



Science For A Better Life



# Commerzbank Life Sciences Forum

October 1, 2009



Science For A Better Life

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## Bayer's Well-Proven Strategy



- Improve performance
- Improve quality of portfolio
- Develop new growth opportunities
- Deleverage balance sheet

## Bayer's Well-Proven Strategy



### Improve performance (2009 target)

- Reaffirm ambitious target of limiting the decline in group uEBITDA to approx. -5%. Sales are expected between €31 and 32bn

### Improve quality of portfolio

- Strategic investment focus is on HealthCare
- Opportunities in AgBioScience will be explored, MaterialScience system house concept extended

### Develop new growth opportunities

- €2.9bn (2009) investment in R&D to continue to build our innovation pipeline
- Strategy for growth in emerging markets in place

### Deleverage balance sheet

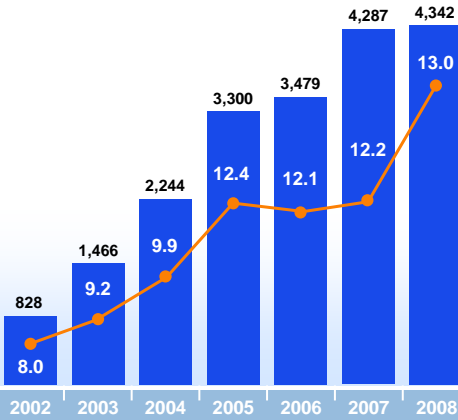
- Target is to reduce net financial debt towards €10bn by year-end 2009

# The Success of Bayer's Strategy is Evident



Underlying EBIT in €million

● CFROl in %



## Achievements

- Improved underlying EBIT by more than factor 5
- Improved underlying EBITDA-margin from 12% to 21%
- Record returns over cost of capital
- Achieved all group (earnings) targets

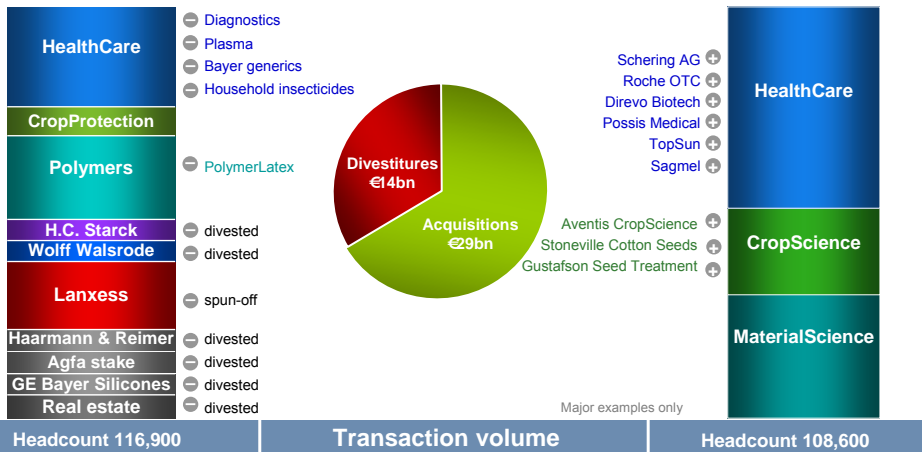
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# Seven Years of Increasing Focus for Growth – Transaction Volume > €43bn since 2002



2001 Sales €30.3bn

2008 Sales €32.9bn



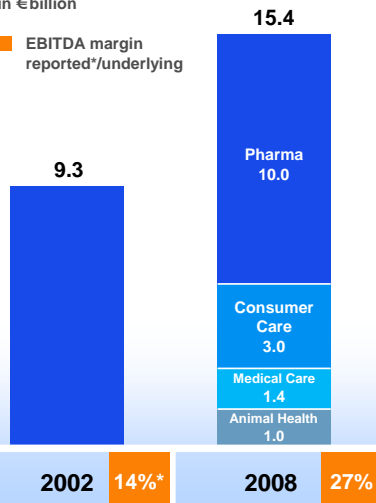
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## HealthCare – A Diversified Business Model



in €billion

EBITDA margin reported\*/underlying



- Global #6 in specialty pharmaceuticals
- Leading positions in key therapeutic categories
- Underweight in US, overweight in emerging markets
- Outperformed market growth in 2007/2008
- Transformational late-stage pipeline
- Global #2, outpaced market growth in 11 out of last 13 years
- Became #3 in Q1'07, 2008 was the 3rd straight year as fastest growing company
- Global # 3/5, outpacing market growth

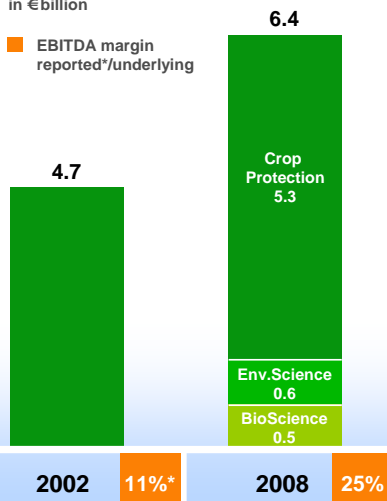
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## CropScience – Strategy Driven by Innovation



in €billion

EBITDA margin reported\*/underlying



- Global #2, with leading positions in all market segments and regions
- Gained market share in Brazil during 2008, the world's largest agchem market
- Proven track record of innovation – launched 21 new active ingredients since 2000
- Global #1, extends the Crop Protection active ingredients' life cycle
- Hybrid canola #1, cotton #1, hybrid rice and vegetables #4
- LibertyLink trait technology also available in soybean and corn

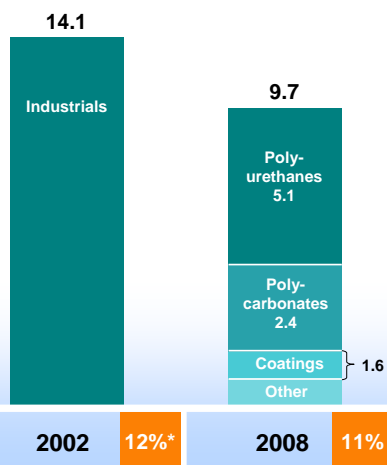
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## MaterialScience – A Genuine Market Leader



in €billion

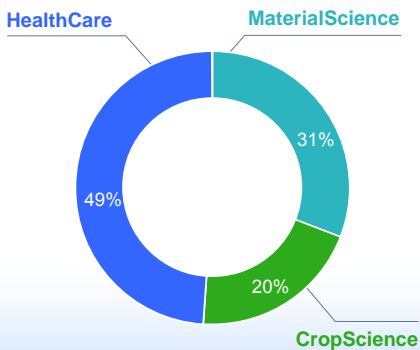
EBITDA margin  
reported\*/underlying



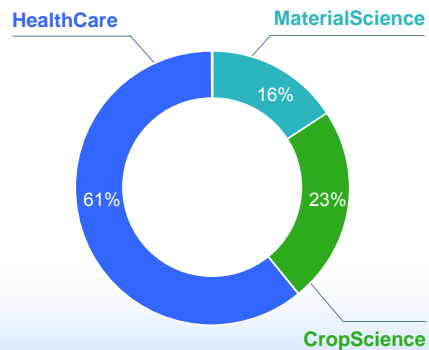
- Global #1 in all business segments
- Focus is on fast-growing isocyanates and polycarbonates
- Long-term fundamental growth drivers remain intact
- Earned attractive returns over cost of capital between 2004–2008
- Short-term challenges are addressed
  - ▶ Restructuring programs accelerated and expanded
  - ▶ Temporary plant shut-downs
  - ▶ CapEx budget trimmed

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## The New Bayer – A Leader in Its Markets



Sales 2008: €32.9bn



Underlying EBITDA 2008: €6.9bn

Life Sciences Account For ~70% of Sales And ~85% of Underlying EBITDA

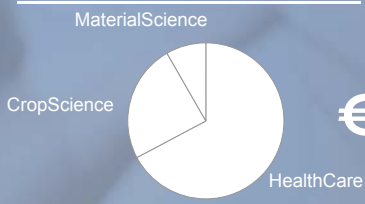
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Break-down excluding reconciliation



## Innovation Pipeline Progresses Dynamically

R&D Budget 2009



€2.9bn

## Key Pharma Pipeline Assets Hold Significant Promise

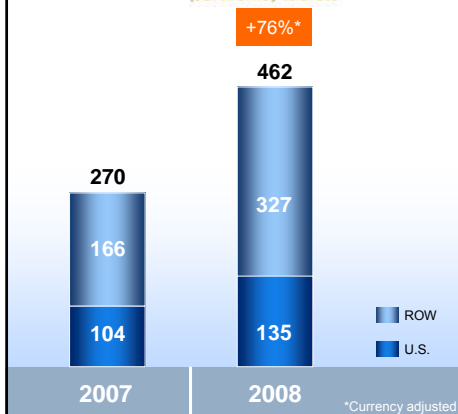


	What it does	What it is / could be used for	Status
<b>Nexavar</b>	inhibits enzymes important for tumor growth	cancer treatment	launched > 200 trials ongoing
<b>Xarelto</b>	inhibits blood clot formation	treatment of diseases caused by blood clots	1st indication launched/ filed; phase III
<b>Riociguat</b>	lowers blood pressure in the lung	treatment of high blood pressure in the lungs	phase III
<b>VEGF Trap-Eye</b>	inhibits formation of new blood vessels	various eye diseases	phase III
<b>Regorafenib</b>	inhibits enzymes important for tumor growth	cancer treatment	phase II

## Nexavar: A Franchise Building Opportunity



Sales in € million



- Dual-targeted mechanism – antiangiogenic and antiproliferative
- First targeted therapy in kidney cancer (RCC)
- Leadership advantage in liver cancer (HCC) – only approved drug with overall survival benefit in HCC
- Approved in >90 countries for RCC, >80 countries for HCC
- Peak sales potential in approved indications of RCC and HCC combined ~EUR 750 million
- > 200 active trials exploring potential i.e., adjuvant RCC and HCC; lung cancer, thyroid and breast

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## Comprehensive Development Program For Nexavar Underway



### Signal-Generating Phase II-Trials

- **Breast cancer**
  - Paclitaxel ± Nexavar
  - Capecitabine ± Nexavar
  - Gemcitabine ± Nexavar
  - Docetaxel or letrozole ± Nexavar
- **Ovarian cancer**
  - Maintenance treatment after 1st-line treatment
- **Colorectal cancer**
  - 1st-line treatment in combination with FOLFOX

### Phase III-Trials

- **Liver cancer**
  - Adjuvant therapy vs. placebo (STORM-trial)
  - Post-TACE
  - Combination therapy with erlotinib (Tarceva®)
- **Kidney cancer**
  - Adjuvant treatment vs. placebo (EU)
  - Adjuvant treatment (ECOG)
- **Non-small cell lung cancer**
  - 1st-line combination therapy with gemcitabine and cisplatin (NExUS-trial)
  - 3rd/4th-line monotherapy in NSCLC
- **Thyroid cancer**
  - Nexavar monotherapy (planned)

Phase II/III highlights only

**More Than 200 Active Trials Exploring Nexavar's Anti-Tumor Potential**

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## Nexavar – First Results from Phase II Breast Cancer Program



### Paclitaxel ± Nexavar

- HER-2 negative, locally advanced or metastatic breast cancer
- Double-blind, randomized, placebo controlled phase II trial
- 237 patients (first line)
- Preliminary results:  
Combination of Nexavar + Paclitaxel demonstrated a positive trend towards improvement of progression-free survival ( $p=0.09$ ).

### Capecitabine ± Nexavar

- HER-2 negative, locally advanced or metastatic breast cancer
- Double-blind, randomized, placebo controlled phase II trial
- 229 patients (first and second line)
- Combination of Nexavar + Capecitabine significantly improved median progression-free survival by 74% vs. Capecitabine + Placebo (6.4 months vs. 4.1 months; HR=0.567,  $p=0.0006$ )\*

Next steps for path forward in breast cancer indication currently evaluated

## Nexavar - Upcoming Newsflow



- Start of Phase III breast program probably Q1 2010
- Start of Phase III thyroid cancer program expected still this year



## Xarelto Target Indications With High Unmet Medical Need

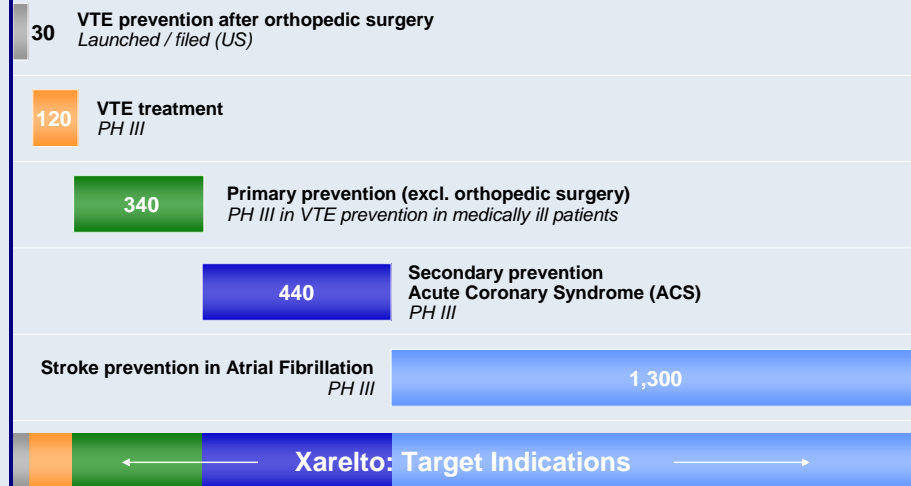


- Thromboembolism is the single largest cause of morbidity and mortality in the Western world
- In the US, VTE affects almost 1 million people each year and is responsible for more deaths each year than breast cancer, HIV disease, and motor vehicle crashes combined
- VTE is the third most common cardiovascular disease in the Western world, and contributes to around 10% of hospital deaths
- Almost all of the hospital deaths resulting from pulmonary embolism are preventable

## Xarelto And The Market For Anticoagulants



Estimated treatment days in 2007\* (in millions)



# Late-Stage Development Program For Xarelto in Five Indications is on Track



Market	Study	Facts	Phase II	Phase III	Filing
Acute Indications	<b>RECORD</b>	>12,500 patients vs. standard therapy (enoxaparin)	VTE prevention after orthopedic surgery		✓
	<b>MAGELLON</b>	~8,000 patients vs. standard therapy (enoxaparin)	VTE prevention in medically ill patients		2011e
Chronic Indications	<b>ENSTEER</b>	~7,500 patients vs. standard therapy (enoxaparin & warfarin)	VTE treatment and secondary prevention		2010e
	<b>ROCKET AF</b>	~14,000 patients non-inferiority vs. standard therapy (warfarin)	Stroke prevention in atrial fibrillation		2010e
	<b>ATLAS</b>	up to 16,000 patients in addition to standard therapy	Secondary prevention ACS		2011/ 2012e

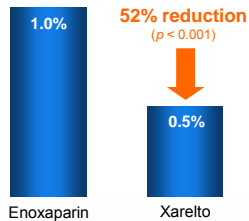
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# Pooled Analysis of RECORD 1 – 4 Confirms Excellent Clinical Profile of Xarelto

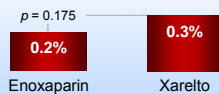


## Primary efficacy outcome\*

Symptomatic VTE + all-cause mortality



## Major bleeding\*



- RECORD 1 - 4 was the largest ever trial program of an oral anticoagulant in the prevention of venous thromboembolism (VTE) after major orthopedic surgery.
- ~12,700 patients randomized
- Pre-specified pooled analysis confirmed results of the four individual RECORD studies
- Xarelto significantly reduced the incidence of symptomatic VTE and all-cause mortality.
- Rates of major bleeding were low and statistically not different in the Xarelto and enoxaparin groups.

\*) Day 12±2 head-to-head treatment pool

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## Xarelto – Upcoming Newsflow



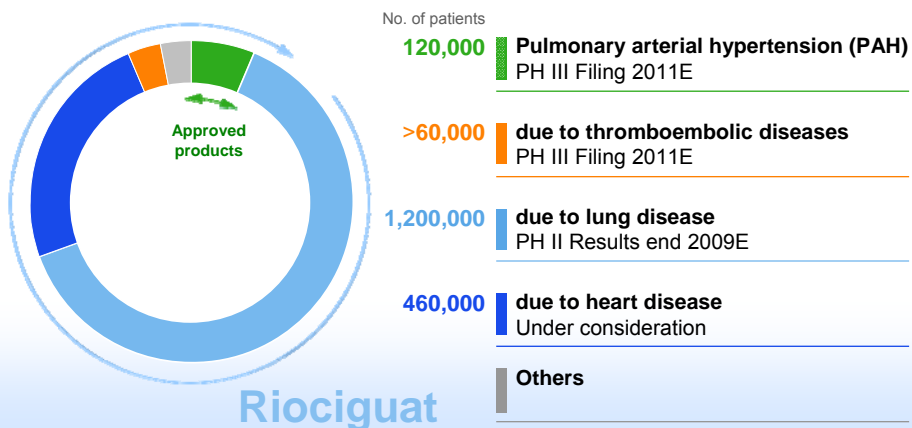
- Presentation of trial data from EINSTEIN extension, target conference is ASH, Dec. 2009
- Submit complete response to FDA, Q4 2009, at the earliest



## Riociguat – An Emerging Treatment For Pulmonary Hypertension



**Pulmonary hypertension encompasses multiple disease subtypes.  
Currently treatments are only indicated for pulmonary arterial hypertension (PAH).**

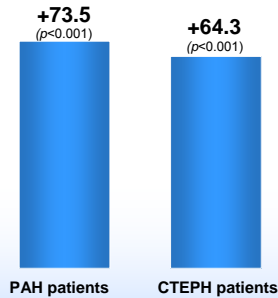


# Riociguat Demonstrated Clinically Meaningful Improvement in Pulmonary Hypertension



## 6-minute walking distance test

Mean improvement over baseline after 12 weeks of treatment (in meters)



Baseline values:  
PAH: 317 m; CTEPH: 383 m

PAH: Pulmonary Arterial Hypertension  
CTEPH: Chronic Thromboembolic Pulmonary Hypertension

- Open-label, uncontrolled phase II study involving 75 PAH and CTEPH patients
- Exercise capacity significantly improved
  - +23% in PAH-patients
  - +17% in CTEPH-patients
- Improvement on hemodynamic parameters, i.e. pulmonary arterial pressure, pulmonary vascular resistance
- Riociguat was well tolerated and had a favorable safety profile

## Riociguat: Major Clinical Studies



Study	Facts	Phase I	Phase II	Phase III	Filing
PATENT-1 / -2	~ 460 patients (treatment-naïve or pre-treated) vs. placebo (PATENT-1); Efficacy study and long-term extension		Pulmonary Arterial Hypertension		2011e
CHEST-1 / -2	~ 270 patients vs. placebo (CHEST-1); Efficacy study and long-term extension		Chronic Thromboembolic Hypertension		2011e
NCT00694850 (PH with ILD)	~ 20 patients (PH with interstitial lung disease - ILD) proof-of-concept; efficacy and dose-finding		PH with ILD		tbd.
NCT00640315 (PH with COPD)	~ 20 patients (PH with chronic obstructive pulmonary disease - COPD) Single-dose hemodynamic study		PH with COPD		tbd.

ILD: Interstitial Lung Disease; COPD: Chronic Obstructive Pulmonary Disease

## VEGF Trap-Eye: Potential New Treatment For Wet Age-Related Macular Degeneration



- Wet age-related macular degeneration (wet AMD) is the leading cause of blindness in the elderly
- Abnormal growth of blood-vessels in the eye as underlying disease mechanism
- Approx. 1.5 million patients annually in the US
- Anti-VEGF therapy has become a validated treatment option



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## VEGF Trap-Eye: Clinical Program Expanded to Additional Eye Diseases



- VEGF Trap-Eye is a novel anti-VEGF therapy with high binding affinity for all forms of VEGF-A and placental growth factor
- Potential for differentiation from current standard of care
- Phase III program (VIEW 1 & 2) in wet AMD in collaboration with Regeneron underway, enrollment completed
- Additional vascular eye diseases explored
  - Phase III program in central retinal vein occlusion (CRVO) initiated
  - Phase II program in diabetic macular edema (DME) underway

**Initial Data From The VIEW Program Could be Expected End of 2010**

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# Regorafenib (DAST-Inhibitor): A Novel Anti-Cancer Compound



## Kidney Cancer (RCC)

- Phase II, open-label study in kidney cancer with regorafenib (160 mg) administered once daily on a three weeks on/one week off schedule (n=49)
  - 31% partial response (PR, RECIST)
  - 50% stable disease (SD) rate

## Colorectal Cancer (CRC)

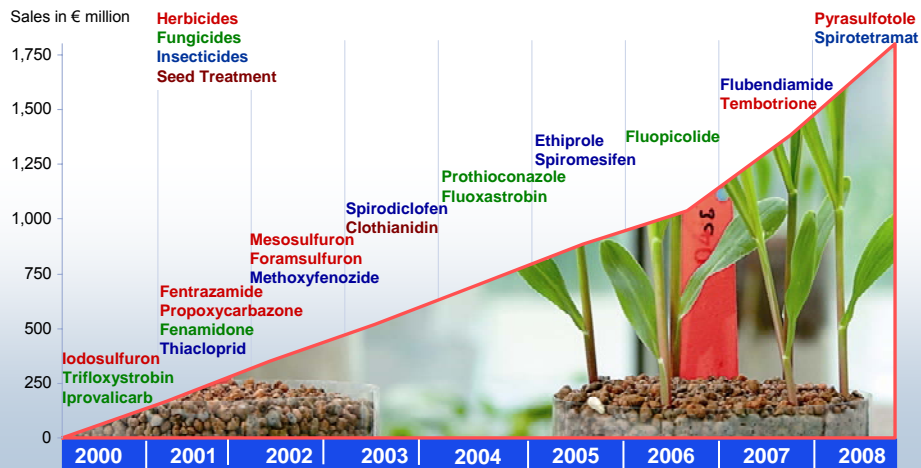
- Phase I dose-finding study in patients with advanced colorectal cancer (n=38)
  - 74% disease control rate in evaluable patients

- Regorafenib is an orally active multikinase inhibitor
- Distinct profile targeting angiogenic, stromal, and oncogenic receptor tyrosine kinases
- Potential for clinical differentiation from other VEGF-receptor inhibitors
- Phase III development program planned to be initiated in early 2010

# CropScience – Proven Track-Record of Innovation



21 new active ingredients launched since 2000

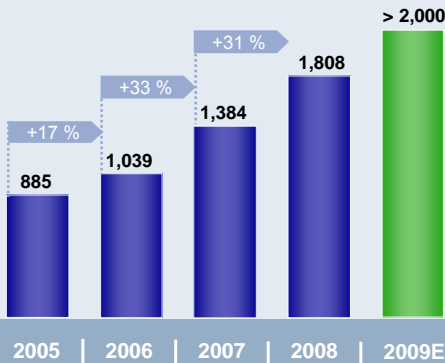


# CropScience Targets €2bn New Product Sales in 2009 – Two Years Earlier Than Originally Planned

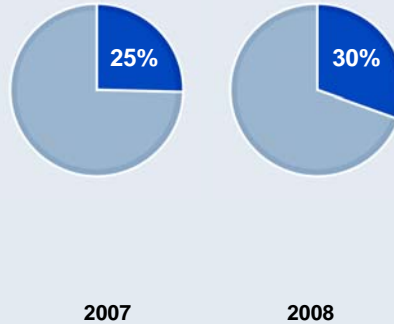


## Sales of new active ingredients (A.I.s)

In € million



## Share of new A.I.s in agchem sales\*

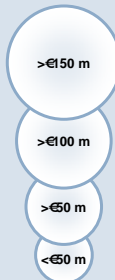


Agchem sales: include Crop Protection and Environmental Science, exclude BioScience business  
 \* Crop Protection only: 28.5 % in FY07, 33.5% in FY08

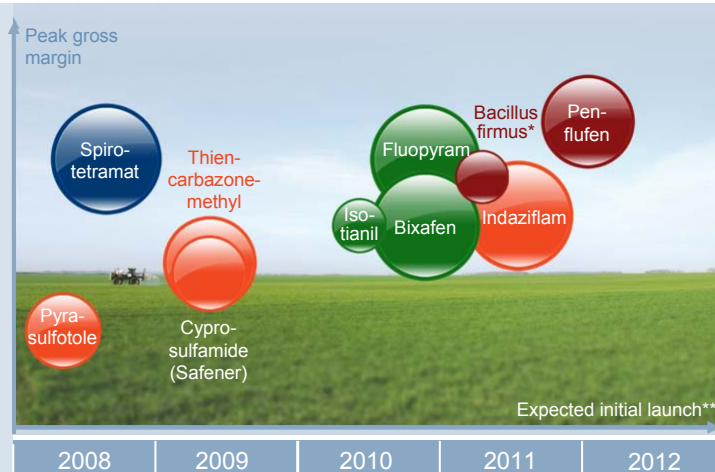
# CropScience – Attractive AgChem Pipeline to Foster Future Growth



Peak sales potential

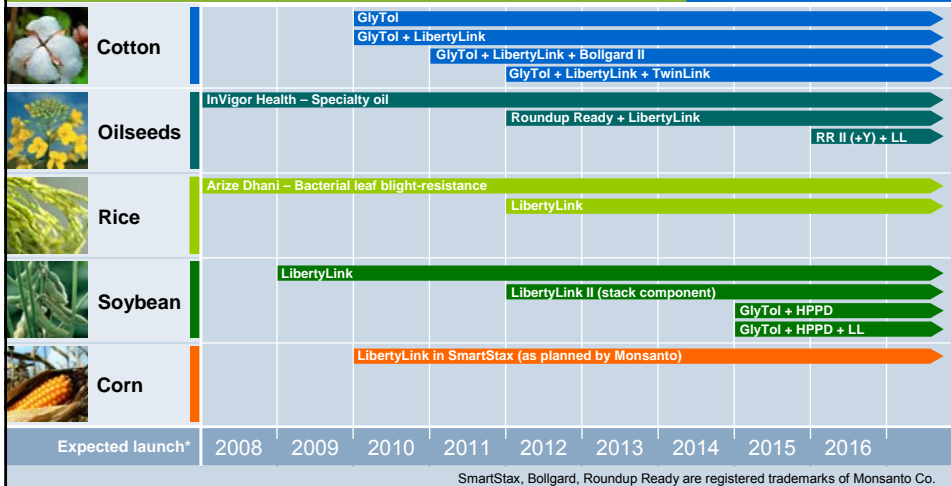


- Herbicides
- Fungicides
- Insecticides
- Seed Treatment



**Combined peak sales potential upgraded to about €1.25 billion**

# Well-Filled Traits Pipeline in BioScience

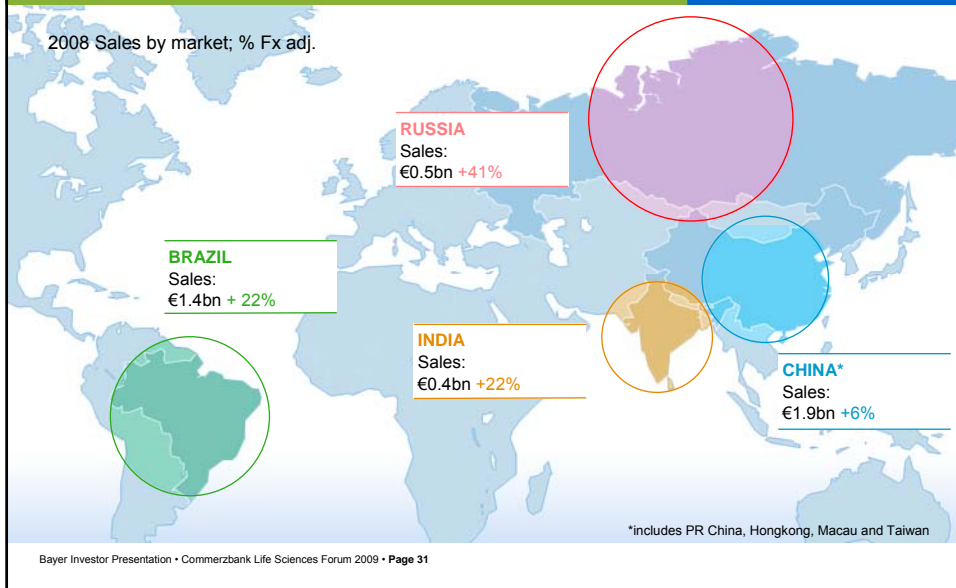


**Combined incremental peak revenue potential of about €500 million**

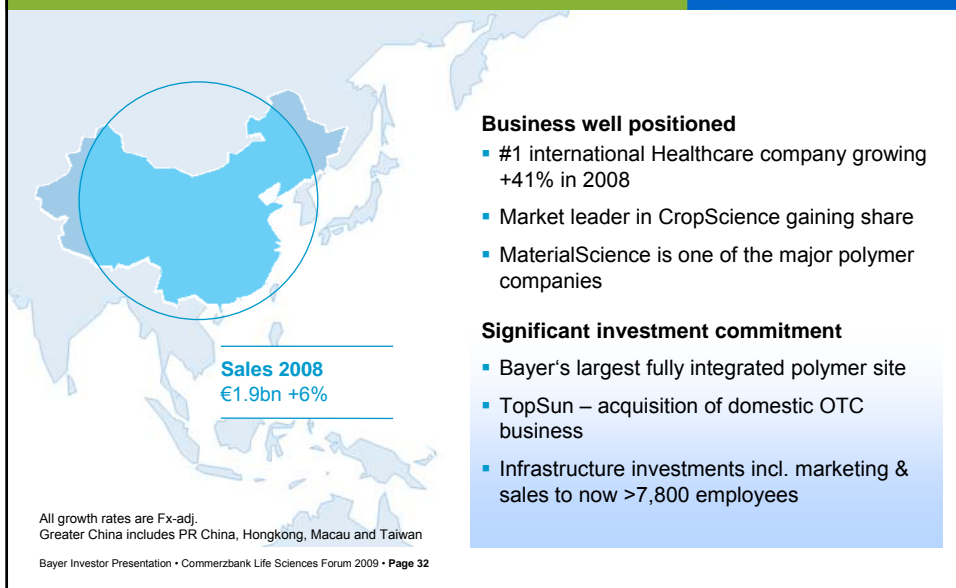
# BRIC: Market leading positions in fast growing markets



## BRIC Countries – Bayer is Well Positioned And Capturing Significant Growth



## China Has Become Our 3rd Biggest Market Within Only a Couple of Years



## FY'09 Outlook



Reaffirm ambitious target of limiting the decline in group uEBITDA to approx. -5%

## HealthCare – On Track Towards 2009 Targets



### H1 2009

- Strong top (+6%) and bottom line performance lifting uEBITDA by 6%
- Consumer Health business gained momentum in Q2 after inventory reductions and softer demand at the beginning of the year
- Pharma with continued growth (+7%)

### Outlook

- Targeting above market growth in all divisions and to improve uEBITDA-margin towards 28%
- Rich pipeline news flow expected over the next couple of quarters

## CropScience – Record First Half, Modest Start Into Q3



### H1 2009

- After a record 2008, agchem stocks in the distribution channels have been very low, leading to strong Q1 sales in the industry and at Bayer
- Globally less favorable growing and weather conditions deteriorated growth dynamics during Q2
- H1: Sales expanded 5% driven by North America and Asia Pacific, uEBITDA up 2%

### H2 Trends & Outlook

- Moderate start into Q3 – unfavorable weather, late start of the season in Argentina, drop of demand in US
- FY outlook of uEBITDA-margin of about 25% now appears ambitious
- Long-term fundamental growth drivers remain fully intact

## MaterialScience – Unprecedented Drop in Demand, Recovery Continuing



### H1 2009

- Q1: Unprecedented drop in demand (volumes -33%, prices -5%); uEBITDA of -116m
- Q2: First signs of sequential recovery in demand (volumes +24% qoq), lower selling prices (-9% qoq) overcompensated by lower raw material costs and savings; uEBITDA +121m
- Acted fast and decisively: Capacities mothballed, restructuring accelerated, first permanent plant closures announced

### H2 & Outlook 2009

- Recovery of demand continuing, led by Asia. Selling prices stabilizing, further price increases announced
- Confidently confirm Q3 outlook of positive uEBITDA

## 2009 Financial Outlook



### Group

**Reaffirm ambitious target of limiting the decline in Group underlying EBITDA to approx. -5%**

**CapEx** approx. €1.4bn

**R&D** spending about €2.9bn

**Net debt** reduction towards €10bn (before portfolio changes)

### Subgroups

#### ■ HealthCare - confirmed

Sales growth above market and improvement of underlying EBITDA margin towards 28%

#### ■ CropScience - updated (Sept. 2009)

Underlying EBITDA margin in the range of 25% has to be considered as ambitious

#### ■ MaterialScience - updated

Q3: Positive underlying EBITDA

## The New Bayer – Clear Strategy, Ambitious Targets, Focus is on Execution



- Active portfolio management: transaction volume >€43bn
- Strategic investment focus is on HealthCare: more than €20bn to grow the business to almost 50% of group sales
- Increased underlying EBIT from €828m in 2002 to €4.3bn in 2008
- Delivered on commitments and achieved financial targets
- Solidly financed – no short-term refinancing need
- Intend to pay-out 30–40% of Core EPS as dividend
- 2009 group outlook reiterated



## Reporting Events and AGM



Date	Event	Publication
Tuesday, October 27, 2009	Investor Conference Call	Third Quarter Results Stockholders' Newsletter
Friday, February 26, 2010	Investor Conference Call	Full Year 2009 Results Annual Report
Thursday, April 29, 2010	Investor Conference Call	First Quarter Results Stockholders' Newsletter
Friday, April 30, 2010	Annual General Meeting	
Thursday, July 29, 2010	Investor Conference Call	Second Quarter Results Stockholders' Newsletter
Thursday, October 28, 2010	Investor Conference Call	Third Quarter Results Stockholders' Newsletter

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