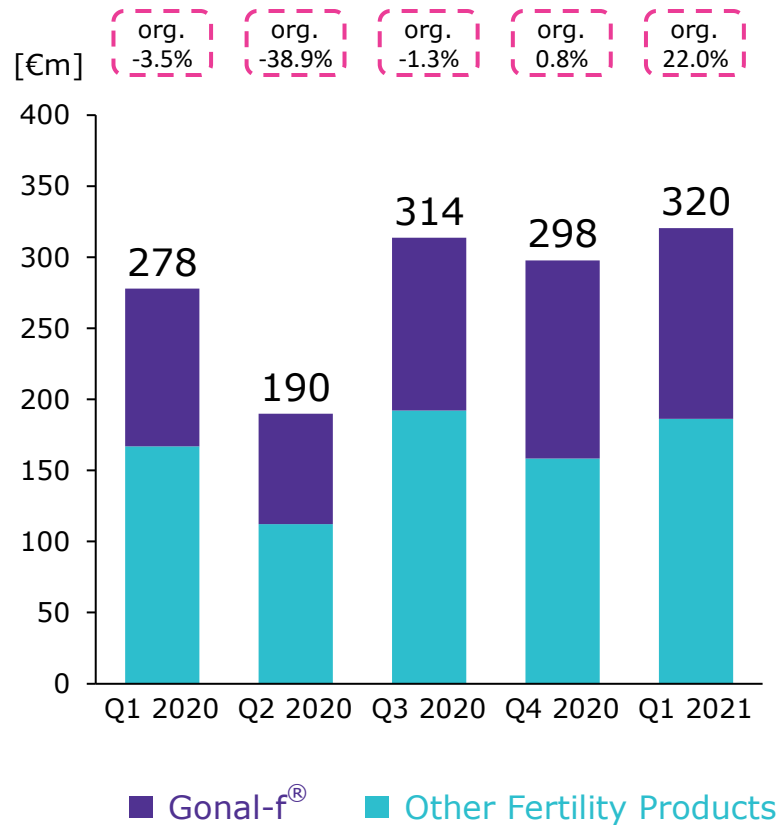
- Market access on track
- Strong initial uptake in key launch markets
- Recently recommended by EAU (European Association of Urology) guidelines (March 25) as the preferred treatment in 1L UC

1: Carboplatin or Cisplatin, 2: Complete / partial response or stable disease based on clinical trial data; Acronyms: PT = Platinum, SOC = Standard of care

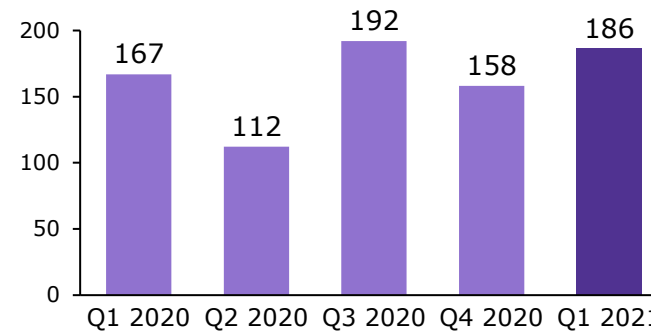


Fertility: 22% organic growth and strong sequential recovery of Gonal-f®

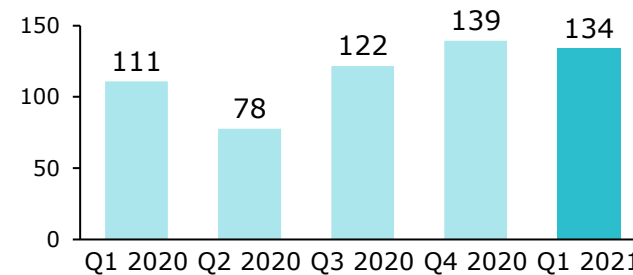
Sales development Fertility, [€m]



Gonal-f® net sales, [€m]



Other Fertility net sales, [€m]

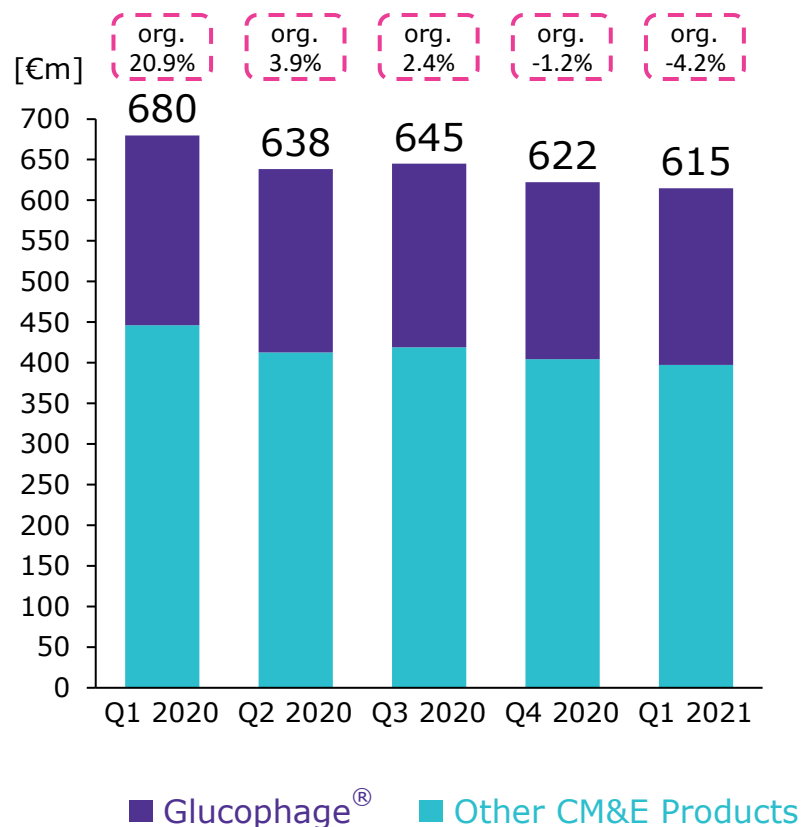


- Strong Fertility growth of +22% amid continued recovery from COVID-19 impact
- All regions showing organic growth
- Particularly strong momentum in APAC and the U.S.
- FX burden of -7% mutes absolute numbers

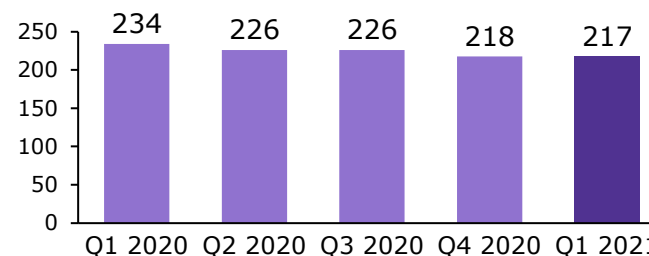


CM&E: Declining -4% as growth in ME&A and LATAM are offset by VBP impact on Glucophage® & Concor® in China and tough comps in Europe

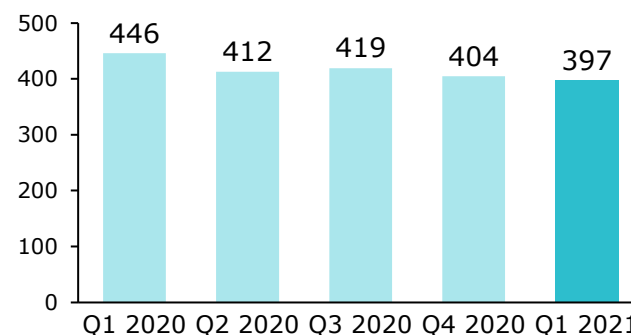
Sales development CM&E, [€m]



Glucophage® net sales, [€m]



Other CM&E net sales, [€m]



- Growth in ME&A (org. +31%) and LATAM (org. +21%) offset by APAC (org. -10%) as China VBP¹ roll-out progresses (completion expected in Q2)
- Tough comps in EU due to pandemic-related stocking
- Concor® decline (org. -10%) driven by VBP effect in 2020



Phase I

M1231
Bispec. MUC1xEGFR ADC
Solid tumors

M1774
ATR inhibitor
Solid tumors

peposertib
DNA-PK inhibitor
Solid tumors¹

bintrafusp alfa
TGFbeta trap/anti-PD-L1
Cervical cancer 1L

M6223
anti-TIGIT mAb
Solid tumors²

M5049
TLR7/8 antagonist
Systemic lupus erythematosus /
Cutaneous lupus erythematosus

M5717
PeEF2 inhibitor
Malaria

Simplified overview excluding programs for which Merck KGaA, Darmstadt, Germany explores externalization opportunities and/or for which Merck KGaA, Darmstadt, Germany pursues only limited internal development activities

Phase II

berzosertib
ATR inhibitor
Small-Cell Lung Cancer³

tepotinib
MET kinase inhibitor
Metastatic Colorectal Cancer
RAS/BRAF wt, *MET* amplified⁴

tepotinib
MET kinase inhibitor
Non-small cell lung cancer,
EGFR mutant, *MET* amplified⁵

bintrafusp alfa
TGFbeta trap/anti-PD-L1
Non-small cell lung cancer 1L/2L

bintrafusp alfa
TGFbeta trap/anti-PD-L1
Locally advanced non-small cell
lung cancer

bintrafusp alfa
TGFbeta trap/anti-PD-L1
Biliary tract cancer 1L

bintrafusp alfa
TGFbeta trap/anti-PD-L1
Cervical cancer 2L

bintrafusp alfa
TGFbeta trap/anti-PD-L1
Triple negative breast cancer
(HMG2A positive)

M5049
TLR7/8 antagonist
Covid-19 pneumonia

Phase III

xevinapant
IAP inhibitor
Locally advanced squamous cell
carcinoma of the head and neck⁶

avelumab
anti-PD-L1 mAb
Non-small cell lung cancer 1L

evobrutinib
BTK inhibitor
Relapsing multiple sclerosis

Registration

tepotinib
MET kinase inhibitor
Non-small cell lung cancer,
*MET*ex14 skipping^{7,8}

avelumab
anti-PD-L1 mAb
Urothelial cancer 1L-M^{9,10}

- Oncology
- Immuno-Oncology
- Immunology
- Neurology
- Global Health

ADC: Antibody Drug Conjugate; Bispec.: bispecific; 1L: first-line treatment; 1L-M: first-line maintenance treatment; 2L: second-line treatment;

¹ Study in combination with avelumab. ² Includes study in combination with bintrafusp alfa. ³ Includes studies (phase I/II) in collaboration with/ sponsored by external partners, e.g. NCI. ⁴ In combination with cetuximab. ⁵ In combination with osimertinib. ⁶ On March 01st, Merck KGaA, Darmstadt, Germany announced a worldwide in-licensing agreement with Debiopharm, Switzerland, for the development and commercialization of xevinapant (Debio 1143). ⁷ As announced on February 03rd, 2021, the US Food and Drug Administration (FDA) has approved tepotinib for the treatment of adult patients with metastatic non-small cell lung cancer (NSCLC) harboring mesenchymal-epithelial transition (MET) exon 14 skipping alterations. This indication is approved under accelerated approval based on overall response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials. ⁸ As announced on November 26th, 2020, the European Medicines Agency (EMA) has validated for review the application for tepotinib for the treatment of adult patients with advanced non-small cell lung cancer. ⁹ As announced on January 25th, 2021, the European Commission (EC) has approved avelumab as monotherapy for the first-line maintenance treatment of adult patients with locally advanced or metastatic urothelial carcinoma. ¹⁰ As announced on February 24th, 2021, Japan's Ministry of Health, Labor and Welfare (MHLW) has approved a new indication for avelumab as a first-line maintenance treatment for advanced bladder cancer. Additional information: Several combination studies (phase II) of avelumab with talazoparib, axitinib, ALK inhibitors or chemotherapy ongoing under sponsorship of Pfizer.

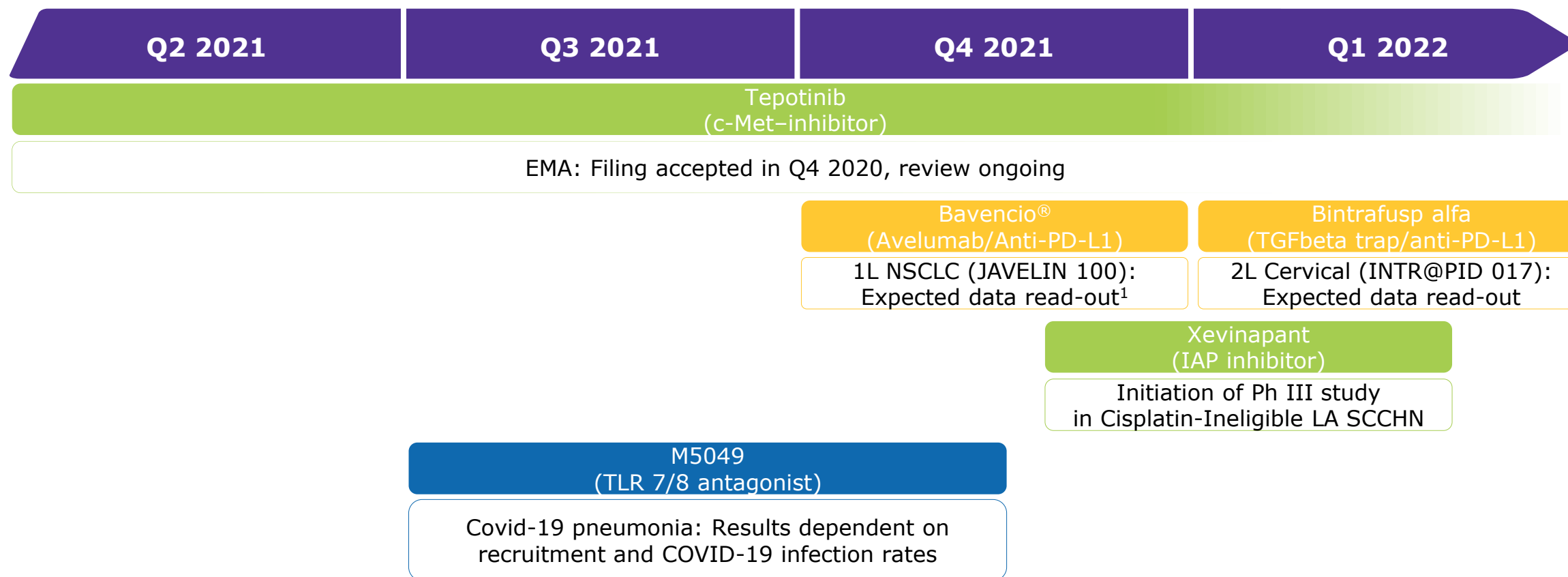
Unless noted otherwise, clinical programs conducted in collaboration with external partners are not shown unless Merck KGaA, Darmstadt, Germany has co-ownership of data. In such case the indication is shown in *Italics*.

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.



Healthcare catalysts – Significant developmental progress across Oncology and Immuno-Oncology portfolio expected in 2021

■ Oncology
 ■ Immuno-Oncology
 ■ Immunology

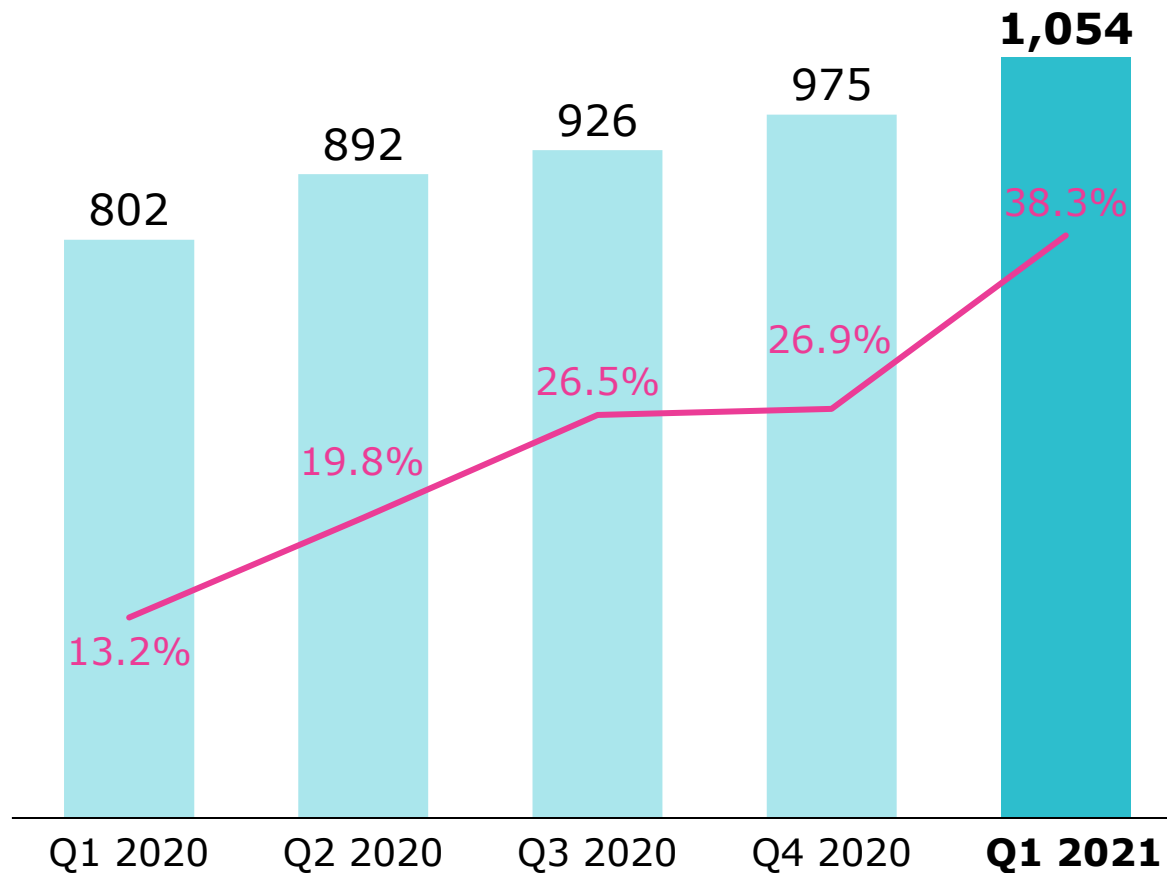


Acronyms: EMA = European Medicines Agency, LA = locally advanced, SCLC = Small cell lung cancer, SCCHN = Squamous cell carcinoma of the head and neck, NSCLC = Non-small cell lung cancer, TLR = Toll-like receptor, 1: Clinical timelines are event-driven and may be subject to change



BIG 3 - Process Solutions: upside potential continues to materialize

Sales development [€m] - org. growth [%]

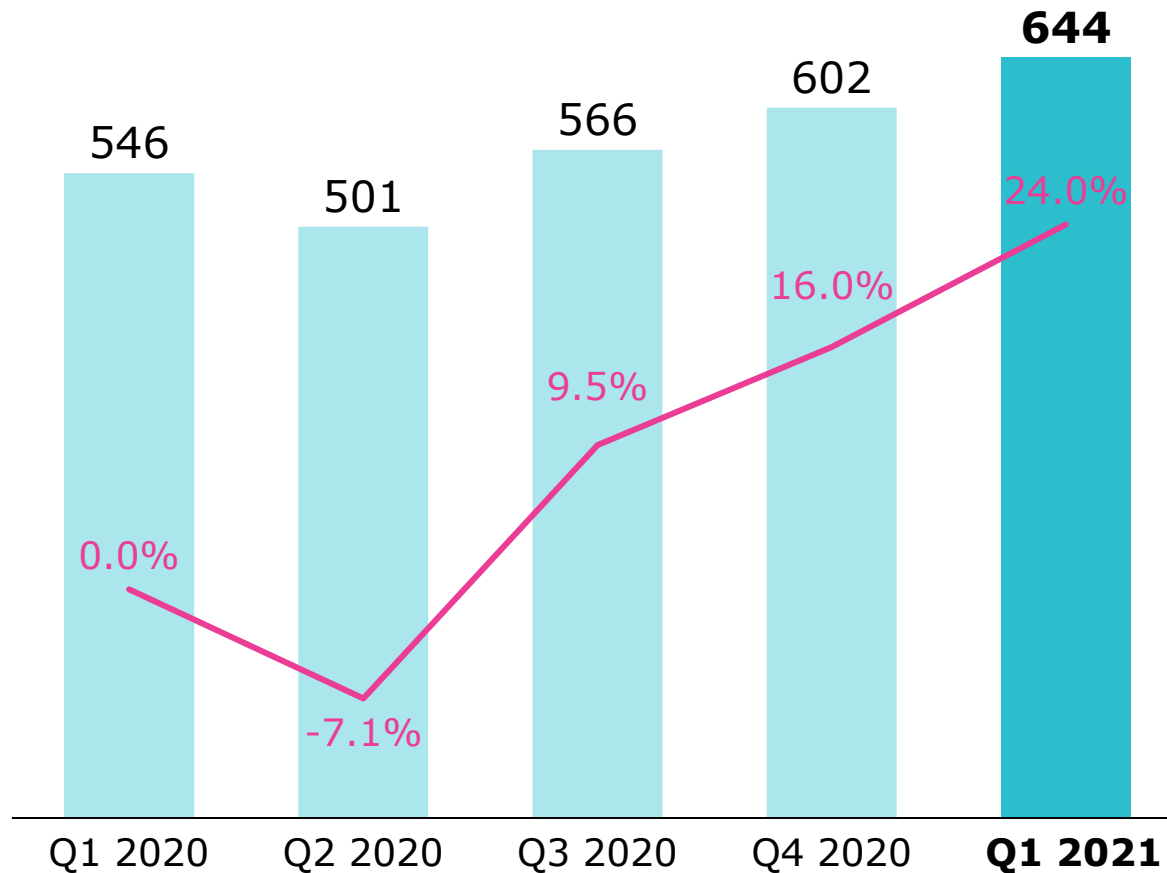


- COVID-19 related projects in **BioP Single Use and Downstream** remain key drivers of ~ 50% additional pandemic-related growth
- Unprecedented growth across all regions particularly strong in **Asia** (>50% org.) in large parts driven by the recovery vs. Q1 2020 lockdown in China
- **Pharma & Biotech** customer segment remains by far the strongest growth driver
- **Comps will be getting tough** from Q2 2021 onwards, as base starts including significant COVID-19 business upside
- **FX headwinds of -7%** mute absolute numbers



Research Solutions: additional COVID-19 demand has gained momentum

Sales development [€m] - org. growth [%]

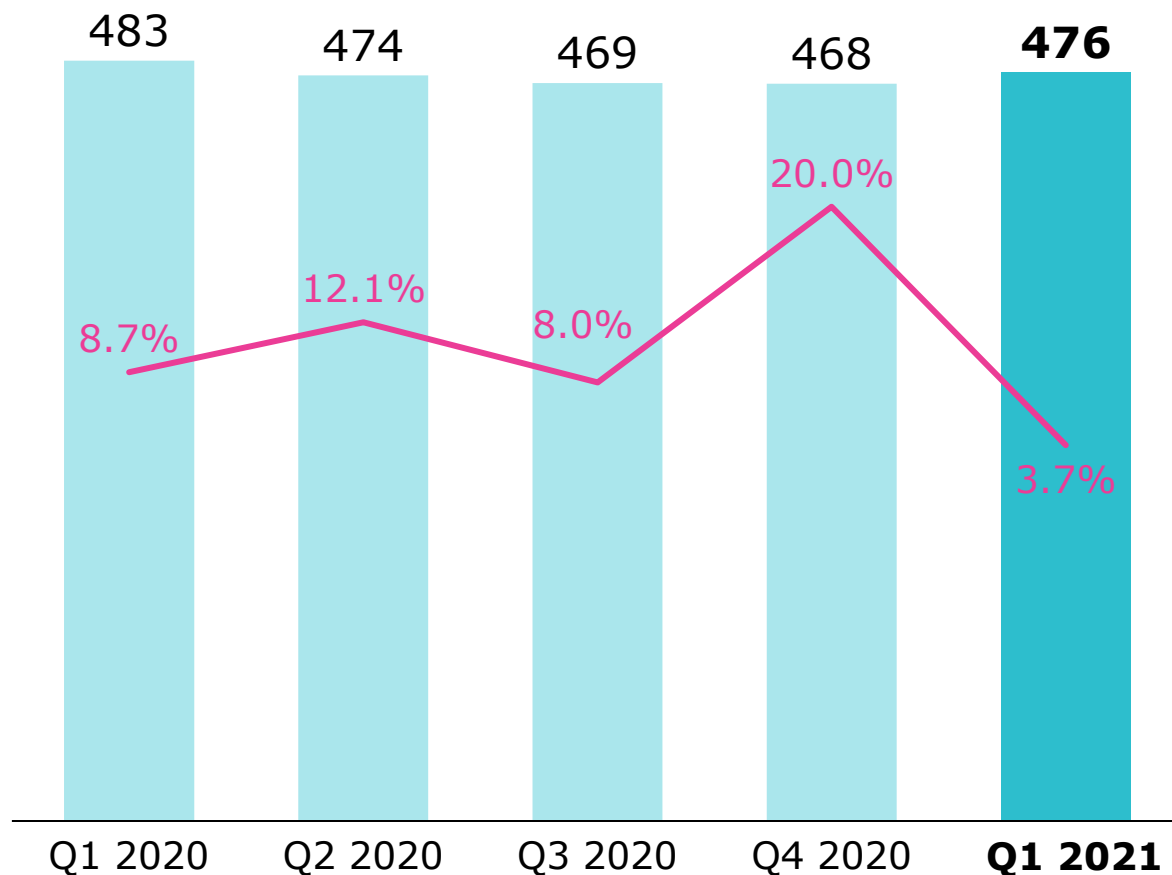


- **Ongoing core business recovery** boosted by additional **COVID-19 related demand**
- Unprecedented growth across all regions particularly strong in **Asia** (>30% org.) and **North America** (>20% org.)
- **Pharma & Biotech** customer segment strongest Q1 growth driver in absolute terms; **Diagnostics** customer segment showed fastest growth in relative terms
- Q2 2021 will be softest comp, against the COVID-19 induced lock-down dip in 2020
- **FX headwinds of -6%** mute absolute numbers



BIG 3 - Semiconductor Solutions: DS&S phasing & FX effects mute growth

Sales development [€m] - org. growth [%]



- **Q4 2020:** strong underlying performance boosted by **favorable DS&S project phasing**
- **Q1 2021: unfavorable DS&S project phasing;** more significant DS&S project contributions expected in following quarters
- **Semiconductor Materials growth** in line with our expectations despite known logistic bottlenecks mainly from Covid-19 related seaport congestions
- **Continued strong confidence** in mid-term market outperformance (200 to 300bps) and in Semi contribution to deliver ambitious 2021 Electronics guidance (+5 to 7% org. net sales)
- **Adverse FX effects of -5.3%** further mute absolute figures



Adjustments in Q1 2021

EBIT Adjustments

[€m]	Q1 2020		Q1 2021	
	Adjustments	thereof D&A	Adjustments	thereof D&A
Healthcare	-27	2	10	0
Life Science	11	0	14	0
Electronics	35	0	17	3
Corporate & Other	17	0	6	0
Total	36	2	47	3





Financial calendar

Date	Event
May 12, 2021	Q1 2021 Earnings release
August 5, 2021	Q2 2021 Earnings release
September 9, 2021	Virtual Capital Markets Day
November 11, 2021	Q3 2021 Earnings release
April 22, 2022	Annual General Meeting

CONSTANTIN FEST



Head of Investor Relations
+49 6151 72-5271
constantin.fest@emdgroup.com

SVENJA BUNDSCHUH



Assistant Investor Relations
+49 6151 72-3744
svenja.bundschuh@emdgroup.com

SARA HOFMANN



Assistant Investor Relations
+49 6151 72-3321
sara.hofmann@emdgroup.com

ILJA DOERING



Institutional Investors /
Analysts
+49 6151 72-24164
ilja.doering@emdgroup.com

GUNNAR ROMER



Institutional Investors /
Analysts
+49 6151 72-2584
gunnar.romer@emdgroup.com

AMELIE SCHRADER

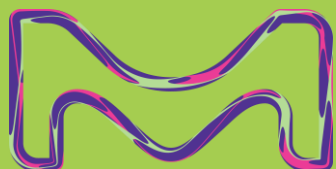


Institutional Investors /
Analysts
+49 6151 72-22076
amelie.Schrader@emdgroup.com

EVA STERZEL



ESG / Institutional & Retail
Investors / AGM
+49 6151 72-5355
eva.sterzel@emdgroup.com



EMAIL: investor.relations@emdgroup.com

WEB: www.emdgroup.com/investors

FAX: +49 6151 72-913321