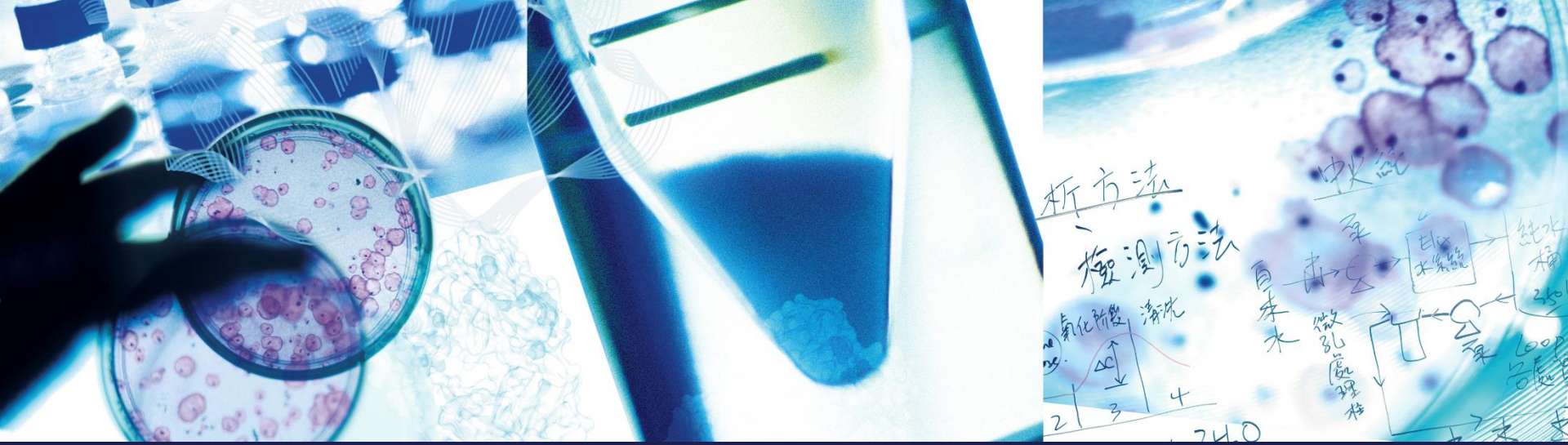

Q1 2015 Results Conference Call

A solid quarter in a challenging year 2015

Marcus Kuhnert, CFO

MERCK

May 19, 2015

Disclaimer

Cautionary Note Regarding Forward-Looking Statements
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 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”).

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, and the Risk Factors section of Sigma-Aldrich’s most recent reports on Form 10-K and Form 10-Q. 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.

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Q1 2015: Highlights

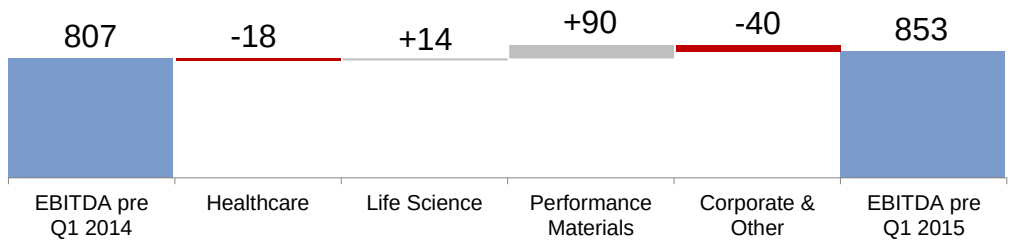
Operations	Healthcare stable despite Rebif decline
	First avelumab* Phase III in NSCLC initiated
	Continued success with innovative UB-FFS technology
Financials	Sales growth of 15.7% driven by AZ, organic performance and FX tailwinds
	EBITDA pre increases by 5.7% to €853 m
	Guidance 2015: Sales €12.3 – 12.5 bn EBITDA pre €3.45 – 3.55 bn

*Avelumab = proposed International Non-proprietary Name (INN), formerly referred to as Anti-PD-L1 mAb (MSB0010718C)

Top-line growth supported by FX

Q1 2015 YoY net sales	Organic	Currency	Portfolio	Total
Healthcare	0.3%	7.1%	0.0%	7.4%
Life Science	3.4%	9.8%	-0.8%	12.4%
Performance Materials	1.6%	14.8%	37.0%	53.4%
Merck Group	**1.3%**	**8.9%**	**5.5%**	**15.7%**

FY YoY EBITDA pre contributors [€ m]



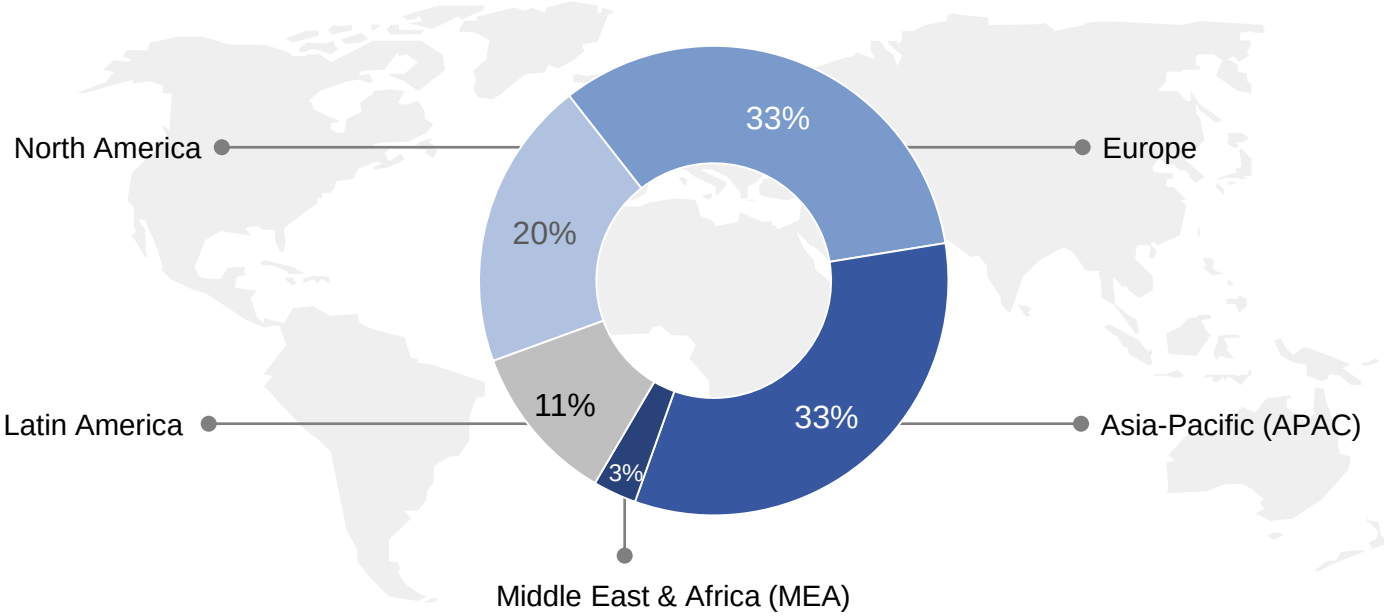
- Healthcare stable; Rebif declines, but offset by growth of other franchises
- Life Science benefits from ongoing biopharma demand
- Performance Materials driven by AZ, LC volume growth (incl. UB-FFS) and FX tailwinds

- Healthcare affected by Humira royalty loss, Rebif decline and higher R&D costs
- Increase in Life Science dampened by significant USD cost base
- Performance Materials contains AZ and FX benefits
- Hedging losses reduce Corporate EBITDA pre

Totals may not add up due to rounding

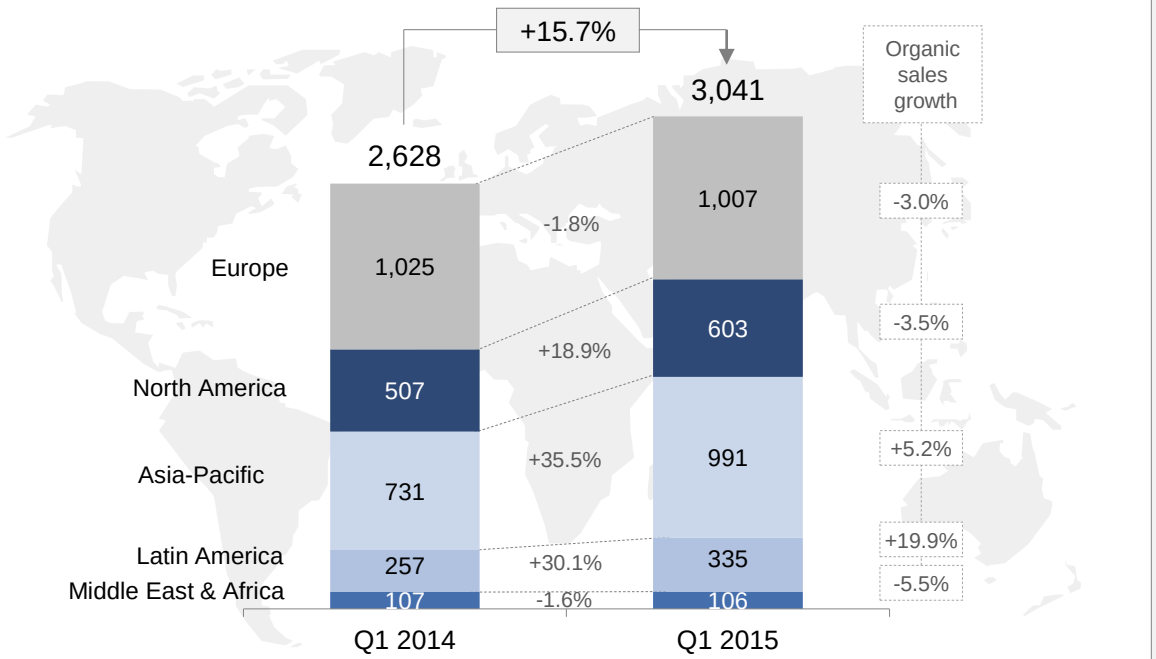
New regional split: APAC and Europe largest regions

Merck Group Q1 2015 net sales by region [in %]



Europe and North America influenced by Rebif decline, offset by APAC and Latin America

Regional development of net sales [€ m]



Regional details

- Reported sales growth includes AZ contribution especially in Asia-Pacific and North America
- Europe mainly impacted by increasing competition for Rebif
- Organic decline in North America due to Rebif erosion mitigated by bio-pharma demand for purification products
- China main organic driver in APAC with fertility products as key contributor
- Organic growth in Latin America driven by General Medicine and Consumer Health products

Totals may not add up due to rounding

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Q1 2015 overview

[€ m]	Q1 2014	Q1 2015	Δ
Net sales	**2,628**	**3,041**	**15.7%**
EBITDA pre	**807**	**853**	**5.7%**
Margin (% of sales)	*30.7%*	*28.0%*	
EPS pre [€]	**1.15**	**1.12**	**-2.6%**
Operating cash flow	**409**	**279**	**-31.8%**
[€ m]	Dec 31, 2014	March 31, 2015	Δ
Net financial debt	**559**	**78**	**-86.0%**
Working capital	**2,356**	**2,700**	**14.6%**
Employees	**39,639**	**39,842**	**0.5%**

Q1 2015

- EBITDA pre increases, while margin softens due to royalty loss, Rebif decline, higher R&D and LTIP*
- EPS pre decrease mainly driven by financial result
- Operating cash flow burdened by higher tax and interest payments
- Reduced net financial debt due to operating cash flow and net cash position in USD (FX)
- Working capital increase mainly attributable to FX

Totals may not add up due to rounding; *Long Term Incentive Plan

Reported EPS reflects Sigma financing costs

[€ m]	Q1 2014	Q1 2015	Δ
EBIT	**468**	**480**	**2.5%**
Financial result	-35	-101	>100%
Profit before tax	**434**	**379**	**-12.5%**
Income tax	-106	-94	-11.4%
Tax rate (%)	*24.5%*	*24.8%*	
Net income	**325**	**282**	**-13.4%**
EPS (€)	**0.75**	**0.65**	**-13.3%**

Reported results

- EBIT reflects D&A from AZ and costs for acquisitions
- Financial result impacted by higher interest expenses (hybrid & USD bond) and LTIP*
- Tax rate in line with guidance range of 23-25%

Totals may not add up due to rounding; *Long Term Incentive Plan

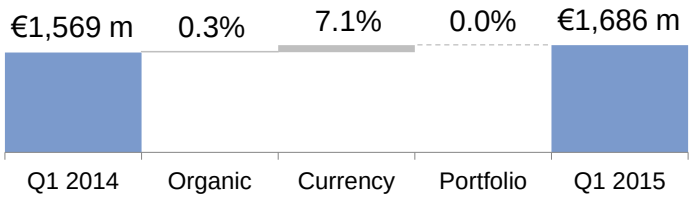
Healthcare: The start of an investment year

[€ m]	Q1 2014	Q1 2015
Net sales	**1,569**	**1,686**
Marketing and selling	-609	-660
Admin	-58	-66
R&D	-303	-348
EBIT	**273**	**268**
EBITDA	467	449
EBITDA pre	**479**	**461**
Margin (% of sales)	*30.5%*	*27.3%*

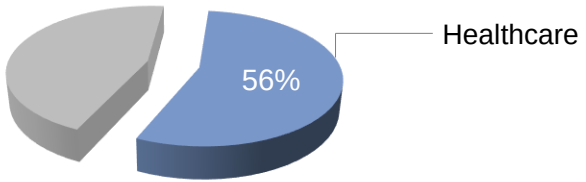
Comments

- Expected decline of Rebif driven by volume losses in EU & U.S.
- Erbitux negative, mainly affected by tender phasing and EU pricing
- Fertility and General Medicine portfolio remain growth drivers
- Consumer Health organically strong, driven by new marketing concept and ongoing demand for Neurobion in Latin America
- Higher M&S due to investments in growth markets and FX
- R&D reflects ramp-up of avelumab* development; first PhIII trial started
- EBITDA pre and margin lower, as loss of Humira royalties, Rebif decline and investments outweigh currency tailwinds

Net sales bridge



Q1 2015 share of group net sales



Healthcare includes Merck Serono, Consumer Health, Biosimilars and Allergopharma;
*Avelumab = proposed International Non-proprietary Name (INN), formerly referred to as Anti-PD-L1 mAb (MSB0010718C)

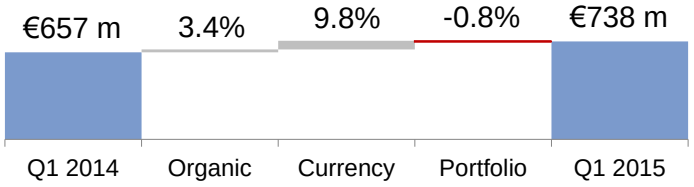
Life Science: A solid quarter

[€ m]	Q1 2014	Q1 2015
Net sales	**657**	**738**
Marketing and selling	-210	-233
Admin	-29	-31
R&D	-38	-45
EBIT	**87**	**83**
EBITDA	164	164
EBITDA pre	**170**	**184**
Margin (% of sales)	*25.8%*	*25.0%*

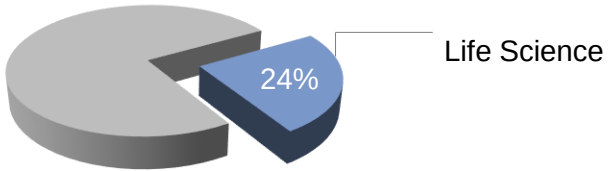
Comments

- Process Solutions drives divisional growth mainly due to strong demand from biopharma for single-use and purification products
- Lab Solutions with moderate growth especially in lab water consumables and biomonitoring
- Bioscience flat as good development of protein detection products is offset by low demand for antibodies
- EBIT decline due to double-digit acquisition costs
- EBITDA pre benefits from organic growth and FX tailwinds, partially offset by investments in marketing and selling

Net sales bridge



Q1 2015 share of group net sales



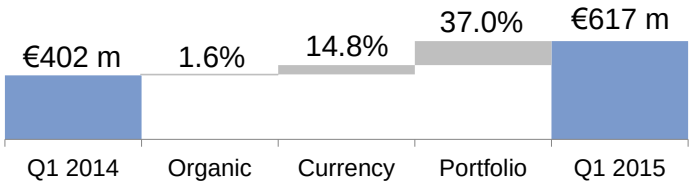
Performance Materials: Healthy market trends amid significant currency tailwinds

[€ m]	Q1 2014	Q1 2015
Net sales	**402**	**617**
Marketing and selling	-36	-46
Admin	-8	-18
R&D	-38	-47
EBIT	**152**	**214**
EBITDA	179	273
EBITDA pre	**186**	**277**
Margin (% of sales)	*46.3%*	*44.8%*

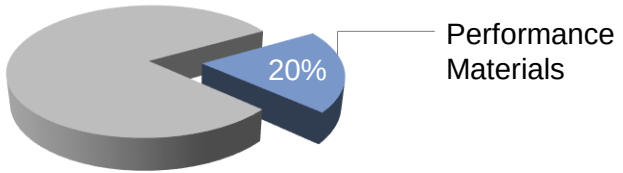
Comments

- Strong sales reflect portfolio effect, organic growth and FX tailwinds
- Liquid Crystals volume trends remain largest organic contributor
- New UB-FFS mode main driver in LC; ongoing demand for high-end TVs benefits flagship technologies (PS-VA & IPS)
- Pigments supported by coating industry demand for Xirallic products
- Significant EBITDA pre increase driven by AZ and FX
- EBITDA pre margin reflects mix effect from AZ

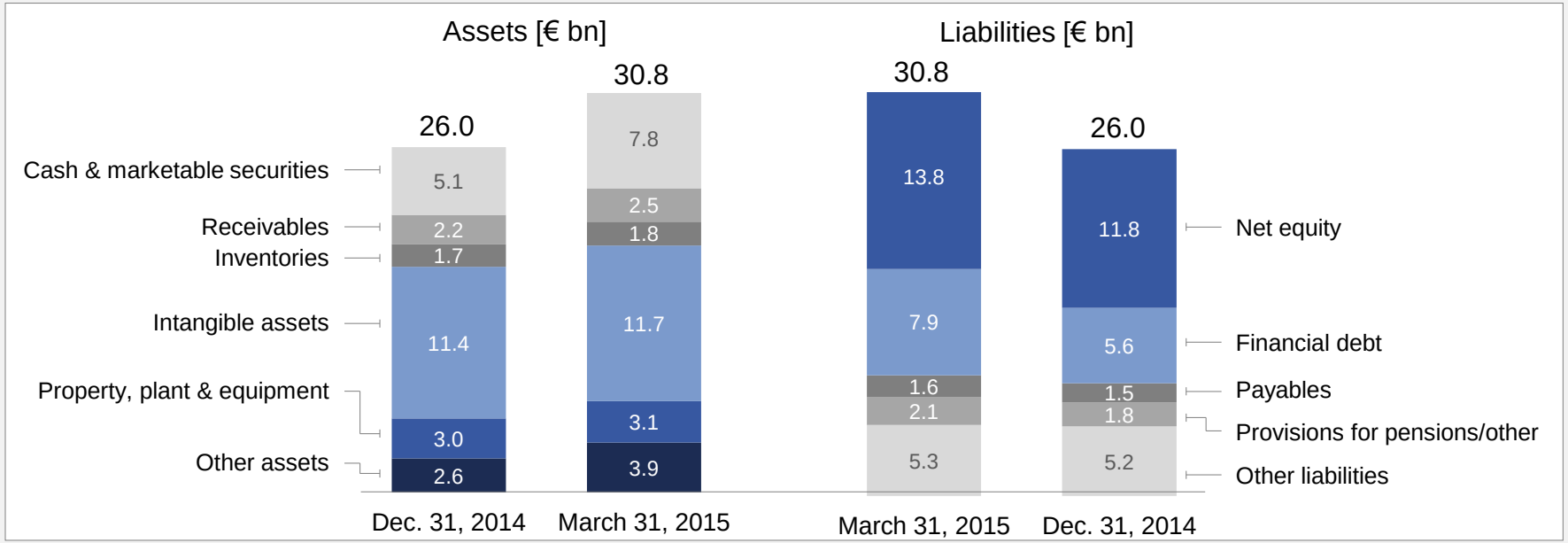
Net sales bridge



Q1 2015 share of group net sales



Balance sheet reflects Sigma financing measures



- Issuance of USD bonds impacts cash and debt
- FX development accounts for ~€1.5 bn total balance sheet increase

Totals may not add up due to rounding

Operating cash flow burdened by one-time tax payment relating to Pfizer upfront

[€ m]	Q1 2014	Q1 2015	Δ
Profit after tax	**327**	**285**	**-42**
D&A	302	325	23
Changes in provisions	-47	90	137
Changes in other assets/liabilities	-32	-231	-199
Other operating activities	5	-20	-25
Changes in working capital	-147	-172	-25
Operating cash flow	**409**	**279**	**-130**
Investing cash flow	**1,100**	**392**	**-708**
thereof Capex on PPE	-57	-75	-18
Financing cash flow	**7**	**2,288**	**2,281**

Cash flow drivers

- D&A increase attributable to AZ
- Higher LTIP* and currency adjustments in litigation provisions drive increase in changes in provisions
- Changes in other assets & liabilities reflect higher tax and interest payments
- LY's investing cash flow contains sale of current financial assets for AZ
- Financing cash flow reflects USD bond issuance and repayment of eurobond

Totals may not add up due to rounding; *Long Term Incentive Plan

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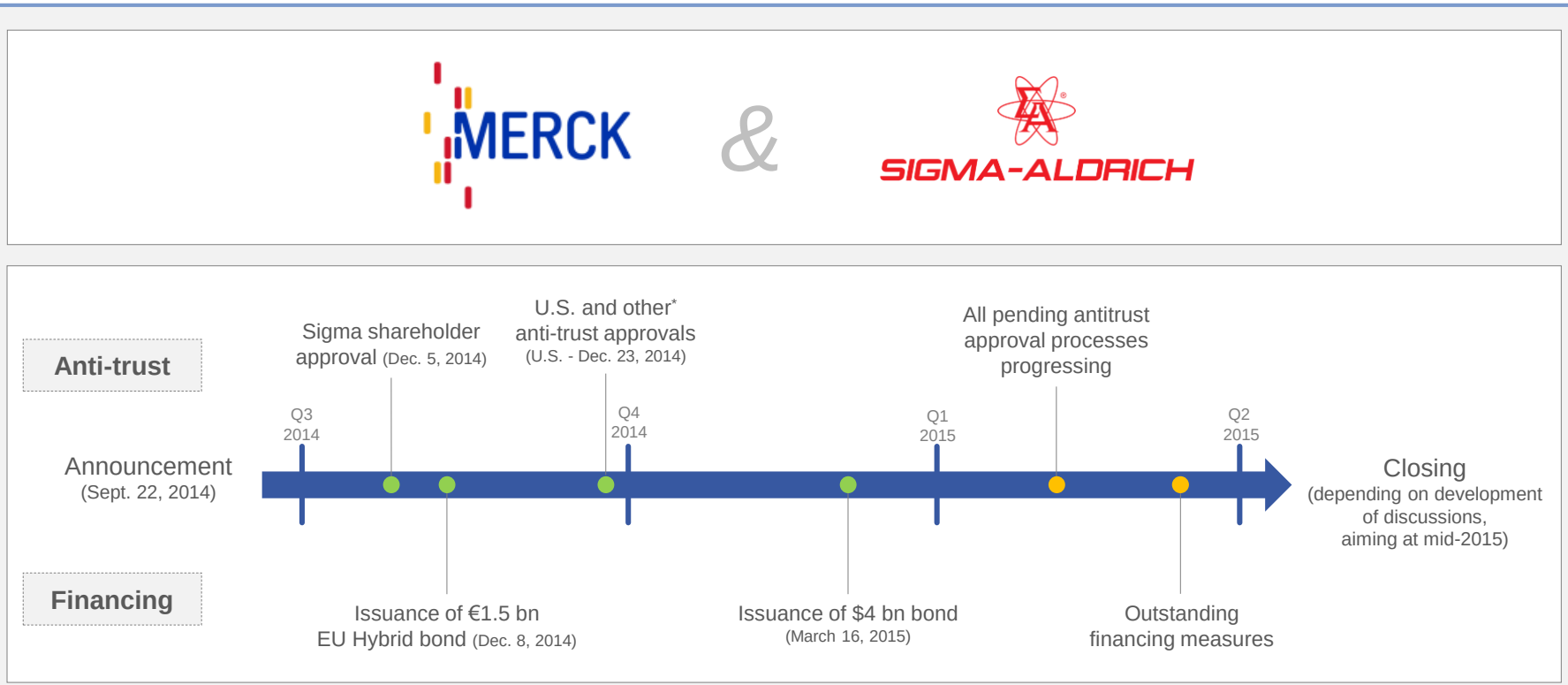
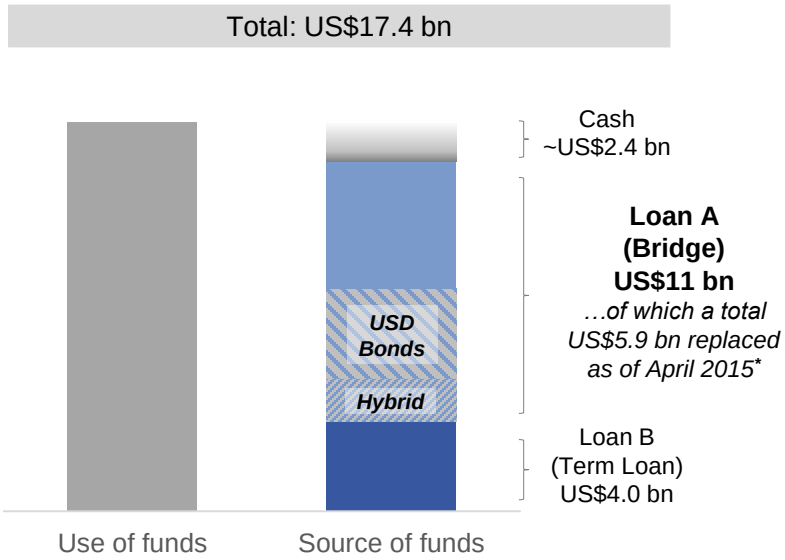
Sigma-Aldrich – Update



*Russia, Serbia, Ukraine, Taiwan and South Africa

Solid structure to finance Sigma-Aldrich transaction

Financing structure



Update on funding structure

- Acquisition 100% cash & debt financed
- Intention to replace the bridge until closing of acquisition through various capital markets transactions
- Accomplished transactions:
  - Dec. 2014: ~$1.9 bn hybrid bond
  - March 2015 ~$4 bn USD bond
- Strong combined cash flows available for rapid deleveraging
- Strong investment grade rating maintained
- Expected financing costs below 2%

*FX rate for hybrid bond EUR/USD 1.30 according to financing concept at signing

High cost base in strong currencies and hedging losses partially offset FX tailwinds

Healthcare

Sales

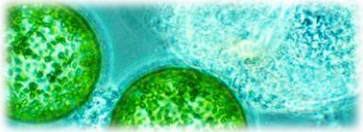
- Global presence
- ~40% of sales in Europe

Costs

- High Swiss franc cost base due to manufacturing sites
- R&D hub and notable sales force in U.S.

FX impact

Life Science



Sales

- Balanced regional sales split between EU, NA and RoW

Costs

- Extensive manufacturing and research footprint in the U.S.
- Global customer proximity requires broad-based sales force

FX impact

Performance Materials

Sales

- ~80% of sales in Asia-Pacific
- Industry is USD-driven

Costs

- Main production sites in Germany
- Several R&D and mixing facilities in Asia

FX impact

Illustration; Acronyms: EU = Europe; NA = North America; RoW = Rest of World

Full year 2015 guidance

Merck guidance* for 2015, on existing platform

Net sales:	**~ €12.3 – 12.5 bn**
EBITDA pre:	**~ €3,450 – 3,550 m**
EPS pre:	**~ €4.60 – 4.80**

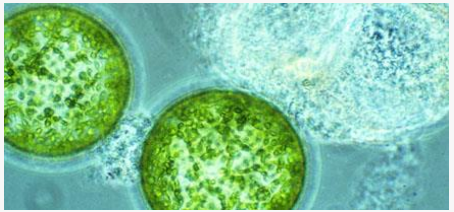
*Without Sigma-Aldrich contribution

2015 business sector guidance

Healthcare

Net sales
Organically stable
EBITDA pre
~ €1.9 – 2.0 bn

Life Science*



Net sales
Moderate organic growth
EBITDA pre
~ €730 - 760 m

Performance Materials

Net sales
Slight organic growth
EBITDA pre
~ €1.05 – 1.1 bn

*Without Sigma-Aldrich contribution

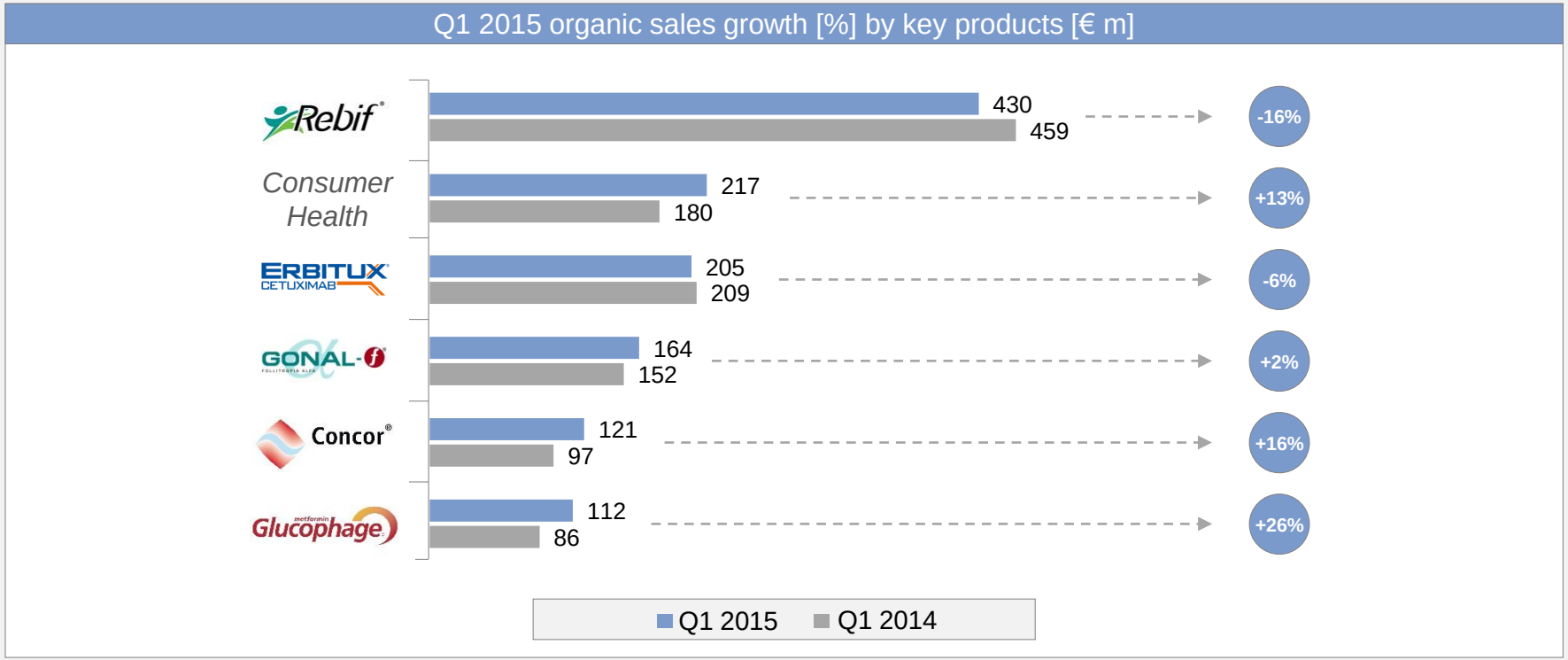

MERCK
Living Innovation

Appendix

Additional financial guidance 2015

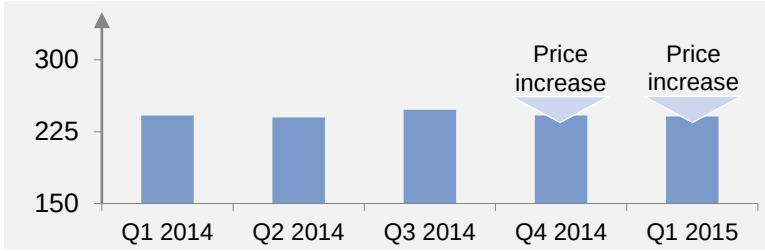
Further financial details	
Merck Group royalty, license and commission income in 2015	~€300 m
Corporate & Other EBITDA pre	~ -€280 – -330 m
Underlying tax rate	~23% to 25%
Capex on PPE	~€550 m
Hedging / USD assumption	2015 & 2016 hedge rate ~30% at EUR/USD ~1.24 to 1.26
2015 Ø EUR/USD assumption	~1.10 – 1.15

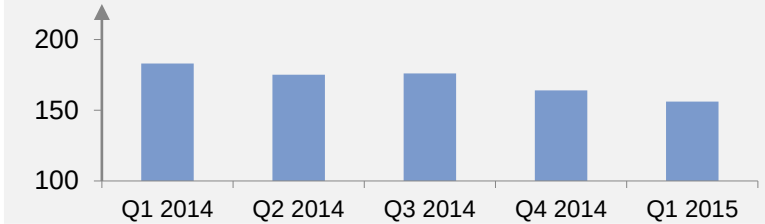
Healthcare organic growth by franchise/product



Rebif: Defending the franchise – competitive pressure in the U.S. and Europe

Rebif - Regional sales evolution [€ m]

Trend	North America	Q1 drivers
↘		-16.7% org. Price Volume FX

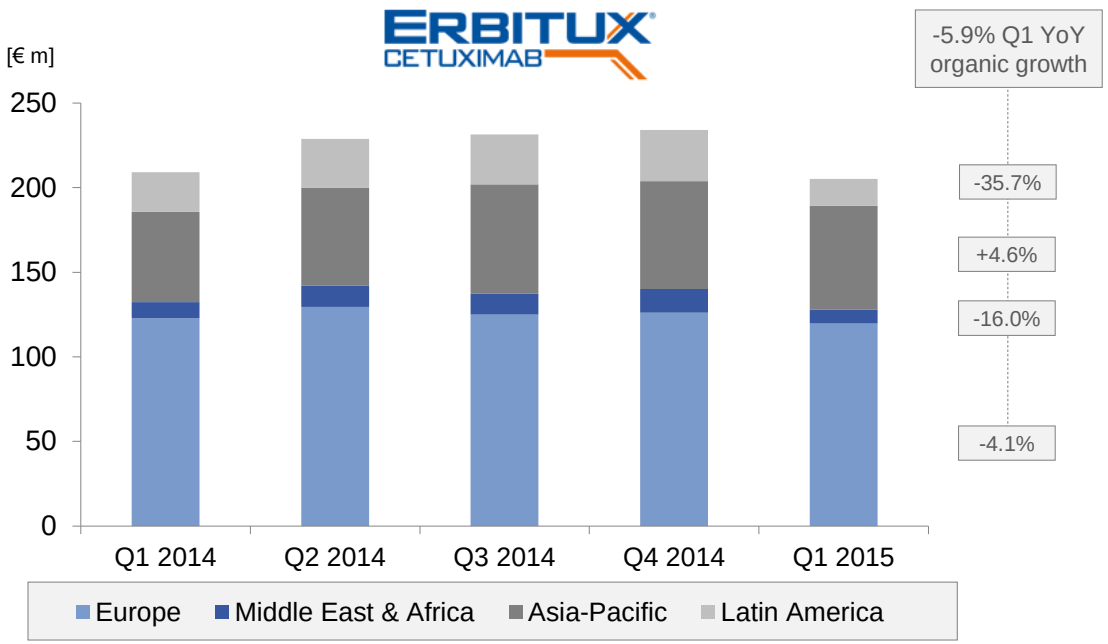
Trend	Europe	Q1 drivers
↘		-15.7% org. Price Volume

Rebif performance

- Rebif sales of €430 m in Q1
- Organic decline of -15.9% is driven by lower volumes slightly mitigated by U.S. pricing
- U.S. influenced by some destocking; last year included positive wholesaler restocking effect in U.S.
- Competition from orals main factor of U.S. and European volume decline
- Recent price increases support the U.S.

Erbitux: A challenging quarter

Erbitux sales by region



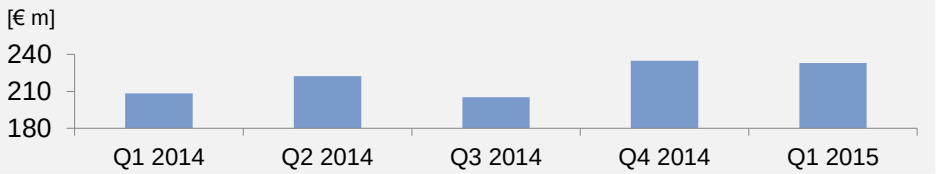
Erbitux performance

- Sales decrease to €205 m as FX is more than offset by organic decline
- Europe facing tough environment with price declines in some countries
- Phasing of tender business in several strategic markets burdens organic growth
- Growth in China due to successful listing in further provinces drives Asia-Pacific

Strong growth in General Medicine, Fertility and Endocrinology

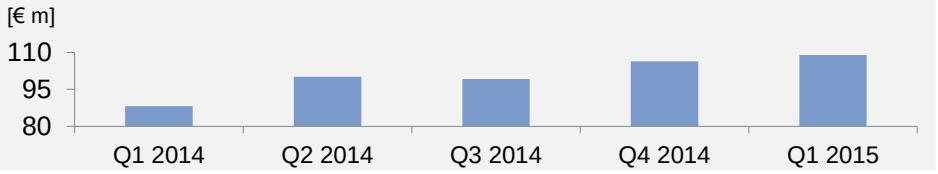
Sales evolution

Fertility



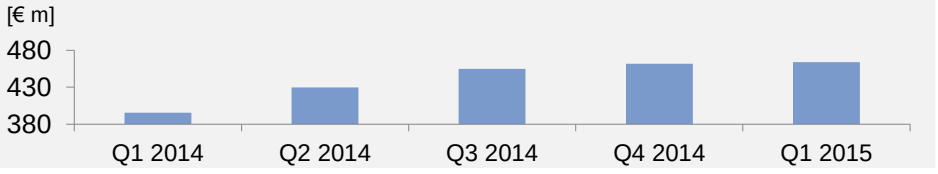
Q1 drivers: Organic

Endocrinology



Q1 drivers: Organic

General Medicine[1]



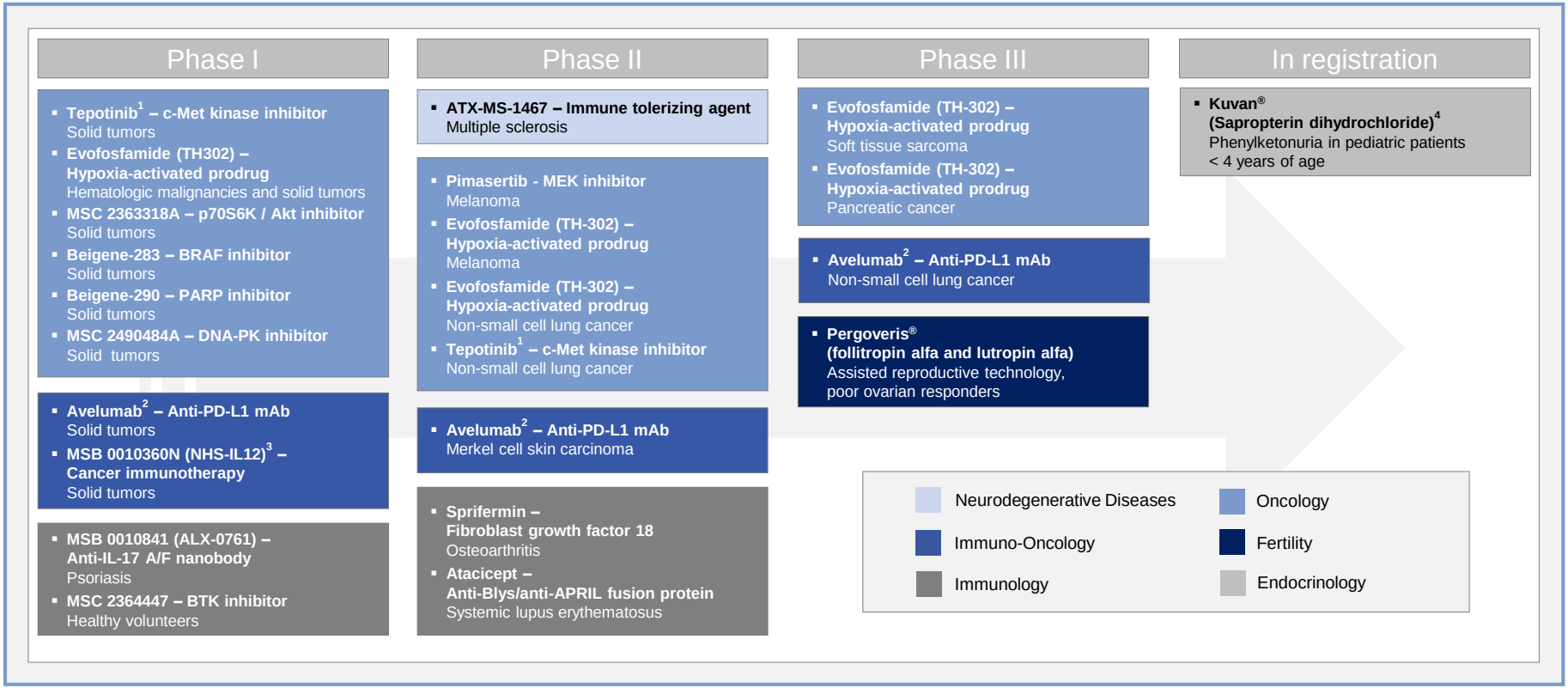
Q1 drivers: Organic

Q1 drivers

- Fertility franchise with 5.8% organic growth mainly driven by high demand from fast-growing Chinese market
- Solid volumes in Europe support solid organic growth in Endocrinology
- Concor and Thyroid products see ongoing good demand from LatAm[2], driving growth of General Medicine[1]
- Glucophage growing organically especially in LatAm[2], supported by low base due supply chain issues LY
- Successful repatriation in Russia – Glucophage and Euthyrox picking up

[1]includes “Cardiometabolic Care & General Medicine and Others”; [2]Latin America

Merck Serono pipeline



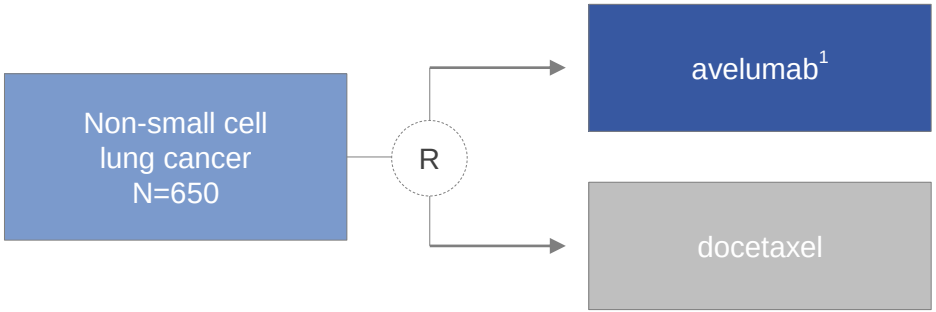
Pipeline as of 30 April, 2015; [1]Tepotinib is the proposed International Nonproprietary Name (INN) for the c-Met kinase inhibitor (MSC 2156119J); [2]Avelumab = proposed International Non-proprietary Name (INN), formerly referred to as Anti-PD-L1 mAb (MSB0010718C); [3]Sponsored by the National Cancer Institute (USA); [4]Post-approval request by the European Medicines Agency

First avelumab Phase III initiated

Phase III (avelumab[1] NSCLC[2]) – Study design

JAVELIN Lung 200
avelumab[1] in non-small cell lung cancer

Open-label, multicenter trial in subjects with NSCLC that has progressed after a platinum-containing doublet



Study setup:

- Primary endpoint: Overall survival in patients with PD-L1+ stage IIIb/IV NSCLC
- Secondary endpoints include: Overall survival, progression-free survival, overall response rate and will be assessed across the entire study population irrespective of PD-L1 status
- Study recruitment across 290 sites in over 30 countries

Strategic rationale:

- High unmet medical need with a low 5-year patient survival rate
- Extensive market potential despite competitive environment
- Potential for future combinations

[1]Avelumab = proposed International Non-proprietary Name (INN), formerly referred to as Anti-PD-L1 mAb (MSB0010718C); [2]Non Small Cell Lung Cancer

ASCO: Key avelumab abstracts

Avelumab*

- Ovarian cancer
  - Avelumab*, an anti-PD-L1 antibody, in patients with previously treated, recurrent or refractory ovarian cancer: a phase Ib, open-label expansion trial
- Lung cancer
  - Avelumab*, an anti-PD-L1 antibody, in advanced NSCLC patients: a phase 1b, open-label expansion trial in patients progressing after platinum-based chemotherapy
- Gastric cancer
  - A phase I dose expansion trial of avelumab* (MSB0010718C), an anti-PD-L1 antibody, in Japanese patients with advanced gastric cancer
- Metastatic Merkel cell carcinoma
  - A phase II, open-label, multicenter trial to investigate the clinical activity and safety of avelumab* (MSB0010718C) in patients with metastatic Merkel cell carcinoma
- Safety and efficacy update
  - Phase I expansion cohort trial to investigate the safety and clinical activity of avelumab* (MSB0010718C) in patients with metastatic or locally advanced solid tumors

*Avelumab = proposed International Non-proprietary Name (INN), formerly referred to as Anti-PD-L1 mAb (MSB0010718C)

Exceptional items in Q1 2015

Exceptional items in EBIT				
[€ m]	Q1 2014		Q1 2015	
	Exceptional items	thereof D&A	Exceptional items	thereof D&A
Healthcare	13	1	12	0
Life Science	6	0	20	0
Performance Materials	8	0	4	0
Corporate & Other	11	0	12	0
Total	38	1	48	0

Totals may not add up due to rounding

Financial calendar

Date	Event
August 06, 2015	Q2 2015 Earnings release
November 12, 2015	Q3 2015 Earnings release
March 08, 2016	Q4 2015 Earnings release
April 29, 2016	Annual General Meeting

Investor Relations contact details

Constantin Fest
Head of Investor Relations
+49 6151 72-5271
constantin.fest@merckgroup.com

Alessandra Heinz
Assistant Investor Relations
+49 6151 72-3321
alessandra.heinz@merckgroup.com

Annett Weber
Institutional Investors / Analysts
+49 6151 72-63723
annett.weber@merckgroup.com

Svenja Bundschuh
Assistant Investor Relations
+49 6151 72-3744
svenja.bundschuh@merckgroup.com

Julia Schwientek
Institutional Investors / Analysts
+49 6151 72-7434
julia.schwientek@merckgroup.com

Eva Sterzel
Private Investors / AGM / CMDs / IR Media
+49 6151 72-5355
eva.sterzel@merckgroup.com

Olliver Lettau
Institutional Investors / Analysts
+49 6151 72-34409
olliver.lettau@merckgroup.com

Email: investor.relations@merckgroup.com Web: www.investors.merck.de Fax: +49 6151 72-913321