

Merck Serono Investor & Analyst Day

Roadmap to sustainable success

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Remarks

All comparative figures relate to the corresponding last year's period.

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Agenda

Our strategic priorities for sustainable success

Maximizing our core franchises

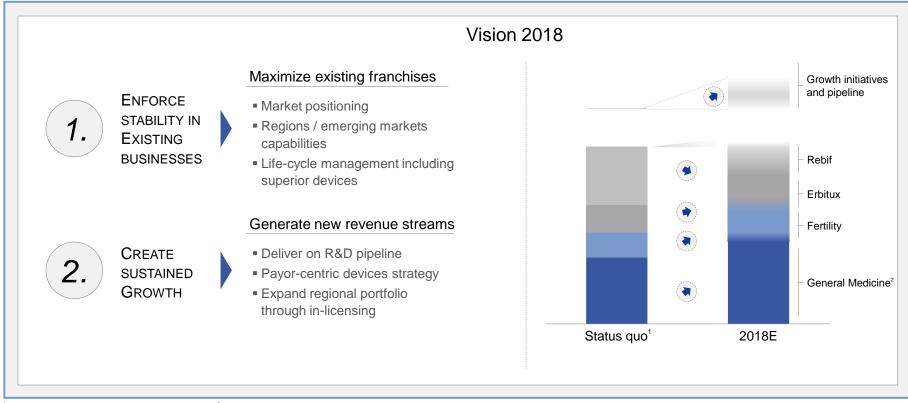
Driving Emerging Markets leadership

R&D for long-term sustainable growth

Executive summary

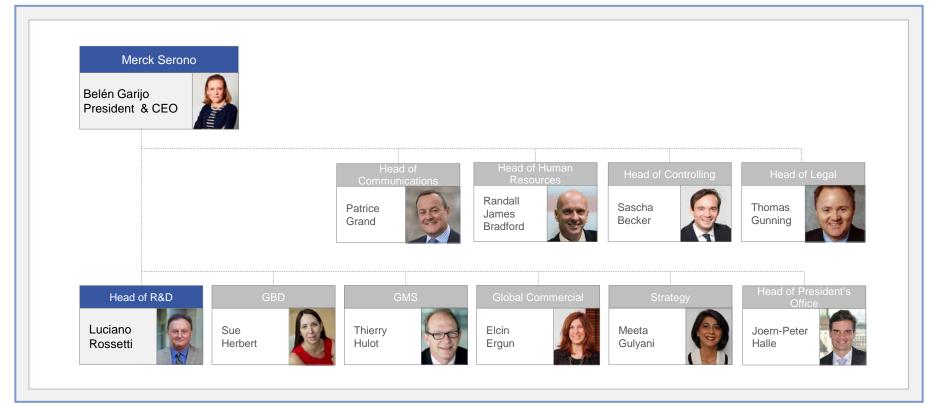
Strategic priorities for sustainable success: New revenue streams and maximizing existing franchises





Global, diverse and talented Merck Serono executive management team ensures flawless execution







Agenda

Our strategic priorities for sustainable success

Maximizing our core franchises

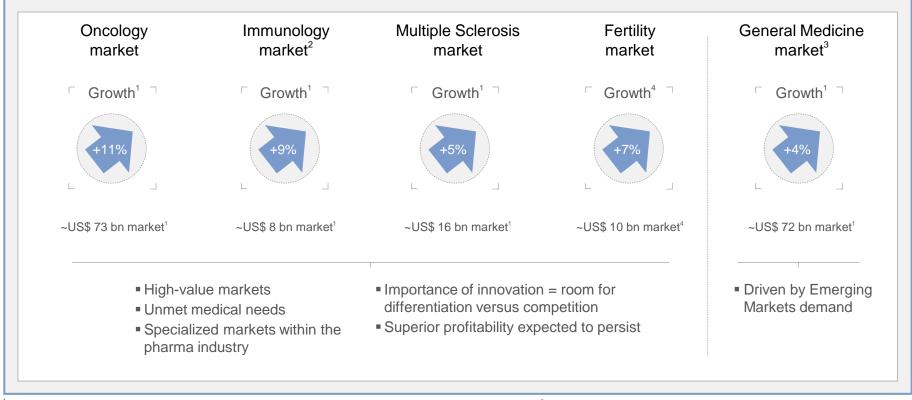
Driving Emerging Markets leadership

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Merck Serono's existing franchises focus on attractive markets





¹Data for global market 2013, CAGR for 2013-2018 (2020 for multiple sclerosis); Source: Sales data according to EvaluatePharma® a service of Evaluate Ltd. (UK), www.evaluategroup.com, accessed July 2014 ²Immunosuppressants ³Includes cardiovascular, diabetes treatment ⁴Growth 2013-2021; Source: Merck Serono based on Transparency market research 2010; US IV Clinics 2011, CDC, ESHRE, press

Strategic priorities are well defined to maximize core franchises



Oncology	Promote Erbitux' value to personalized treatments Increase RAS testing adoption and usage
Multiple Sclerosis	Strengthen Rebif's competitive position as a leading treatment Drive differentiation via smart devices and first MS* e-health platform
Fertility	Provide innovative services and technologies beyond drugs Drive Emerging Markets presence, especially in China and Russia
Devices and services	Promote as key differentiator of Merck Serono's business Build as a focus area of innovation and service to patients
General Medicine and others	Focus on growth in Emerging Markets Enhance life-cycle management and recover growth levers in core markets



Erbitux® – First choice in personalized treatments for mCRC and champion in head and neck



Top 4 priorities to support Erbitux



Further focus on the value of personalized treatments



Highlight importance of RAS testing², raise RAS testing rates and roll out blood-based RAS test (Sysmex collaboration)



Continue to highlight advantages for targeted patient populations based on current data (Fire3, CALGB-80405, new Crystal retrospective)



Maximize head and neck opportunity globally, especially in Japan and other Asian countries

Erbitux



Sales¹



- Stable to slight organic sales growth
- Growing balance between mCRC³ and SCCHN⁴
- Testing to offer upside potential

¹FY 2013; ²Determination of tumor gene status for RAS in all patients with mCRC – especially emphasized in the updated NCCN Guidelines v.1.2015; ³mCRC = metastatic colorectal cancer ⁴SCCHN = squamous cell cancer of the head and neck

Rebif® – Capitalizing on efficacy and active life-cycle management to support long-term prospects



Top 4 priorities to drive Rebif



Focus on Rebif's efficacy in reducing relapse rates and delaying disability progression



Raise differentiation via smart injection devices², and online and mobile patient applications as tools to drive adherence and improve patient experience



Defend Rebif's leadership position in Europe within the injectables segment and strengthen position in the US; implement tactics to drive patient acquisition and retention



Secure long-term profitability upgrade of the US franchise after Pfizer contract expiry





Sales¹



- Manage revenue erosion
- Leverage profitability
- Maximize payers' value (devices)

Fertility – Expanding the franchise to the next level: beyond drugs



Top 3 strategic priorities



Expand leadership position and build on No.1 brand growing globally, especially in high-potential Emerging Markets



Bolster underlying growth with potential label expansion (e.g. Pergoveris) and life-cycle and devices management versus entry of biosimilars competition



Leverage existing strong presence and knowledge in the fertility clinic channel to provide innovative technologies & services in the ART² lab to drive innovation and increase success rates

Fertility











Sales¹

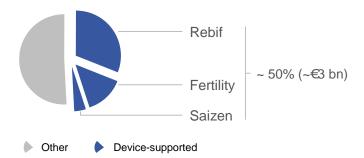


- Continuous sales growth driven by changing demographics in EM
- Ongoing contribution from beyond drugs strategy in Europe and Canada

Medical devices – Further enhancing the value of Merck Serono and harnessing existing strengths



Device-supported franchises at Merck Serono¹



Strategy

- Build on existing competencies in devices and integrate across therapeutic areas
- Drive innovation and differentiation versus competition in existing product franchises
- Expand to selected specialty chronic diseases
- Provide solution to payers to better manage healthcare costs

Current product offering²

Rebif

- Rebidose
- Rebiject
- Rebislide
- RebiSmart³
- MSdialog³



Fertility

 Family of pens for Gonal-F, Pergoveris, Ovidrel

Saizen

- Easypod
- Cool.click2
- Easypod Connect³







¹Supported by Merck Serono's current portfolio of 13 medical devices; based on FY 2013 sales; ²Not all devices are available in all markets; ³Software and mobile applications linked to RebiSmart (allowing – among others – monitoring of treatment adherence and patient reported outcomes, and visualization over time to patient and physicians) and Easypod (allowing, among others, monitoring of treatment adherence and visualization to physicians)

Medical devices – Driving Merck Serono towards an integrated business model



Top 3 strategic priorities



Enhance existing competencies in devices and integrate across therapeutic areas



Drive development of long-term Chronic Treatment Solution Platform on the basis of advanced MS care concept*



Expand current technological lead to specialty chronic diseases outside of current multiple sclerosis franchises

Devices





- Ongoing product and concept development (currently 21 projects in all therapeutic areas)
- Launch MS care concept in multiple sclerosis as blueprint business model
- Potential first drug-agnostic revenue stream after 3 years

General Medicine – Strong Emerging Markets platform enables continued growth



Top 4 strategic priorities to build on track record



Foster role as solid cash generator based on strong brands, focused life-cycle management and customized innovation model with ring-fenced R&D budget



Accelerate growth in already strong Emerging Markets platforms, especially in China, Brazil, Russia, Middle and Near East



Renew and strengthen portfolio through life-cycle management, e.g. Concor FDCs³, Glucophage label changes, Euthyrox reformulations



Continue to recover main growth levers in core markets and assets (e.g. BMS China)

General Medicine¹











Sales²



- Solid organic sales growth
- Rising earnings contribution from growth initiatives

The road to maximizing Merck Serono's existing franchises is clear





Continue to drive front-line mCRC share by increasing patient testing and expanding head and neck coverage



Capitalize on strong efficacy and new smart devices to maximize differentiation and defend franchise





Build on No.1 position and ART¹ channel access with embryo diagnostics and other innovative technologies

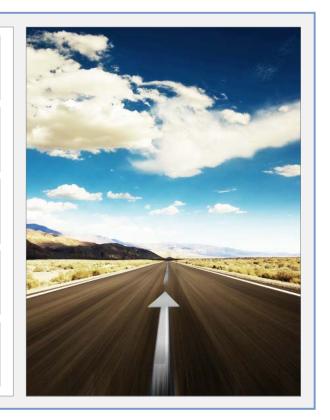




Harness strengths of existing business and build a new focus area driven by innovative devices and services for patients



Build on existing track record in Emerging Markets, drive brand and life-cycle management and expand business including asset repatriation





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Our strategic priorities for sustainable success

Maximizing our core franchises

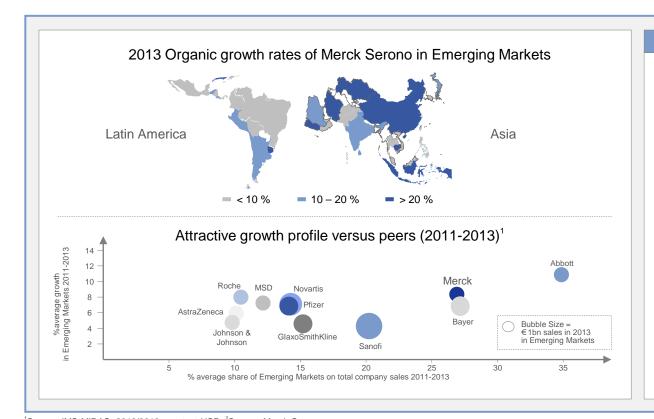
Driving Emerging Markets leadership

R&D for long-term sustainable growth

Executive summary

Emerging Markets are a key pillar of growth for Merck Serono





Key facts

- Emerging Markets are a key driver for the branded products as well as for Merck Serono overall
- ~30% of sales in Emerging Markets
- ~50:50 breakdown between Latin America and Asia
- Emerging Markets account for >60% of organic growth 2011-2013²

Emerging Markets support existing business and serve as a platform for strategic growth initiatives

Emerging markets dynamics support future growth prospects



Growing middle class



- Changing lifestyles and treatment needs (e.g. fertility)
- Higher healthcare spending

Extended healthcare coverage



- Rising government spending
- Higher healthcare requirements (e.g. service, quality)

Shift to chronic diseases



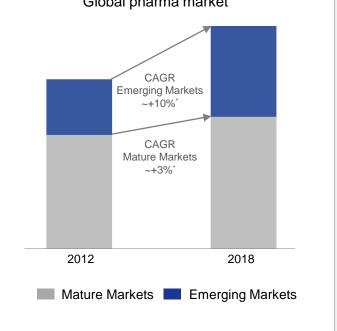
- Higher healthcare costs
- Need for medical support and devices

Rising demand for biologics



- Changing disease profiles
- Rising treatment requirements (e.g. biologics)

Global pharma market*



Source: IMS market prognosis 2014-18; Emerging Markets defined as China, LATAM, APAC, ITC, CEE; Mature Markets defined as USA, EU5 + WE, Japan

Merck Serono – Well-positioned to address market needs and build growth platform



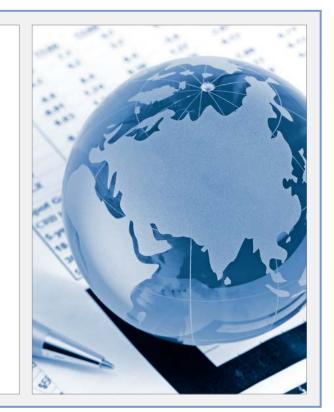
MERCK'S INITIATIVES TO ADDRESS MARKET NEEDS

Tailored products and services

- Provide innovative affordable products
- Increase access to biologics drugs
- Local/adapted products (e.g. formulations)
- Offer out-of-pocket drugs (e.g. fertility)

Positioning as recognized partner

- Openness for public private partnerships
- Be local (e.g. infrastructure = Glucophage)
- Build brand "Merck"



Emerging Markets – Initiatives in China support above-market growth and strong brand presence



Strategic roadmap for China underpinned by strong leadership team and clear portfolio focus

Metabolism

- Glucophage co-promotion with BMS in China
- New product launches, e.g. Glucophage XR
- Expand diabetes portfolio via licensing, e.g. Glufast
- Grow Thyroid franchise by improving diagnosis rates with the 2015 TSH test kit⁴

Oncology

- Expand access on Erbitux mCRC through PAP⁵
- Pursue China-specific indications, cater for local needs and establish as local innovator
- In-license "China-differentiated" assets, e.g.
 BeiGene collaboration
- Explore Biosimilars options

China



- Sales 2013
 ~€300m¹
- Organic CAGR
 2010-2013
 20%²
- Pharma market
 CAGR 2013-2018
 ~13%³

General Medicine

- Capitalize on high brand equity and value proposition
- Increase coverage to capture market growth via "deeper & wider" initiative
- Adapt product and formulations (e.g. Euthyrox)
- Leverage market leadership in thyroids; drive awareness and diagnosis rates

Fertility

- Build on strong brand perception in high-growth markets
- Create targeted patient assistance program
- Support IVF⁶ centers through the new Fertility
 "technology and services for IVF clinics" initiative

¹Rough indication; ²Source: Merck; ³Source: IMS market prognosis 2014-18; ⁴TSH = thyroid stimulating hormone; expected launch in January 2015 ⁵Patient Access Program: ⁶IVF = In-vitro fertilization

Emerging Markets – Partnerships and capability building to differentiate in Brazil



Merck strategy: Winning in biologics and in retail

Biologics

- Biologics account for >50% of growth potential
- Key area of focus for the government
- Long-term strategic partnerships with government for key biological brands via PDP⁴ secure growth
- Prepare Biosimilars: e.g. Bionovis collaboration for oncology and auto-immune diseases
- Leverage multi-channel-marketing to tap opportunities in Fertility franchise (e.g. awareness)

Brazil



- Sales 2013 ~€300m¹
- Organic CAGR
 2010-2013
 +19%²
- Pharma market
 CAGR 2013-2018
 ~14%³

Retail

- Retail to remain biggest segment of Brazilian pharma market
- Focus on strong brands: Concor, Euthyrox, Glucophage
- Invest in growth opportunities through portfolio expansion partnerships
- Raise market penetration, e.g. less affluent patients
- Invest in sales force and capability enhancement
- Invest in medical capabilities (e.g. MSLs⁵)

Emerging Markets – Strategic growth initiatives align market needs and Merck strengths



Leverage capabilities and local channels

Extend breadth and depth of promotion in China, leverage brand by portfolio extensions via regional/local licensing, market development (e.g. Fertility)

Invest selectively and grow flagship brands

New formulations (Euthyrox, Glucophage), fixed-dose combinations (Concor), and devices (Saizen)

Repatriate businesses

Continue taking back promotion of Merck products from pharma partners and distributors where applicable and attractive

Expand portfolio focus

Emerging Markets as a platform for Merck Serono's strategic growth initiatives in biologics



Developed Markets – Key strategic priorities for Merck adapted to core markets



North America

- Rebif: defend market share in interferons and injectables
- Optimize profitability and prepare for end of Pfizer copromotion agreement
- Raise overall US presence prepare for upcoming oncology launches

Europe

- Focus on stabilizing Rebif and Erbitux
- Expand into Central and Eastern Europe
- Take back promotion of Merck products from pharma partners and distributors where applicable and attractive, e.g. General Medicine

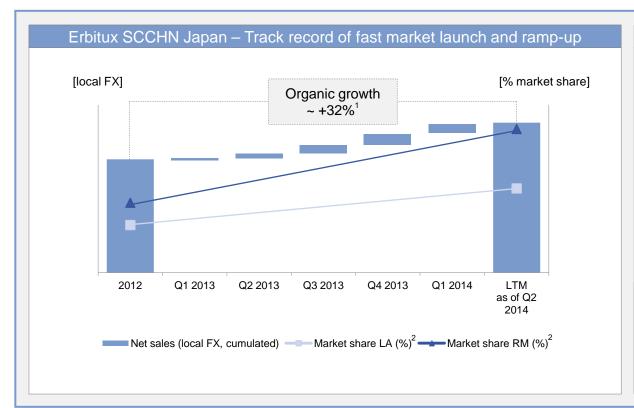
Japan

- Erbitux: raise market share in mCRC and market penetration in SCCHN and strengthen overall oncology franchise
- Maximize fertility business

Maintain developed markets region as solid contributor and key absorber of future R&D outcomes

Developed Markets – Merck's ability to innovate and launch improves prospects





Merck's strategic priorities

- Innovation-driven markets
- Core regions to commercialize Merck's R&D pipeline outcomes
- Local approach to optimize each individual country's potential
- Medical organization enhanced in recent years
- Ensure launch readiness

Developed Markets expected to remain Merck Serono's key pillar by 2018 (~50% of sales)

Source: Merck Serono; ²local market shares for 1st line usage in LA = locally advanced; and RM = recurrent metastatic



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R&D for long-term sustainable growth

Executive summary

New 2012 R&D approach improves focus



Efficiency

Focus

Innovation

Strengthened focus and enhanced biomarkers

- Creation of "Translational Innovation Platform"
- Focus on selected core therapeutic areas
- Biomarker development to improve patient outcomes

Improved innovation flow

- Increased access to external know-how and benchmarking (e.g. Independent External Scientific Advisory Board)
- Increased partnering and in-licensing activity
- Discovery and early development driven by scientific excellence, independent of existing sales force

More stringent processes

 Improved portfolio decision-making process and more rigorous project prioritization

Higher efficiency

- More efficient use of limited resources
- Significant cost reduction (FF18)

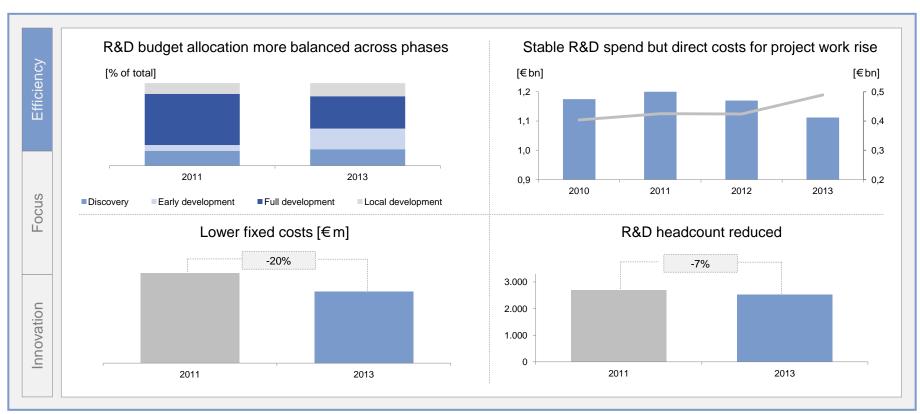
Merck Serono's R&D



- Increased emphasis and strategic focus
- Improved differentiation via
 - TIPs
 - Focus on three closely linked therapeutic areas
 - Biomarker approach
- Shorter timelines to phase transitions (e.g. anti-PD-L1)

R&D efficiency continues to improve





Source: Merck Serono

Commitment to scientific innovation makes a meaningful difference

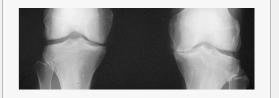


Efficiency

Focus

Innovation

Immunology & Neurology



Vision

Understand disease-led human immunology to build a competitive drug portfolio

Key projects*

- Atacicept
- ATX-MS-1467
- BTK inhibitor

Oncology



Vision

Leverage our presence in oncology to deliver the best benefit possible to patients

Key projects

- TH-302
- c-Met inhibitor
- p7056K & Akt inhibitor

Immuno-Oncology



Vision

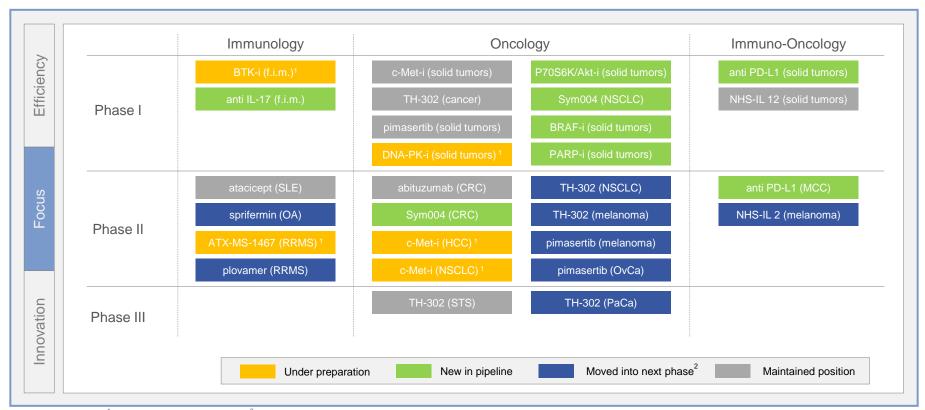
Transform cancer into a chronic disease

Key projects

- Anti-PD-L1
- NHS-IL2LT
- NHS-IL-12

Therapeutic areas of focus determine revamped R&D pipeline

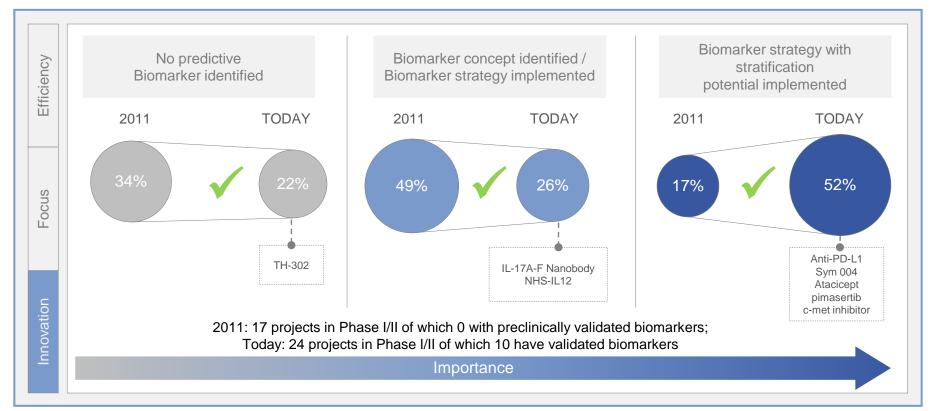




As of September 2014; ¹Under preparation for this phase; ²Since Capital Markets Day in May 2012

Implementation of biomarker strategy enables treatment of patients, not diseases

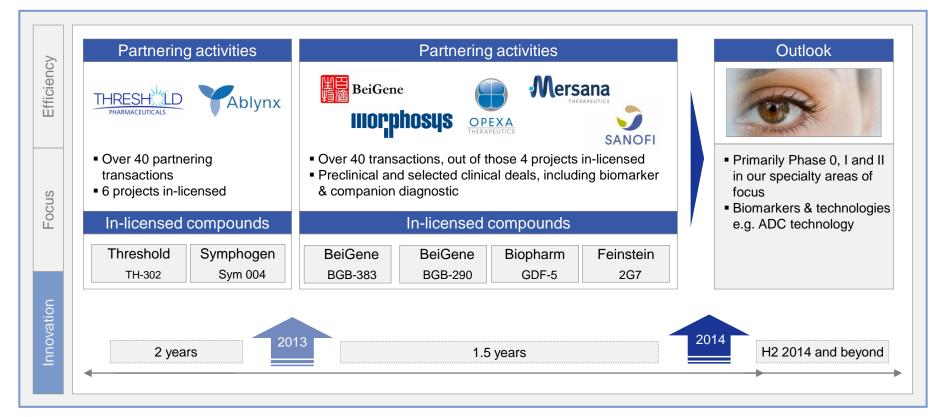




^{*%} for all projects in phase I/II/III, selected examples provided

External innovation continuously supports pipeline expansion





Rigorous value analysis of target product profiles drives portfolio decisions



Project type

- High unmet medical need
- Specialty / niche indication
- Fit into Merck Serono's strategic focus areas

Project quality¹

- Adding value to patients
- Compound's potential to differentiate from competitors
- Potential for patient stratification / biomarker identification
- Expected change in the market environment until launch



Project financials

- Expected peak sales
- Expected costs until launch
- Time until launch
- Expected necessary launch costs / investments

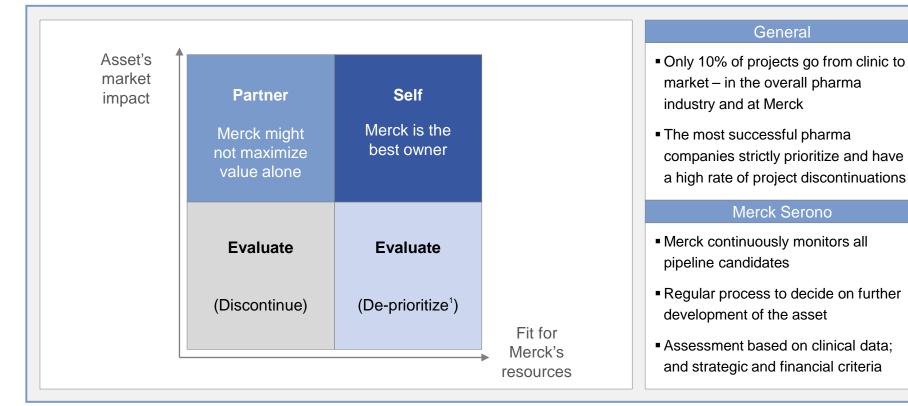
Project fit for Merck

- Sufficient capacity to maximize sales
- Access to the relevant market
- Merck being the best owner of the asset

Project decisions depend on an asset's potential market impact and its value to Merck

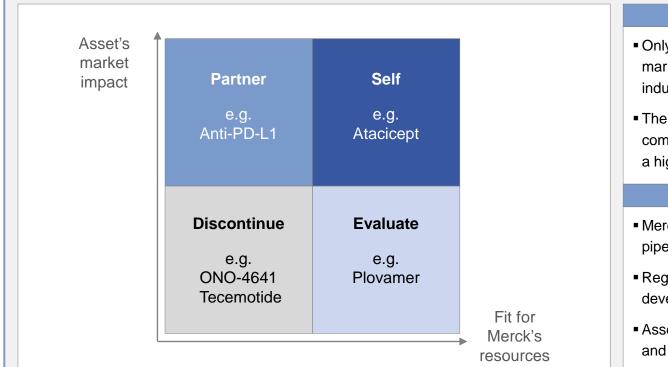
Current view on R&D project prioritization in Phase II and III





Current view on R&D project prioritization in Phase II and III





General

- Only 10% of projects go from clinic to market – in the overall pharma industry and at Merck
- The most successful pharma companies strictly prioritize and have a high rate of project discontinuations

Merck Serono

- Merck continuously monitors all pipeline candidates
- Regular process to decide on further development of the asset
- Assessment based on clinical data;
 and strategic and financial criteria

Anti-PD-L1 – A promising asset



Increasing clinical evidence of competitive product profile

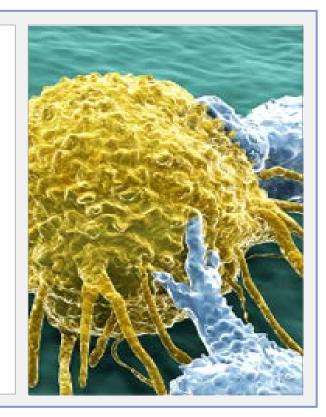
PRODUCT PROFILE

- Over 500 patients treated in Phase I study across multiple tumor types
- Interim analysis of expansion cohorts confirms promising risk/benefit on 2nd line NSCLC and heavily pre-treated ovarian cancer patients
- On-going Phase II study in m-Merkel cell carcinoma

Strategic approach

GLOBAL
CO-DEVELOPMENT
AND CO-COMMERCIALIZATION

- Competitive process for global co-development and cocommercialization has been initiated
- Decision will be driven by development, regulatory and commercial track record as well as deal financials
- Currently in advanced discussions with several oncology players



Indicative timeline for pipeline priority projects in selected indications



TH-302 Opening Lines He		Phase III	Soft Tissue Sarcoma	Interim Analysis	H2 2014
	TH-302			Primary Analysis Date	H2 2015
		Phase III	Pancreatic Cancer	Primary Analysis Date	H1 2016
		Phase I	Various Indications	Interim Analysis	H2 2014
	Anti-PD-L1	Phase II	mMCC ²	Primary Completion Date	H1 2016
		Phase III	Various Indications	Under Preparation	H2 2014
Y	Atacicept	Phase II	SLE ³	Primary Completion Date	H1 2016

¹As of September 2014; ²Metastatic Merkel Cell Carcinoma; ³Systemic Lupus Erythematosus



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Merck Serono – Poised for sustainable growth



Underlying business expected to remain resilient, stable and profitable

Improved R&D pipeline management will lead to improved pipeline productivity

Enhanced R&D to deliver long-term sustainable growth in specialty areas

Continuous upgrade of critical talent in core country and focus positions

Solid prospects of sustainable success





Back-up information

Erbitux

Rebif

Fertility

General Medicine

Erbitux® – Further enhancing the value of personalized treatments

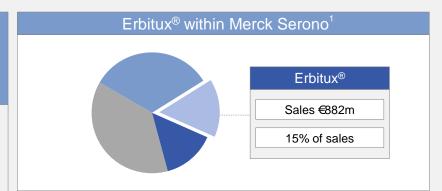




Market

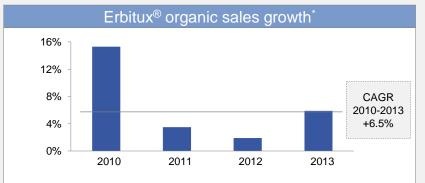
Strategy

Growth





- Enhance franchise and improve balance between indications
- Capitalize on Emerging Markets presence
- Pro-actively promote EU label change and study results (Fire 3, CALGB-80405, new Crystal)
- Monitor possible biosimilars competition
- Raise RAS testing rates and roll out blood-based RAS test



Current outlook

- 2014: moderate organic growth; maintain momentum
 - Stable in Europe
 - Ongoing solid organic growth in all other markets
- Aiming to position Erbitux as the first-choice treatment in all approved indications

Erbitux® – Niche indications secure stability and competitiveness



Overview

Market

Strategy

Growth

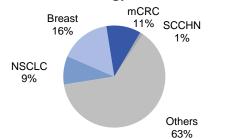
General trends

- Rising importance of patient stratification
- Ongoing cost containment, price focus and regulation limit upside
- Increasing focus on value

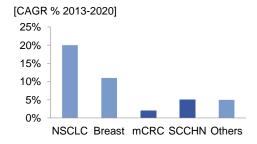
Competitive situation

- Biosimilars players tend to focus on larger products
- Biosimilars players exploring; not expected until 2018; need to monitor
- No new 1st line mCRC competition expected





Expected growth rates²



mCRC

- Global mCRC market CAGR 2013-2018E ~2%
- Good stability
- Trend towards further personalizing therapy

SCCHN

- Global SCCHN market CAGR 2013-2018E ~5%
- Specialized niche; limited competition; currently no other antibodies
- Opportunity to enhance with limited investment

¹Source: Evaluate Pharma - All Cancer types & all products; ²Source: Evaluate Pharma – All Cancer types & all products by 2020 (currently marketed, filed, PhIII, PhII risk adjusted) Sales data according to EvaluatePharma[®] a service of Evaluate Ltd. (UK), www.evaluategroup.com, accessed July 2014

Erbitux® – Strategies to raise value contribution for Merck



Overview

Market

Strategy

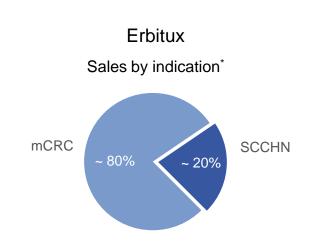
Growth

Exploit and expand market potential

- Develop market: raise share of untreated patients, share of biologics therapies, manage treatment duration and drop-out rates
- Expand indications and lines of treatment in certain markets, e.g. China
- Broaden geographic reach

Drive franchise positioning

- Improve marketing and focus on Emerging Markets
- Capitalize on latest trial results (Fire 3, CALGB-80405, new CRYSTAL retrospective)
- Build market share: label change leads to improved outcomes for indicated population - RAS / Sysmex collaboration
- Prepare for possible biosimilars competition
- Position Erbitux as first-choice treatment



Erbitux® – Focusing on three areas of growth



Overview

Market

Strategy

Growth

Capitalize on clinical data



- Clinical data: new CRYSTAL, Fire 3, CALGB-80405
- Highlight Erbitux' advantages for targeted patient populations and relevance of RAS testing
- Prepare for possible biosimilars competition but not immediate effects expected

Drive patient stratification



- EU Label change (RAS*) in December 2013 allows to position Erbitux as an "all-RAS" therapy in mCRC in a crowded market
- Helps identify patients who are most likely to benefit from Erbitux, thus benefiting patients and payers
- Continuously raise RAS testing, supported by blood-based RAS test (Sysmex) which further reduces turn-around times for results

Develop regions



- Expand into indications and regions (e.g. SSCHN China) and into new lines of treatment
- Japan: gradual improved marketing shows visible results in mCRC; successful launch into head & neck indication
- Emerging Markets: Focus on Latin America (Brazil / reimbursement);
 China (ongoing trials)



Back-up information

Erbitux

Rebif

Fertility

General Medicine

Rebif® – **Defending the franchise**



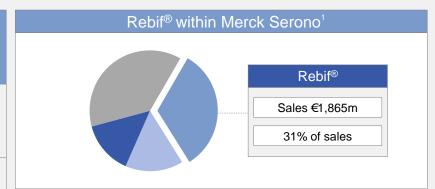
Overview

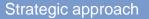
Market

Strategy

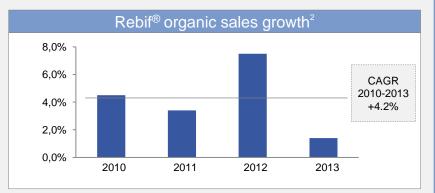
Volume

Price





- Defend Rebif's position within the injectables segment in a growing but highly competitive MS³ market
- Focus on efficacy in reducing relapses and delaying disability progression
- Regain full commercialization rights from Pfizer
- Drive differentiation via smart devices⁴, MS e-health platform, RebiCare⁵ and improve patient adherence and efficacy

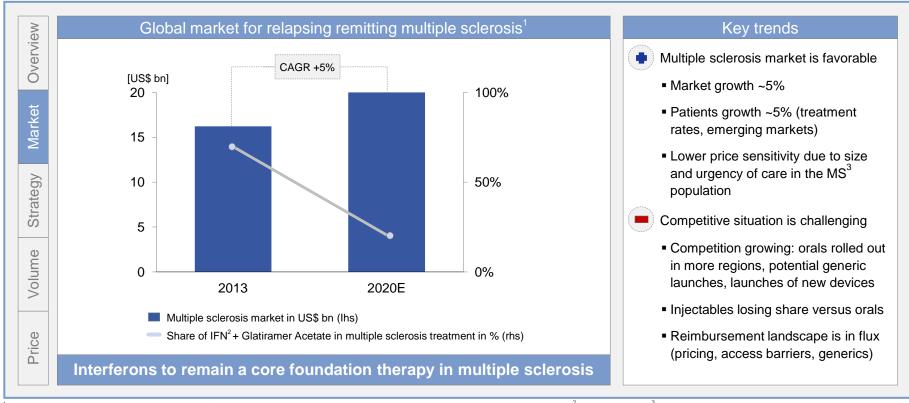


Current outlook

- 2014: continuous competitive pressure and volume decline lead to declining sales
- Volume decline in the US, mitigated by pricing
- Decreasing sales in all other regions
- Improving profitability after Pfizer co-promotion expiry

Rebif® – Competitively challenging but growing market





¹Source: Sales data according to EvaluatePharma® a service of Evaluate Ltd. (UK), www.evaluategroup.com, accessed September 2014; ²IFN = interferons; ³MS = multiple sclerosis

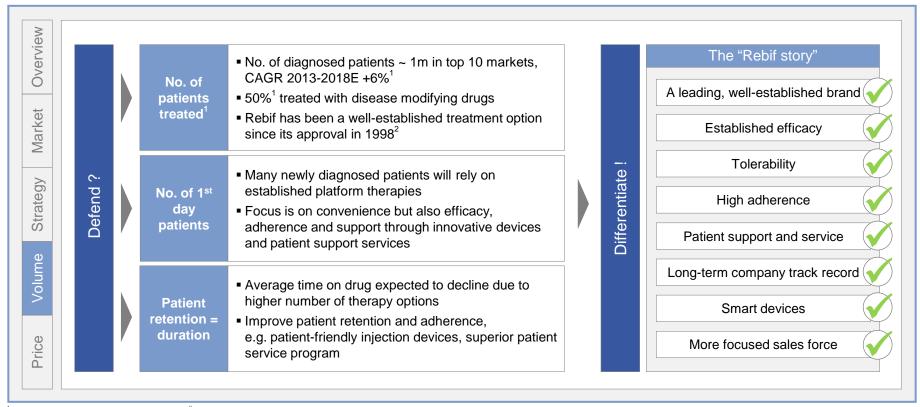
Rebif® - Several levers to sustain Rebif's value



Overview Rebif® value contribution for Merck = earnings and cash Market Strategy Drive sales Raise margins Other options Pricing opportunities (see left) ■ Volume (= no. of units and LCM and new indications patients): initiatives to grow ■ Right-size cost base • New dosing regimens (e.g. share of 1st day/naïve patients clinically isolated syndrome) and increased focus on patient Net EBITDA pre benefit from Volume retention Roll-out RebiCare¹ and expiry of Pfizer co-promotion agreement devices strategy Pricing (e.g. Dec. 2013) Value messaging: enhance product positioning, e.g. via RebiCare¹, patient support, Price devices'

Rebif® – Initiatives to differentiate and defend share





Rebif® – Priorities for value pricing



Overview Market Strategy Volume Price

Situation U.S.

- Multiple sclerosis drug costs represent ~65-70%¹ of total MS² costs to payers
- BUT: Multiple sclerosis costs are only 3%³ of overall drug costs

Situation Europe

- Increased price transparency and international reference pricing
- Budget restrictions lead to cost control measures

But: Low price sensitivity



U.S. price action

Actions

- Improve product positioning with payers
- Highlight Rebif[®] value proposition (differentiation, efficacy, roll out RebiCare⁴)
- Optimize local pricing strategies and innovative pricing models
- Strengthen sales efforts (Pfizer/US)
- Highlight treatment outcome and patient adherence; implement adherence-based contracting

Increasing competition limits further pricing upside



Back-up information

Erbitux

Rebif

Fertility

General Medicine

Fertility – Taking the franchise to beyond drugs

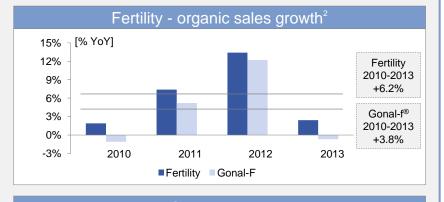




Market

Strategy & Growth

Fertility franchise within Merck Serono¹ Fertility and Gonal-f® Sales €807m (Gonal-F® €586m**) 14% of sales (Gonal-f® 10%)



Strategic approach

- Expand strong position in Emerging Markets
- Support existing momentum in portfolio of other fertility products²
- Differentiate versus biosimilars competition (Europe)
- Provide innovative technologies & services

Current outlook

- 2014: achieve organic growth in a moderately growing market
 - Organic growth in developed markets
 - Solid growth in Emerging Markets

Fertility – Sustainable market trends key drivers of continued growth



Overview

Market

Strategy & Growth

High-growth market

 Global fertility market² is a highly specialized niche with ~€7bn (2013) with
 CAGR 2013-2021E ~+7%¹

> Merck fertility franchise

Competitive situation

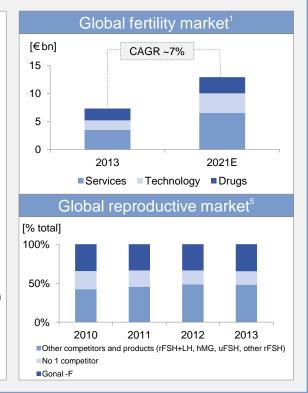
- Biosimilars competition in Europe expected to increase footprint going forward⁴
- Strong position of urinary products (perception of product similarity, treatment cost differential)

Favorable market dynamics

- Average age of women's first pregnancy continues to rise
- Only ~15%⁶ of women with selfdiagnosed infertility issues start an ART³ treatment
- Emerging Markets: CAGR ~11%

Demand sensitivity

- Demand partially linked to economic environment (e.g. sluggish 2013 in southern Europe)
- Price sensitivity is also related to the economic situation



¹Source: Merck Serono based on Transparency market research 2010; US IV Clinics 2011, CDC, ESHRE, press; ²Includes drugs, technology, services; Source: Merck Serono based on Transparency market research 2010; US IV Clinics 2011, CDC, ESHRE, press, ³ART = Assisted Reproductive Technology; ⁴Approved and launched in various markets;

⁵Source: Merck Serono based on own research. BCG: ⁶Merck Serono market research

Fertility – Four opportunities to drive franchise growth



Overview

Market

Strategy & Growth



Expand relevant market

- Earlier diagnosis lifts number of patients receiving treatment
- Earlier initiation of treatment
- Target new patient groups, e.g. age >35

Enhance market share

- Focus on high-growth Emerging Markets, e.g. China
- Drive pen / device uptake
- Improve focus on and service to IVF¹ centers

Expand product offering

- Pergoveris® Phase III trial: expand label to also include potential poor ovarian response patients
- Early Embryo Viability Assessment Test (Eeva Test) license agreement with Auxogyn, Inc.

Differentiation

- Improve cost perception of Gonal-f[®] (value, quality, convenience)
- Product bundling
- Developing Pergoveris in ART (unique combination of rFSH, rLH)

Fertility is a key growth driver for Merck Serono's core business



Back-up information

Erbitux

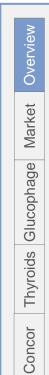
Rebif

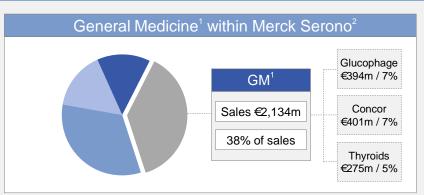
Fertility

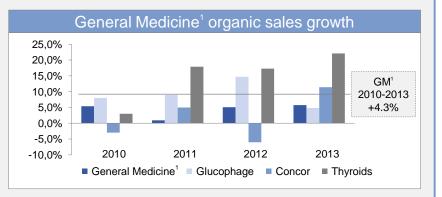
General Medicine

General Medicine¹ – Strong Emerging Markets franchise enables continued profitable growth









Strategic approach

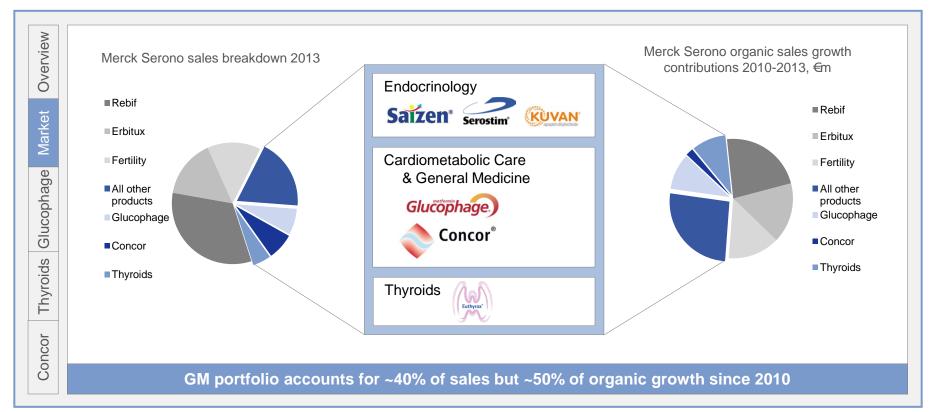
- Foster role as solid cash generator: strong branding and life cycle management but lower R&D pressure
- Accelerate growth in already strong Emerging Markets platforms like China, Brazil, Russia and Middle East
- Renew and strengthen portfolio through LCM (Concor FDCs, Glucophage label changes, Euthyrox reformulation
- Expand / take back activities (BMS China)

Current outlook

- 2014: solid organic growth
 - Strong momentum in Emerging Markets, based on brand equity and loyalty and underlying market growth

General Medicine – Growth engine for Merck Serono in the past and future





General Medicine – Glucophage®



Overview

Market

Glucophage

Thyroids

Concor

Strong market position

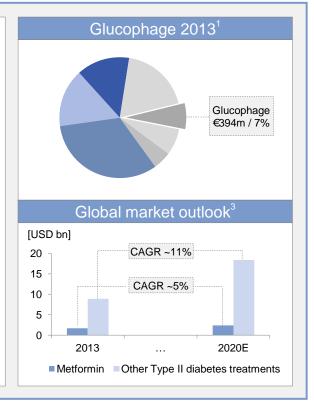
- Leader with ~10% global share in the metformin market (10.5% in total DOT)²
- CAGR 2008-2013:
 Emerging Markets ~+15%
 Mature Markets ~+6%²
- Proven efficacy over decades
- Metformin is 1st line treatment recommended in international and local treatment guidelines

Merck's expertise

- Own production, Metformin as gold standard, slow release
- Presence in important growth markets
- Customer base of more than 14m patients worldwide

Opportunities to expand franchise

- Expand into Emerging Markets with rapidly growing diabetes prevalence
- Collaborate in new therapeutic classes (i.e. DPP-IV inhibitor, SGLT-2 inhibitor))
- Step change in size by leveraging BMS collaboration in China⁴



¹Source: Annual Report 2013; ²Source: IMS Midas; ³Source: Sales data according to EvaluatePharma® a service of Evaluate Ltd. (UK), www.evaluategroup.com, accessed July 2014; ⁴Current co-promotion to end at the end of 2016; new plant as of 2018

General Medicine – Thyroids



Overview

Market

Glucophage

Concor

Unique product position

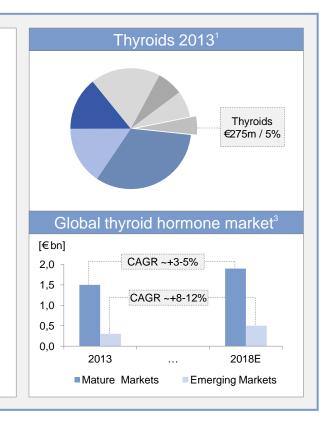
- Consistent and steadily growing earnings contributor
- Global leader for thyroid disorders treatment ~40% share²
- ~50% of 2013 sales generated in Emerging Markets
- The world's thyroid company due to service, product quality, relationship network

Attractive niche market

- Highly consolidated market worth ~€1.8bn (2013)³
- High rate of undiagnosed and untreated patients (75-80%)⁴
- Long-term medication with low switching rates
- High brand loyalty

Development options

- Capitalize on leadership position (quality, service, brand)
- Launch in so far untapped markets (e.g. US)
- Expand exposure to Emerging Markets (e.g. India)
- Awareness programs with government support (e.g. Indonesia, China) and scientific societies⁵



¹Source: Annual Report 2013; ²Source: IMS, Midas, 2013 without US-Market (incl. US = 13%); ³Source: IMS, Dataview, 2013; excluding U.S.; ⁴Own Estimate (Expert Opinion, CTY expectation); ⁵E.g. International Awareness Thyroid Week

General Medicine – Concor®



Overview

Market

Thyroids Glucophage

Concor

Strong market position

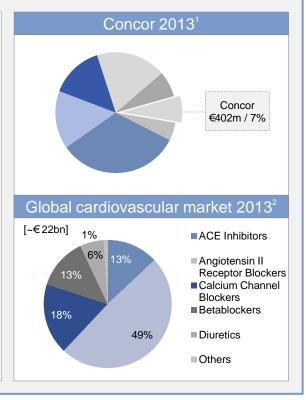
- Concor global share ~15% (excl. US)
- Concor is well accepted in the market (brand reputation, competitive pricing, enhanced cardioprotection)
- Focus on market expansion and product differentiation

Growth driver Emerging Markets

- Total market ~-1% CAGR 2013-2018E²
- Emerging Markets are the main market growth driver with >+5% CAGR 2013-2021E; <=0% in Mature Markets on price cuts and generics³
- Concor has ~65-70% of sales in Emerging Markets

Opportunities to bolster Concor's growth

- Widen betablocker market by focusing on combination therapies, cardioprotection
- Potential new innovative, tailored products/solutions, e.g. Concor AM
- Expansion in Emerging Markets; esp. in strategic markets Brazil and China
- Take business back in markets where appropriate and attractive



Source: Annual Report 2013; Source: Sales data according to EvaluatePharma® a service of Evaluate Ltd. (UK), www.evaluategroup.com, accessed July 2014;

