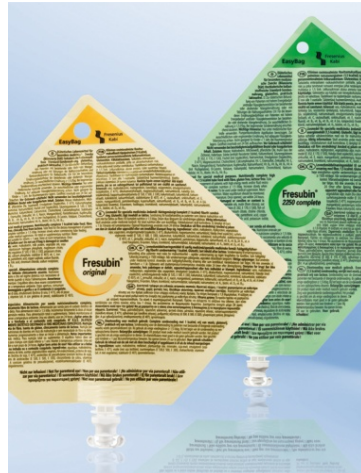


# Fresenius Kabi Capital Market Day Agenda – Tuesday, June 12, 2012

Time	Presentation	Speaker	Index
9.00 a.m.	Welcome / Opening Remarks	Birgit Grund	
	Introduction	Dr. Ulf M. Schneider	
	Business Overview and Growth Drivers	Rainer Baule	1
	Financials and Financial Outlook	Gerrit Steen	2
	Product Segments – Global Leadership – Medical Needs	Prof. Dr. Martin Westphal	3
	Clinical Nutrition	Manfred M. Köhler	4
	Infusion Therapy	Marc Crouton	5
11.00 a.m.	Break	All	
	IV Drugs	John Ducker	6
	Medical Devices	Dr. Christian Hauer	7
	Innovation and Operations	Dr. Michael Schönhofen	8
12.10 p.m.	Q+A Session	All	
12.40 p.m.	Lunch Buffett	All	

# Capital Market Day 2012

June 12, 2012



# Business Overview and Growth Drivers

**Rainer Baule**

Chairman of the Management Board

Capital Market Day Fresenius Kabi, June 12, 2012

# Agenda

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**1**

Introduction

**2**

Product Portfolio

**3**

Strong Worldwide Network

**4**

Market Positions

**5**

Business Development

**6**

Growth Drivers

**7**

Management

**8**

Success Factors



# Fresenius Kabi

## Strong Track Record Meets Strong Growth Prospects



**2011**

Sales: **€3,964 m**

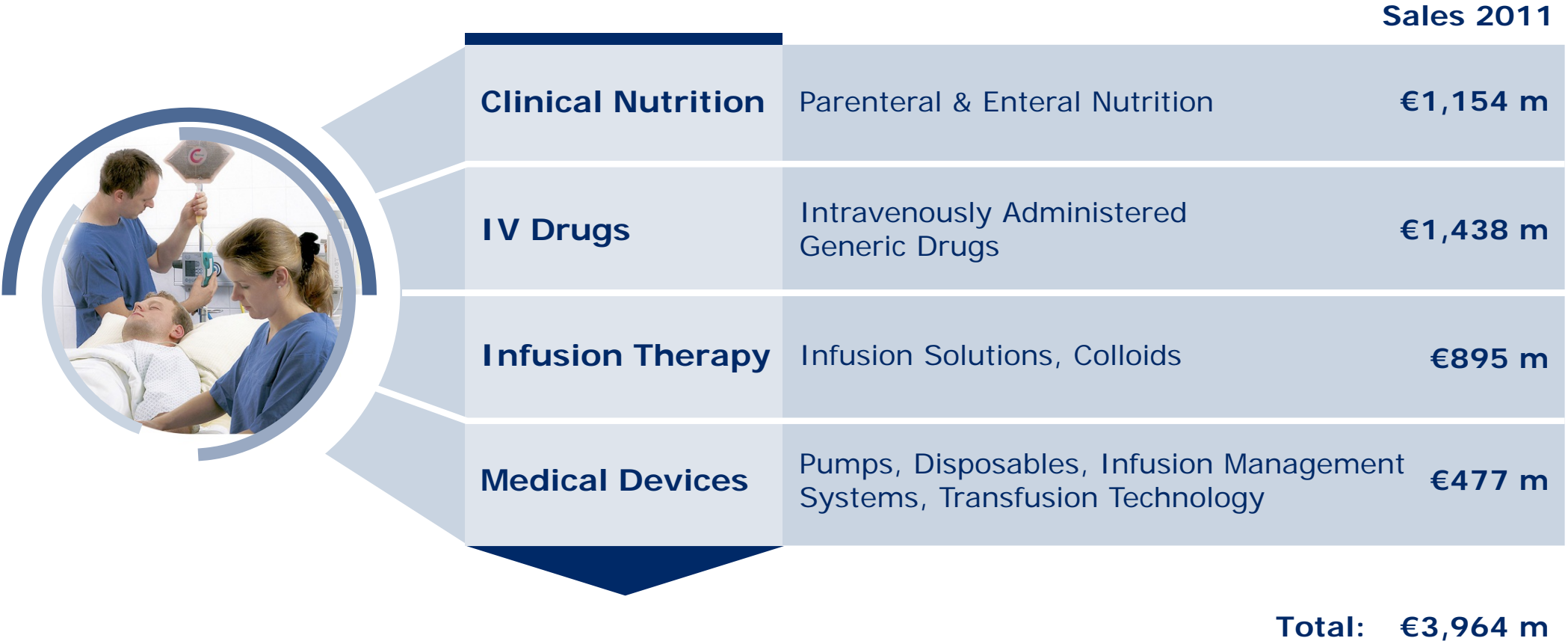
EBIT: **€803 m**

Employees: **24,106**



# Product Portfolio

## Comprehensive Product Portfolio for the Hospital



**Fresenius Kabi covers all hospital needs in those product segments**

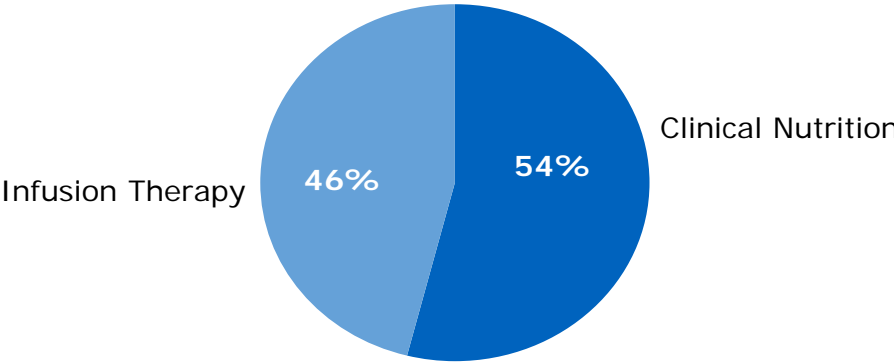
# Business Development

## Diversified Product Portfolio



### Sales 1998

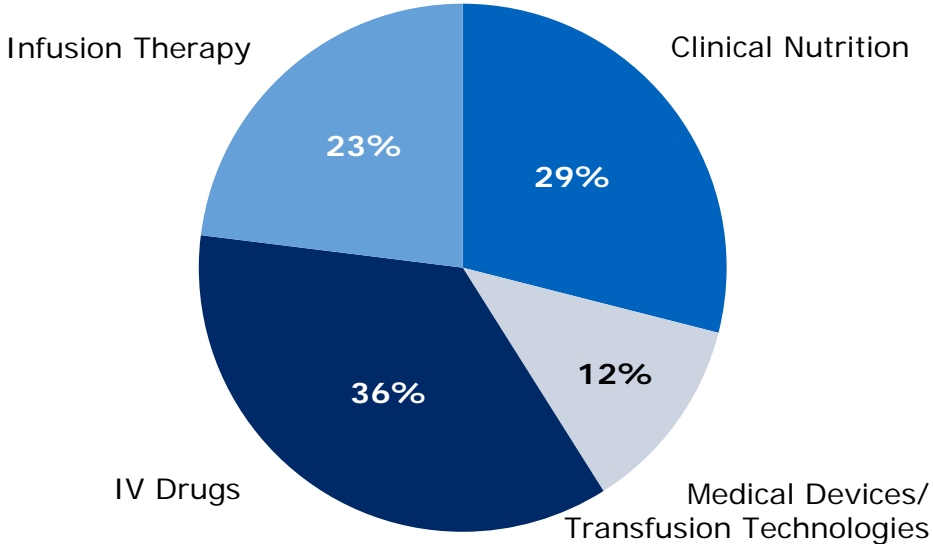
€m



Total sales: €711 m

### Sales 2011

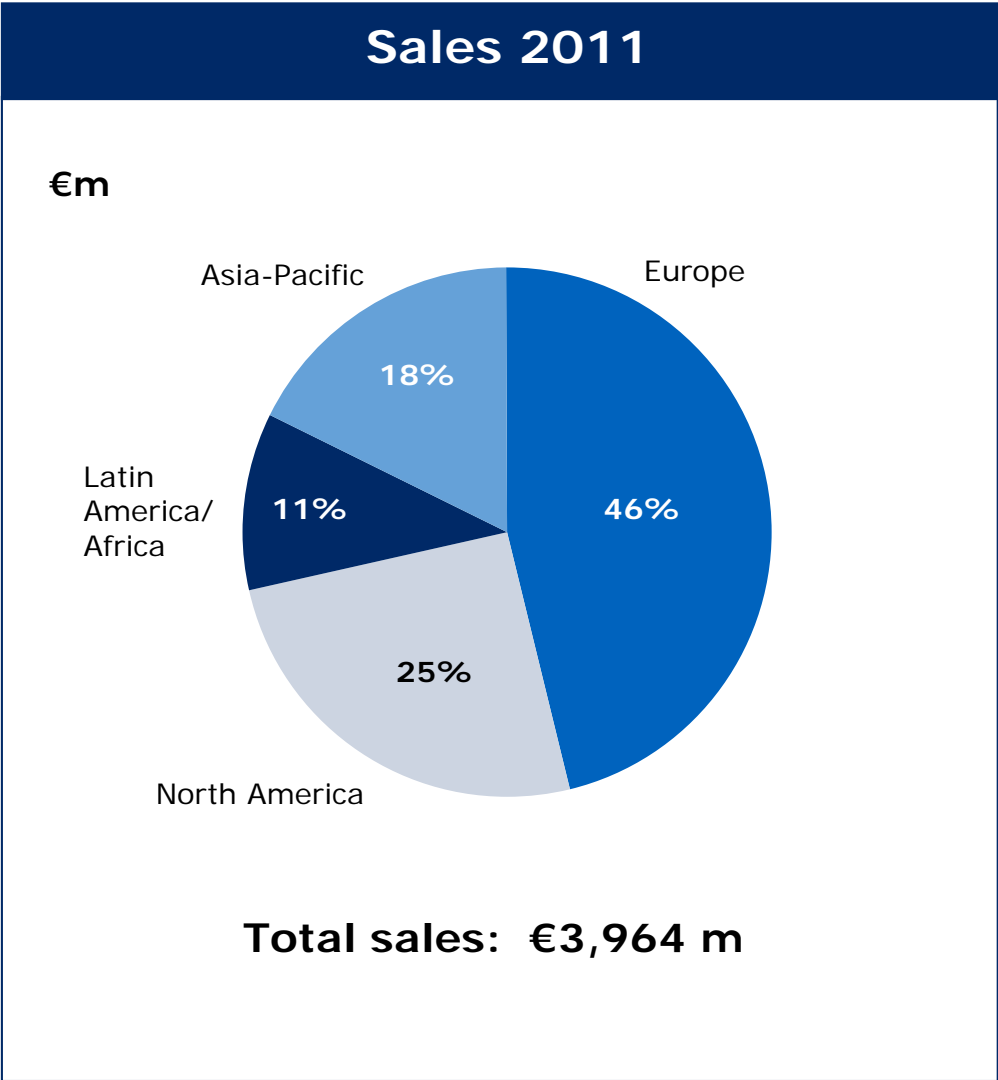
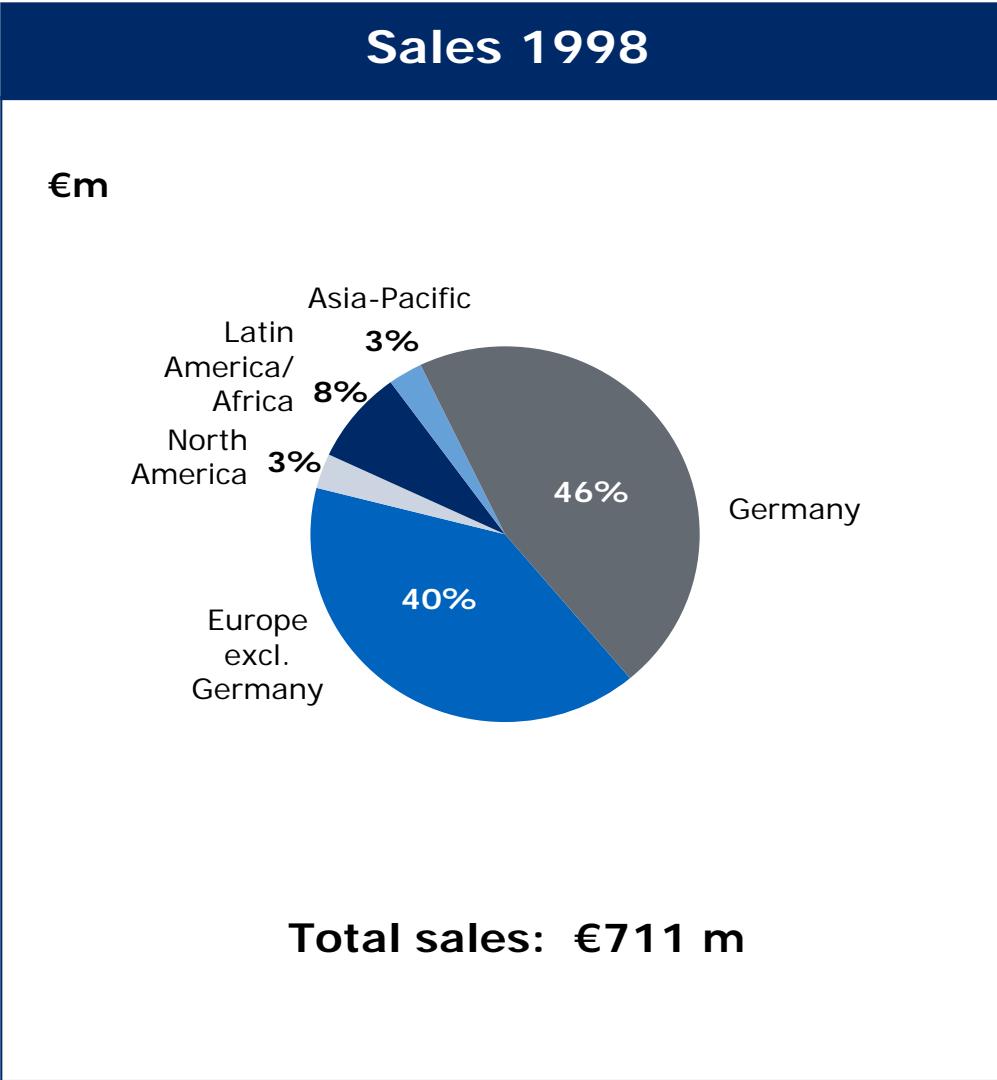
€m



Total sales: €3,964 m

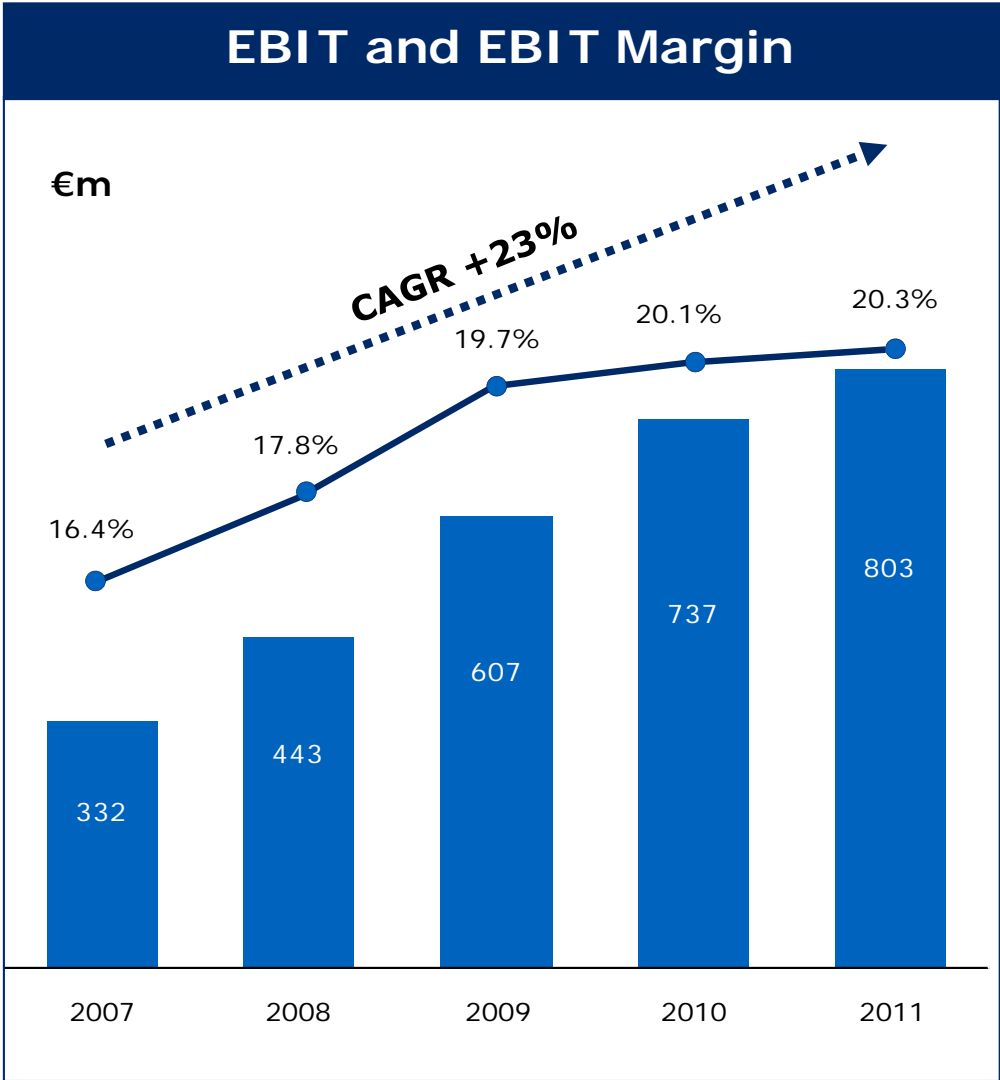
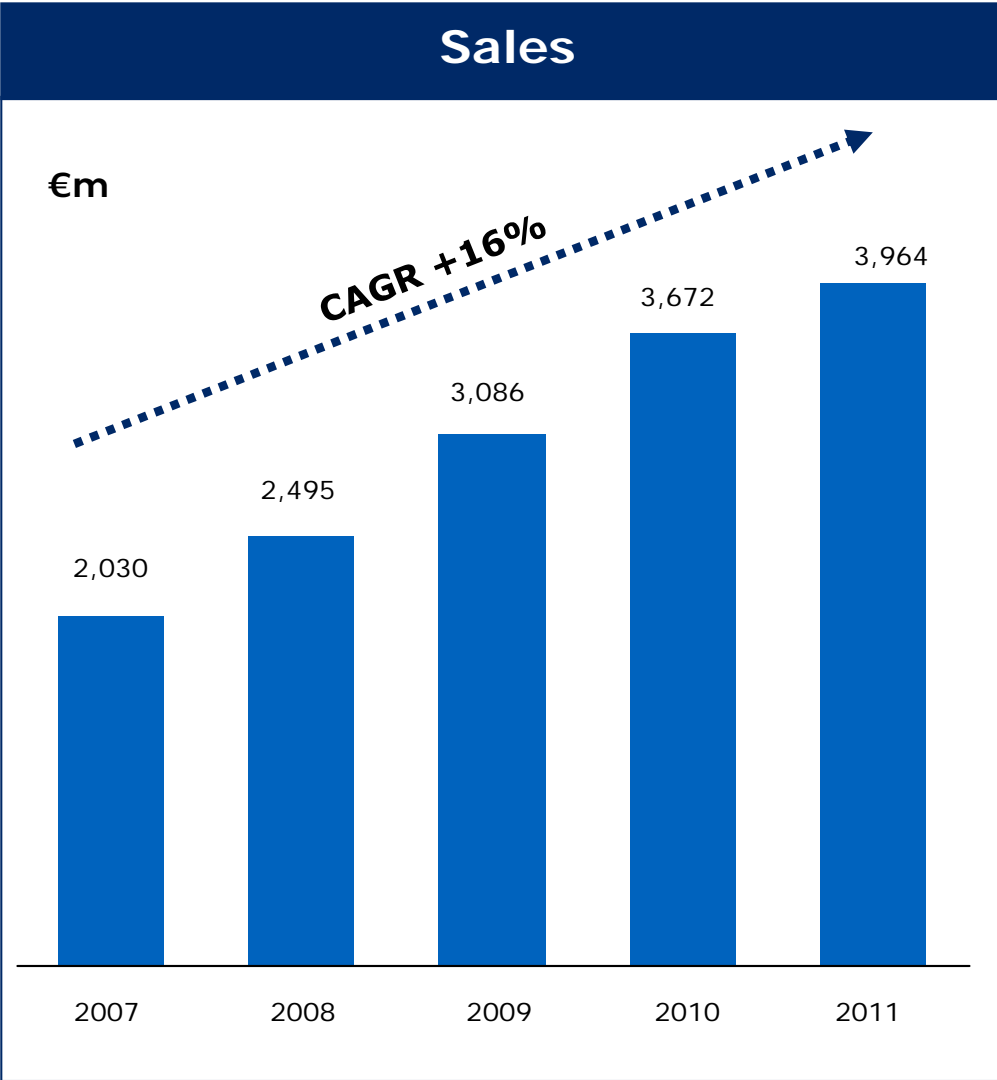
# Business Development

## Sales by Region



# Business Development

## Excellent Track Record



CAGR: 2006 – 2011

# Strong Worldwide Network

Think Global – Act Local



## Our strong worldwide network

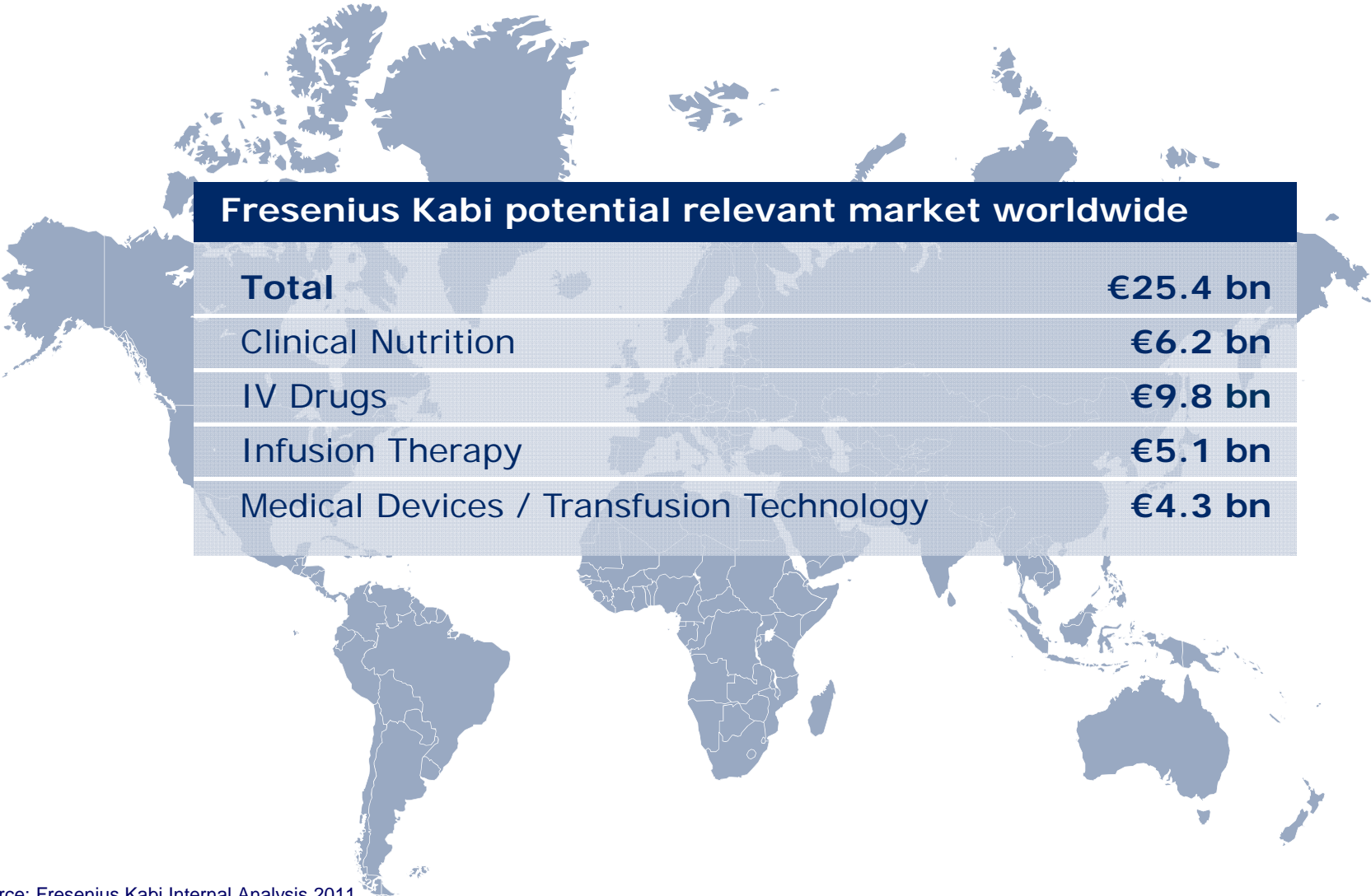
- 59** Sales & Marketing Organizations
- 61** Production Sites and Compounding Centers
- 14** R&D Centers
- 24,106** Employees





# Market Positions

## Addressable Market



Source: Fresenius Kabi Internal Analysis 2011

# Market Positions

## Strong Presence in Markets and Product Segments

<b>Clinical Nutrition</b>	<b>No 1</b>	in Parenteral Nutrition worldwide
	<b>No 3</b>	in Enteral Nutrition in Europe
<b>IV Drugs</b>	<b>No 2</b>	in IV Drugs in the US
	<b>No 4</b>	in IV Drugs in Europe
<b>Infusion Therapy</b>	<b>No 2</b>	in Infusion Therapy worldwide
	<b>No 1</b>	in Artificial Colloids worldwide
<b>Medical Devices</b>	<b>No 1</b>	in Medical Devices in Europe
	<b>No 1</b>	in Transfusion Technology in Europe and Latin America



Source: Fresenius Kabi Internal Analysis 2011



# Growth Drivers

## Key Driving Forces of the Health Care Market

### Market Growth Drivers



Dynamic emerging market growth



Continuing growth of generics



Market consolidation



Demographic development

# Growth Drivers

## Forces of the Market are Met by Our Strengths

### Fresenius Kabi Growth Drivers



Robust pipeline in all product segments



Geographic product rollout



High level of vertical integration



Excellence in quality

# Management

## Experienced Management Team



**252 years of management experience in health care**

# Success Factors

## Well Positioned for Future Growth

### Unique Position With Attractive Growth Potential

- 
- ▶ High quality and affordable products for the therapy and care of critically and chronically ill patients
  - ▶ Most comprehensive product portfolio for core therapeutic areas
  - ▶ Seamless network of marketing, sales and production sites
  - ▶ Attractive market positions
  - ▶ High level of vertical integration driving cost and technology leadership

# Fresenius Kabi

## Strong Track Record Meets High Growth Perspectives



**2015**

**Sales: ~€5,500 m\***

**EBIT: >€1,000 m\***



\*At current exchange rate

## Safe Harbor Statement

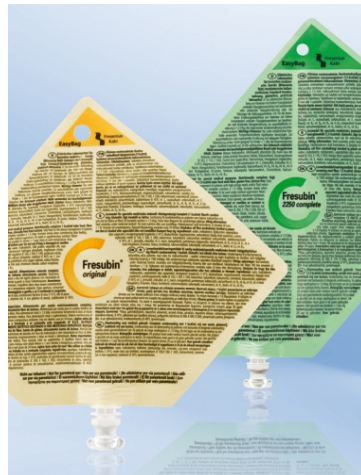
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# Capital Market Day 2012

June 12, 2012



# Financials and Financial Outlook

**Gerrit Steen**

Member of the Management Board

Chief Financial Officer

Capital Market Day Fresenius Kabi, June 12, 2012



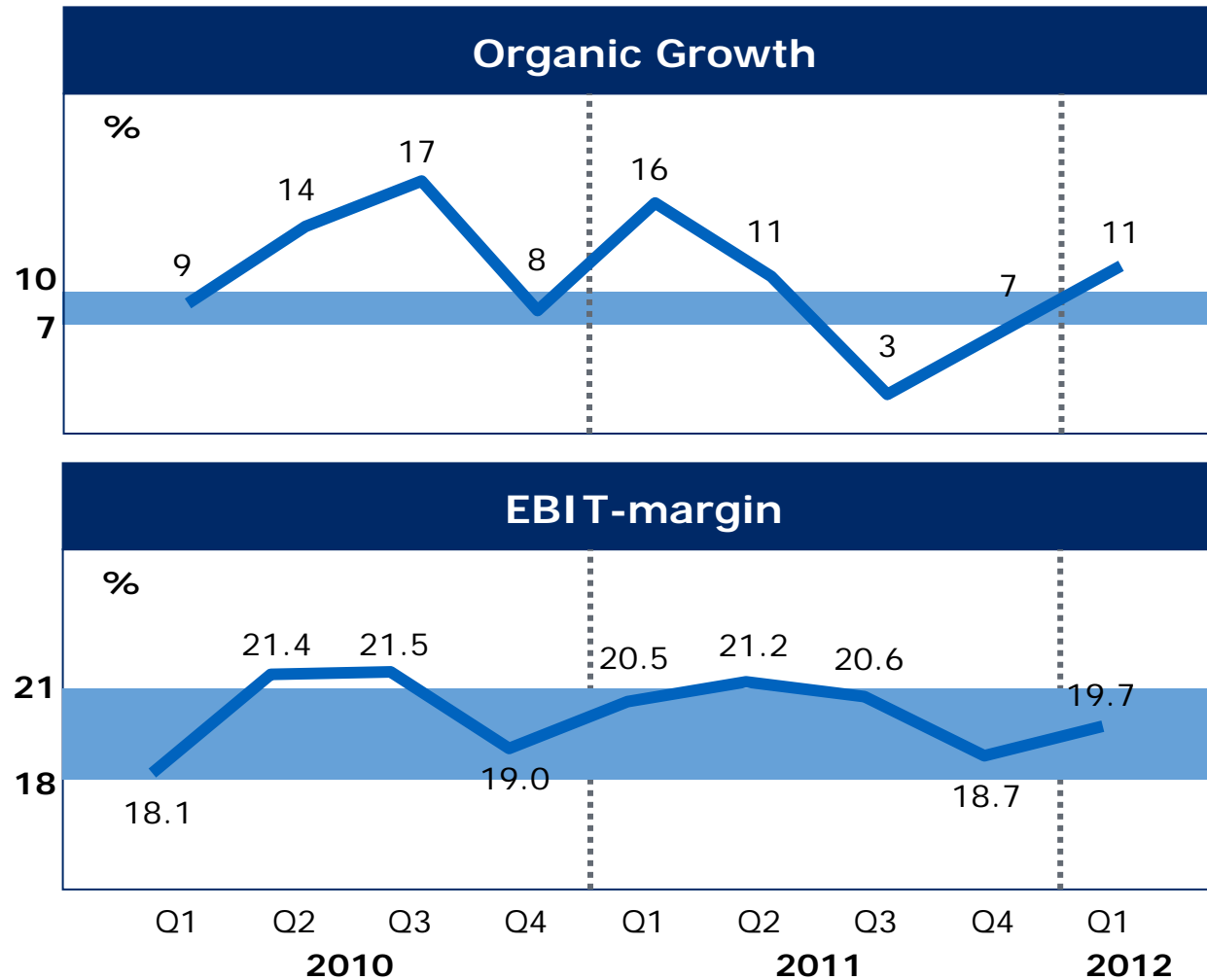
# Agenda

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- 1** Sustainable Growth + Attractive Margins
- 2** Price / Volume Development
- 3** Profit & Loss Structure
- 4** Regional Margin Structure
- 5** Capex
- 6** Cash Flow
- 7** 2012 and Mid-term Outlook

# Sustainable Growth + Attractive Margins

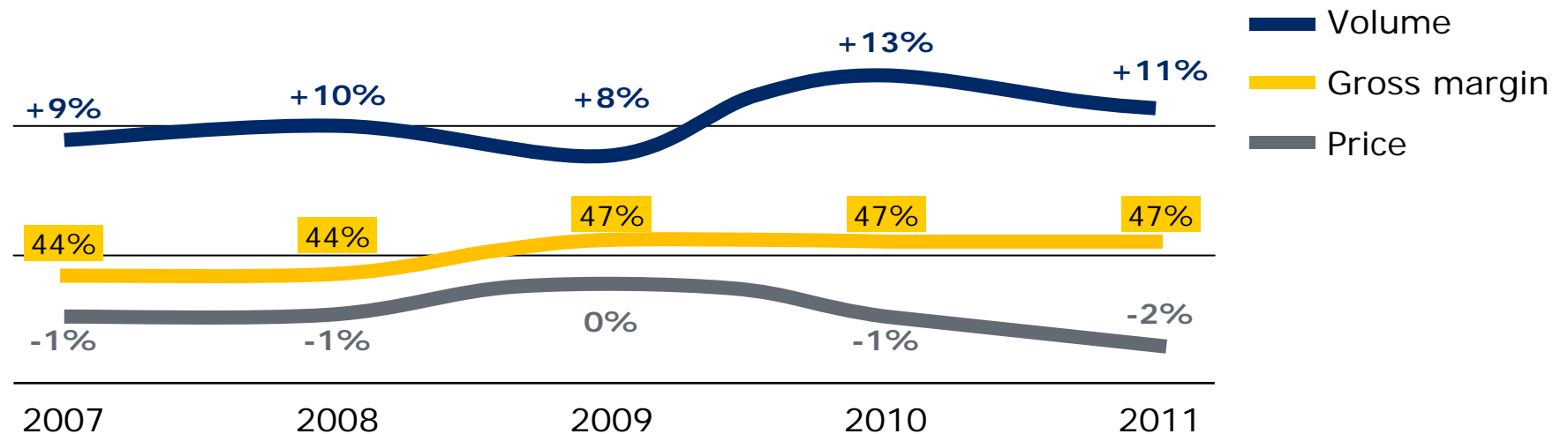
## Quarterly Trend Q1/2010 – Q1/2012



# Price / Volume

## Overall Development

- Worldwide pricing pressure has been compensated by efficiency gains in production
  - Price erosion constantly at low single-digit rates -> expecting same magnitude going forward
  - 10% average volume growth p.a. 2007 - 2011 -> expecting same magnitude going forward
- Gross margin increase from 44% (2007) to 47% (2011)



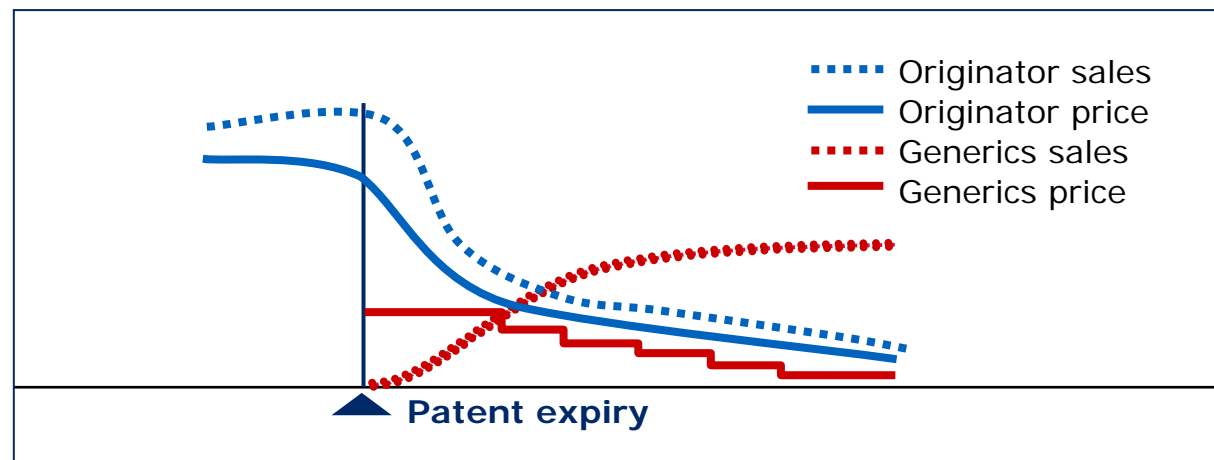
# Price / Volume Development IV Drugs

Despite higher price erosion in IV Generics, Fresenius Kabi can still generate highly attractive margins because of:

- Vertical integration
- Production efficiencies
- Flexibility in production volume changes

Being first to market adds additional returns

Production and Regulatory Competitiveness is Key



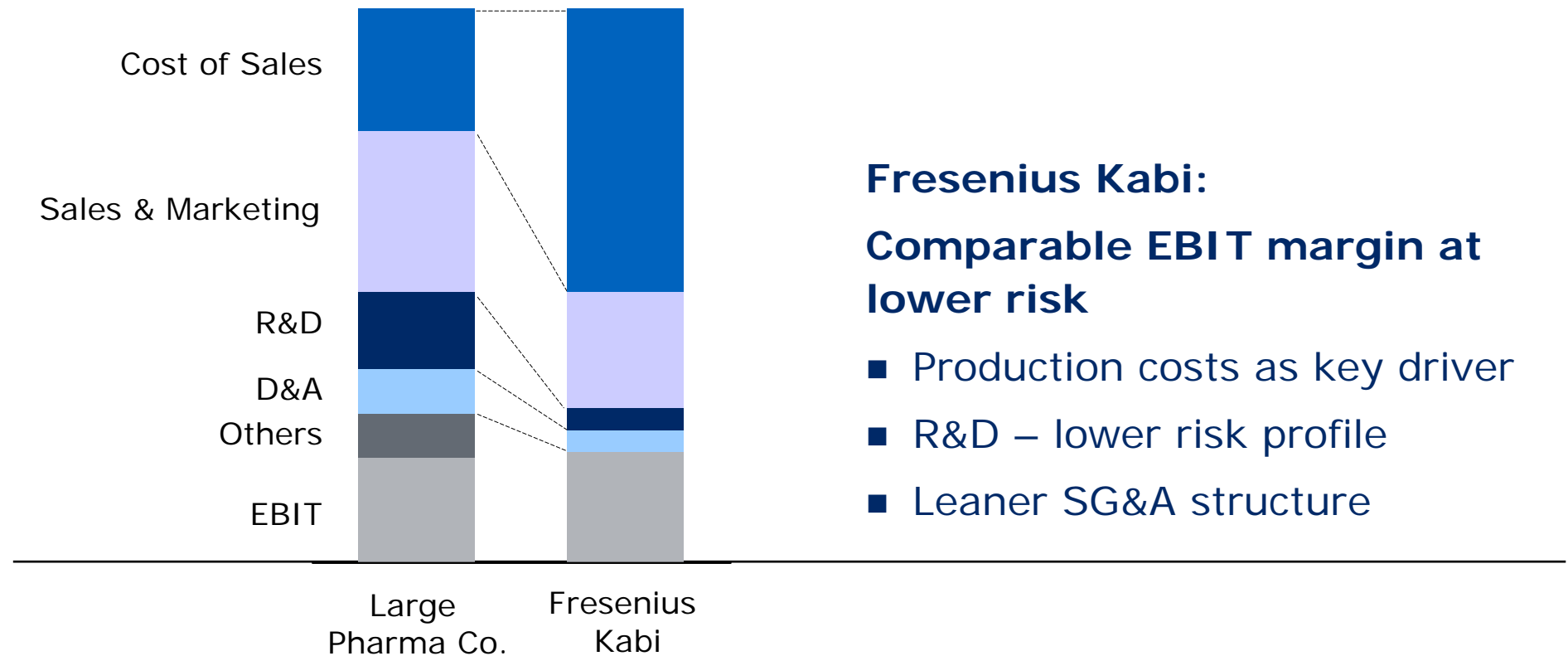
Strong price impact of patent phase, number of competitors and tendering or local pricing regulations

# Profit & Loss Structure

## Large Pharma Company vs. Fresenius Kabi



### Illustrative



**Fresenius Kabi:**  
**Comparable EBIT margin at lower risk**

- Production costs as key driver
- R&D – lower risk profile
- Leaner SG&A structure

Source: Fresenius Kabi Internal Analysis 2011

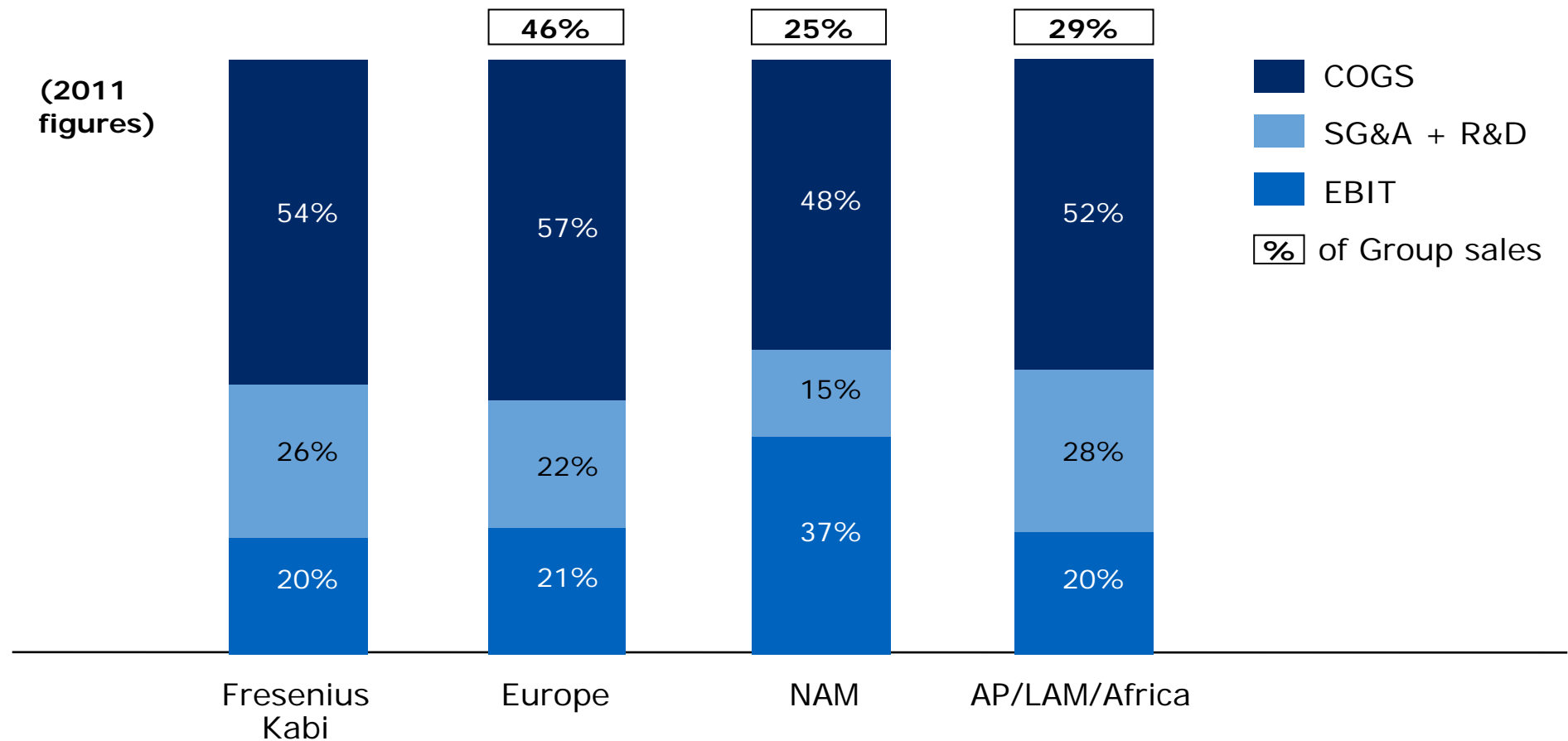
Capital Market Day – Fresenius Kabi – Financials and Financial Outlook, Gerrit Steen, © Copyright, June 12, 2012

# Regional Margin Structure

## Driven by Maturity of Markets and Product Mix



### Profit & Loss Structure

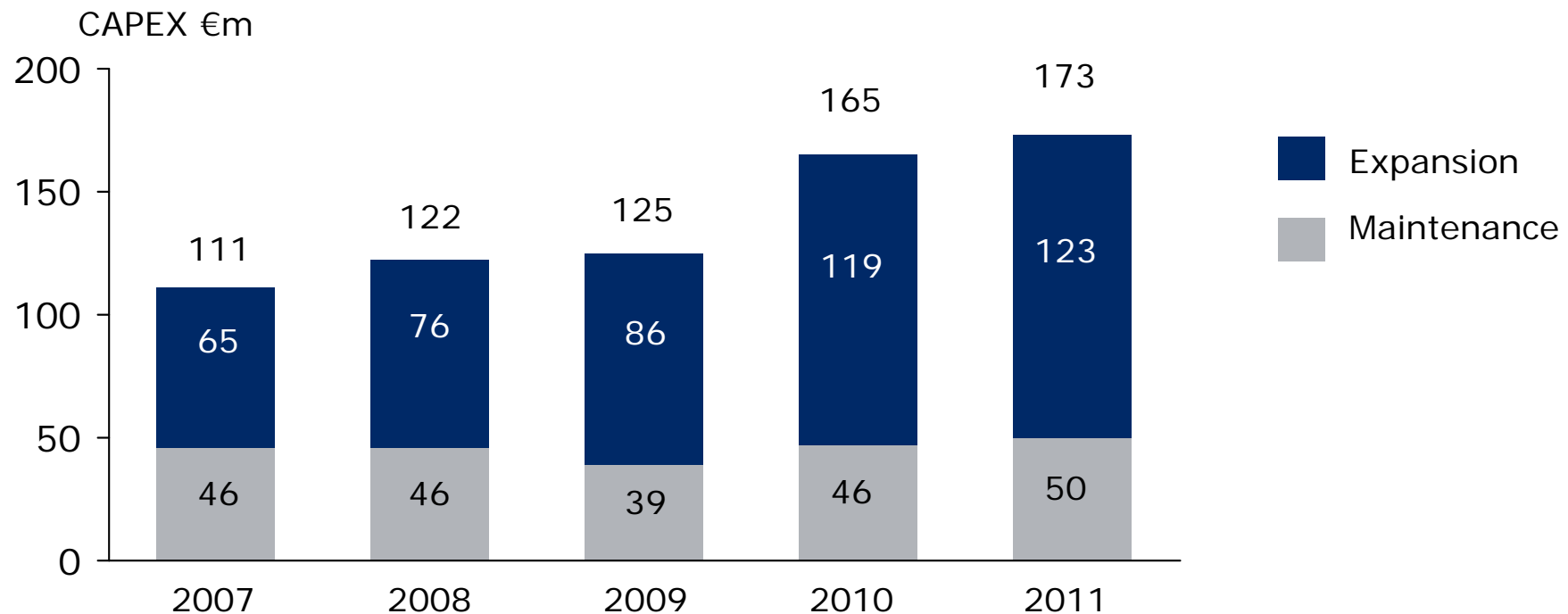


# Capex

## Backbone for Sustainable Growth

Continuous investments in state of the art manufacturing technologies for best-in-class efficiency, quality leadership and supply reliability

Target corridor of 4 - 5% of sales -> going forward absolute Capex therefore to further increase



# Cash Flow

## Sample Cash Flow Development and Outlook



			Trend
<b>Operating cash flow (sample figures)</b>	19.5%	EBIT	→
	-6.5%	Interest	↓
	-3.5%	Tax	→
	-2.5%	WC/Other	→
	+3.5%	D&A	→
	<b>10.5%</b>	<b>CFFO</b>	<b>↑</b>

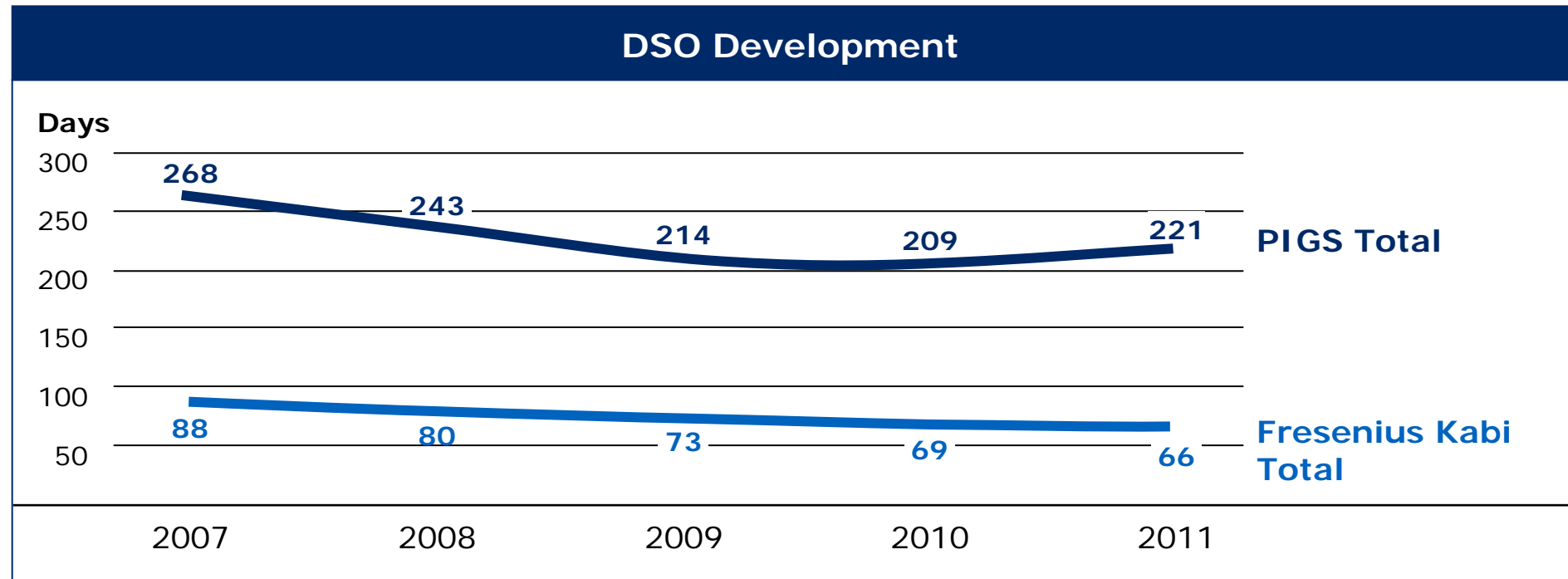
- CFFO margin to stay above 10% with upside potential
- Interest to improve
- Working Capital investment not to increase
- FCF at mid-single digits, also going forward

CFFO = Cash flow from operations, FCD = Free Cash Flow



# Cash Flow

## Receivables/DSO Development



- Improved DSO despite Euro debt crisis
- Even better DSO in PIGS countries than before crisis
- Early factoring activities mainly in 2008 - 2010

# 2012 and Mid-term Outlook

## 2012 Guidance Raised Again



	2012	
	previous	update
Organic Sales Growth	6 - 8%	7 - 9%
EBIT Margin	19.5 - <u>20.0%</u>	20.0 - 20.5%

### Planning premises:

- Strong business in all regions
- Drug shortages in the US stronger than expected
- Volatility of US IV drugs business to stay but about 75% of the global Fresenius Kabi business is outside the US
- Macroeconomic environment challenging but well controlled (DSO)
- FX translation effects: 1ct. change US\$/€ = ~€6 m sales or 3bps EBIT-margin

# 2012 and Mid-term Outlook

## Mid-term Outlook Fully Confirmed



	Mid-term
Organic Sales Growth	7 - 10%
EBIT Margin	18 - 21%

### Mid-term outlook fully confirmed

- Supported by strong business in all regions
- US EBIT margin to normalize to low 30ies
- Leverage cost structure
- Production efficiencies and volume effects to maintain gross margin



## Safe Harbor Statement

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# Capital Market Day 2012

June 12, 2012



# Medical Needs

**Prof. Dr. Martin Westphal**

Executive Vice President & Chief Medical Officer

Global Medical & Clinical Affairs

Capital Market Day Fresenius Kabi, June 12, 2012

# An Example Patient Treatment Hospital Admission

- Chris, 62 year old male patient
- Colorectal carcinoma
- Hospital admission for neoadjuvant radio-/chemotherapy and surgery
- Patient receives i.v. electrolyte solution (**Jonosteril**), as well as medication against pain (**Paracetamol**) and nausea (**Ondansetron**)



## Admission

# An Example Patient Treatment Neoadjuvant Therapy

- Chemotherapy with **5-Fluorouracil** – compounded in a **Fresenius Kabi compounding center** – combined with radiation therapy for 6 weeks
- **Fresubin energy drinks** to maintain energy balance
- **Ondansetron** to attenuate chemotherapy-induced nausea and vomitus



Admission **Chemo-  
therapy**



# An Example Patient Treatment Anesthesia

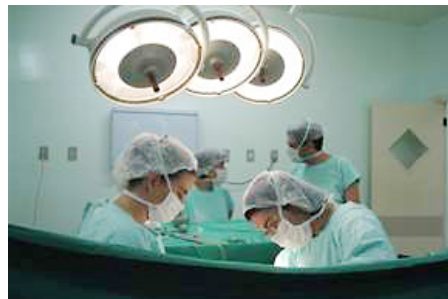
- Deep anterior resection of the rectum
- Preparation for anesthesia:
  - Intravenous electrolyte infusion (**Jonosteril**)
  - Administration of iv drugs using **Agilia pumps**
  - Perioperative antibiotic prophylaxis with **Ceftriaxon/Metronidazol**
- Patient controlled epidural anesthesia (PCEA) with **Ropivacain**
- Target controlled infusion (TCI) with **Propofol** and **Remifentanil**, muscle relaxation with **Cisatracurium**



Admission    Chemo-therapy    Anesthesia & Surgery

# An Example Patient Treatment Surgery

- Perioperative maintenance of fluid homeostasis with a crystalloid solution (**Jonosteril**)
- After 2 hours of surgery, a significant bleeding occurs → Patient receives a colloid to maintain circulating blood volume (**Voluven**; 6% HES 130/0.4) and vasopressors to stabilize hemo-dynamics until blood products are available (**Compoflex blood bags**)
- Patient is transferred to the intensive care unit (ICU)



Admission    Chemo-therapy    Anesthesia & Surgery

# An Example Patient Treatment Admission to the Intensive Care Unit

- Sedation with **Propofol** → weaning and extubation on ICU day 2
- Parenteral nutrition for 5 days via a central venous catheter and a port  
→ **3-chamber bag with amino acids, lipids and carbohydrates**  
→ Blood transfusion with **Compoflex blood bags**
- **Omega-3-fatty acids** to attenuate systemic inflammation
- **Glutamin** to reduce hospital length of stay and mortality



Admission    Chemo-therapy    Anesthesia & Surgery    ICU

# An Example Patient Treatment

## Intensive Care Unit Day 5

- Parenteral nutrition is switched to **enteral nutrition with Fresubin**
- Liquid enteral nutrition for further 5 days
- Beginning of mobilization and planned discharge on day 10



Admission   Chemo-therapy   Anesthesia & Surgery   ICU   ICU day 5

# An Example Patient Treatment

## Discharge to General Ward

- Patient is discharged to the general ward after 10 days in the ICU
- Adjuvant radio- and chemotherapy with **5-Fluorouracil** and **Irinotecan** plus radiation with 50 gray for 6 months
- Planned discharge from hospital after 3 days
- Problem: Surgical wound healing
  - Initiation of wound therapy with **Tegaderm**
  - **Glutamin Plus** to foster recovery



Admission   Chemo-therapy   Anesthesia & Surgery   ICU   ICU day 5   General ward



# An Example Patient Treatment Discharge From Hospital

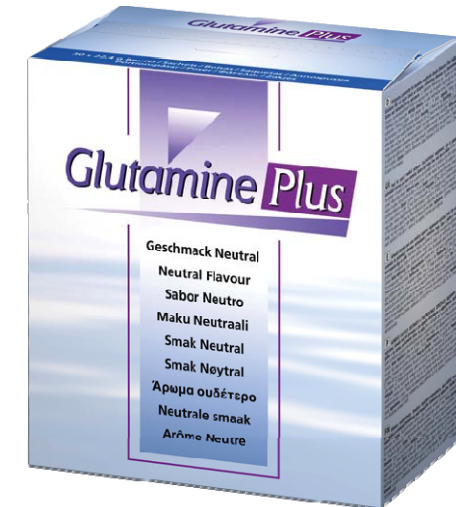
- Patient is discharged from the hospital at day 13



# An Example Patient Treatment

## Intermittent Radio-/Chemotherapy and Homecare

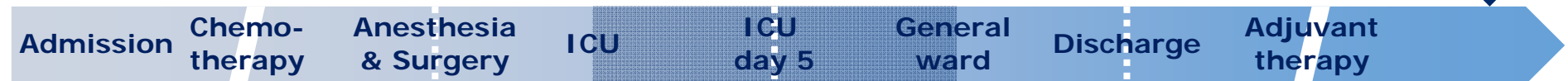
- Ambulatory radio-/chemotherapy for 6 months with **5-Fluorouracil** and **Irinotecan**, radiotherapy with 50 gray
- Care of chronic wound healing disturbance with **Tegaderm** products
- Home care including **Glutamin Plus**



Admission   Chemo-therapy   Anesthesia & Surgery   ICU   ICU day 5   General ward   Discharge   Adjuvant therapy

# An Example Patient Treatment Outcome

- Patient is screened regularly
- No signs of tumor recurrence or metastasis
- Wound healing is significantly improved



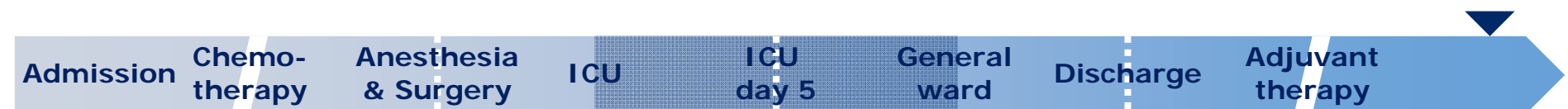


# An Example Patient Treatment

## Summary of the Products Used in this Patient

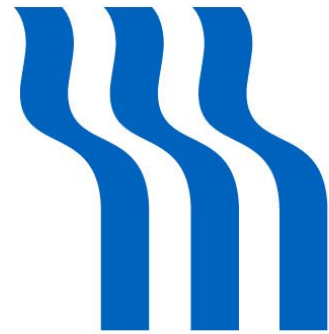


- **Chemotherapy:** Irinotecan, 5-Fluorouracil (compounded in FK compounding centers)
- **Critical Care:** Ondansetron
- **Anesthesia and Pain Medicine:** Propofol, Remifentanyl, Cisatracurium, Ropivacain, Paracetamol
- **Antibiotics:** Ceftriaxon, Metronidazol
- **Infusion/Transfusion:** Jonosteril, Voluven, Compoflex blood bags
- **Parenteral Nutrition:** Kabiven, Omegaven, Dipeptiven
- **Enteral Nutrition:** Fresubin, Glutamin Plus, Fresubin energy drinks
- **Medical Devices:** Agilia pumps, TCI, Tegaderm
- **Disposables**



# What Makes Fresenius Kabi So Special in the Health Care Segment?

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**FRESENIUS  
KABI**

caring for life

## Safe Harbor Statement

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# Capital Market Day 2012

June 12, 2012



# Product Segments Clinical Nutrition

**Manfred M. Köhler**

Member of the Management Board

President Region Central/Eastern Europe, Nordics & Middle East

Capital Market Day Fresenius Kabi, June 12, 2012

# Agenda

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- 1** Malnutrition and its Impact
- 2** What is Clinical Nutrition
- 3** Fresenius Kabi's Portfolio
- 4** The Clinical Nutrition Market
- 5** Fresenius Kabi's Position in the Market
- 6** Fresenius Kabi Success Stories

# Malnutrition and its Impact

## Malnutrition is a Problem Across the World

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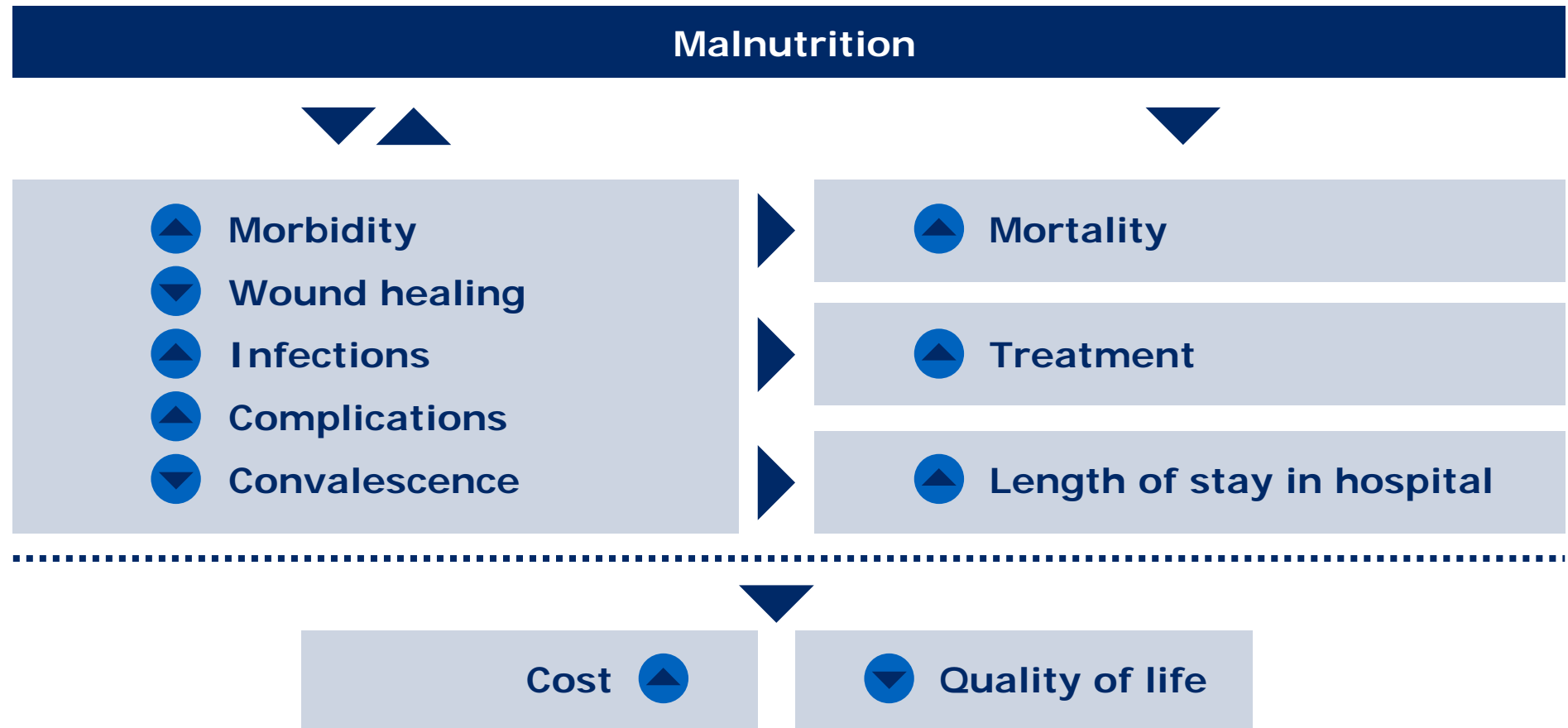


- Up to 40% of hospital patients worldwide are malnourished
  - Even in Europe 33 million patients are affected
- €120 bn\* estimated costs for EU governments for treatment of disease-related malnutrition
- Clinical Nutrition is efficient to treat malnutrition and avoid associated costs
- Costs for Clinical Nutrition is less than 2.5% of cost associated with malnutrition

Source: \*Ljungqvist O, Clin Nutr 2010

# Malnutrition and its Impact

## Malnutrition Increases Health Care Cost

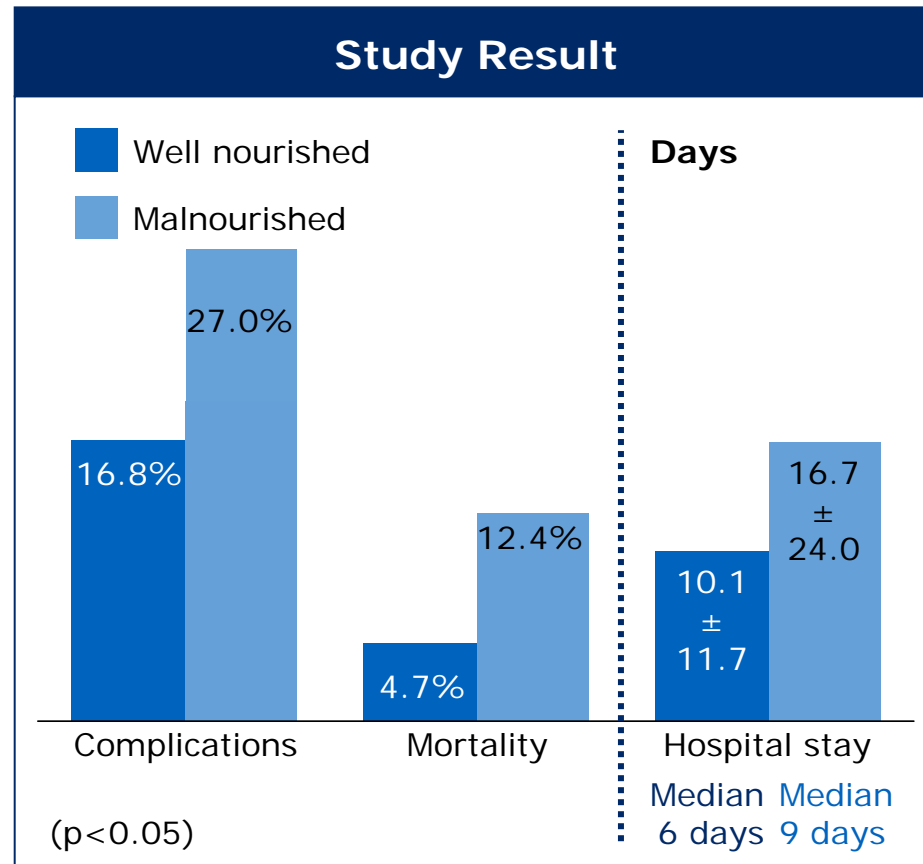


Source: Adapted from Norman K, Clin Nutr 2008



# Malnutrition and its Impact

## Medical Benefit and Cost Savings for Hospitals



- Less complications
  - Pneumonia
  - Wound infection
  - Sepsis
- Reduced hospital stay (average 3 days reduced)
- Reduced mortality
- Well nourished patients allows 40% savings/day

n = 709 patients, nutrition status screened within 72h after admission

Source: Correia et al. 2003

# Malnutrition and its Impact

## European Action Plans Fighting Malnutrition

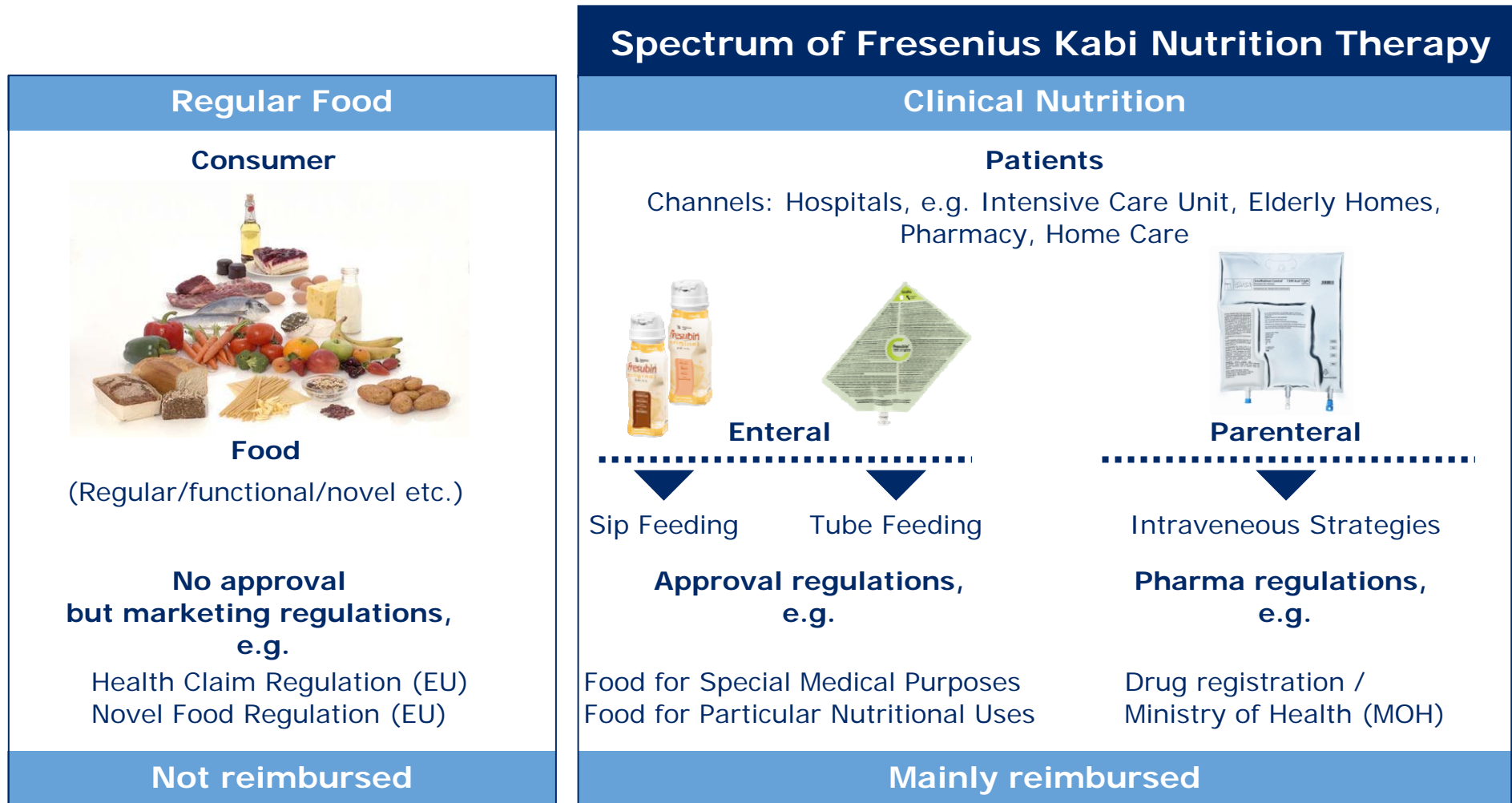
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- In 2009: European Parliament urged European Commission and member states to make malnutrition a key priority in the field of nutrition and health
- In 2011 definition of action plan to prevent disease-related malnutrition in the EU
- Implementation of actions against malnutrition is mandatory, e.g. in Poland and Denmark

# What is Clinical Nutrition?

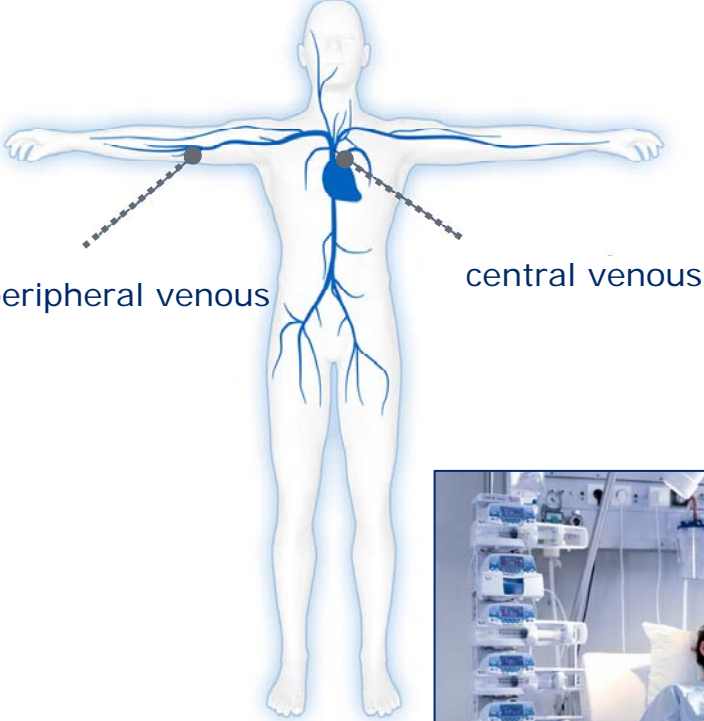
## Spectrum of Fresenius Kabi Nutrition Therapy



# What is Clinical Nutrition?


## Two Irreplaceable Routes for Clinical Nutrition

### Parenteral Nutrition

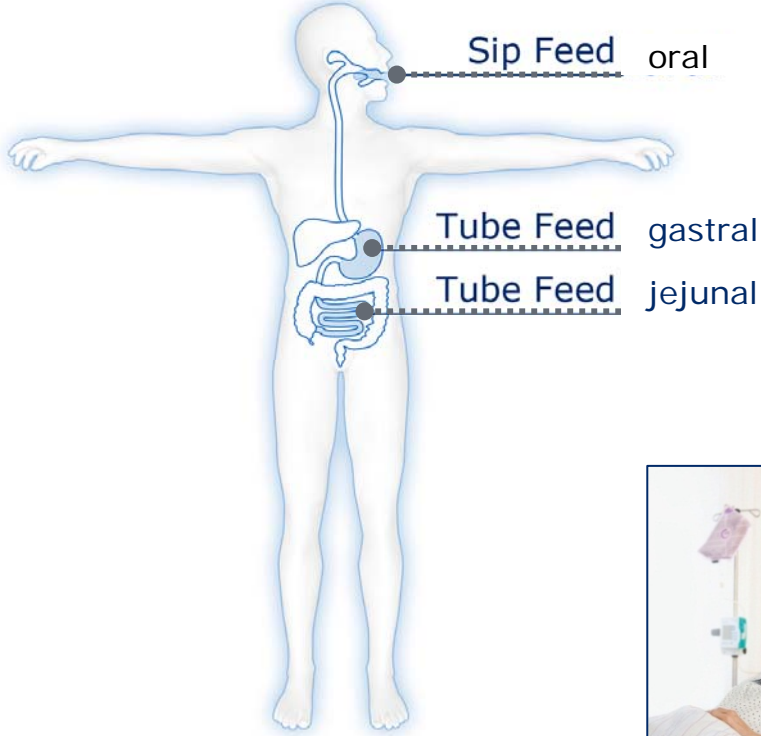


peripheral venous

central venous




### Enteral Nutrition



Sip Feed oral

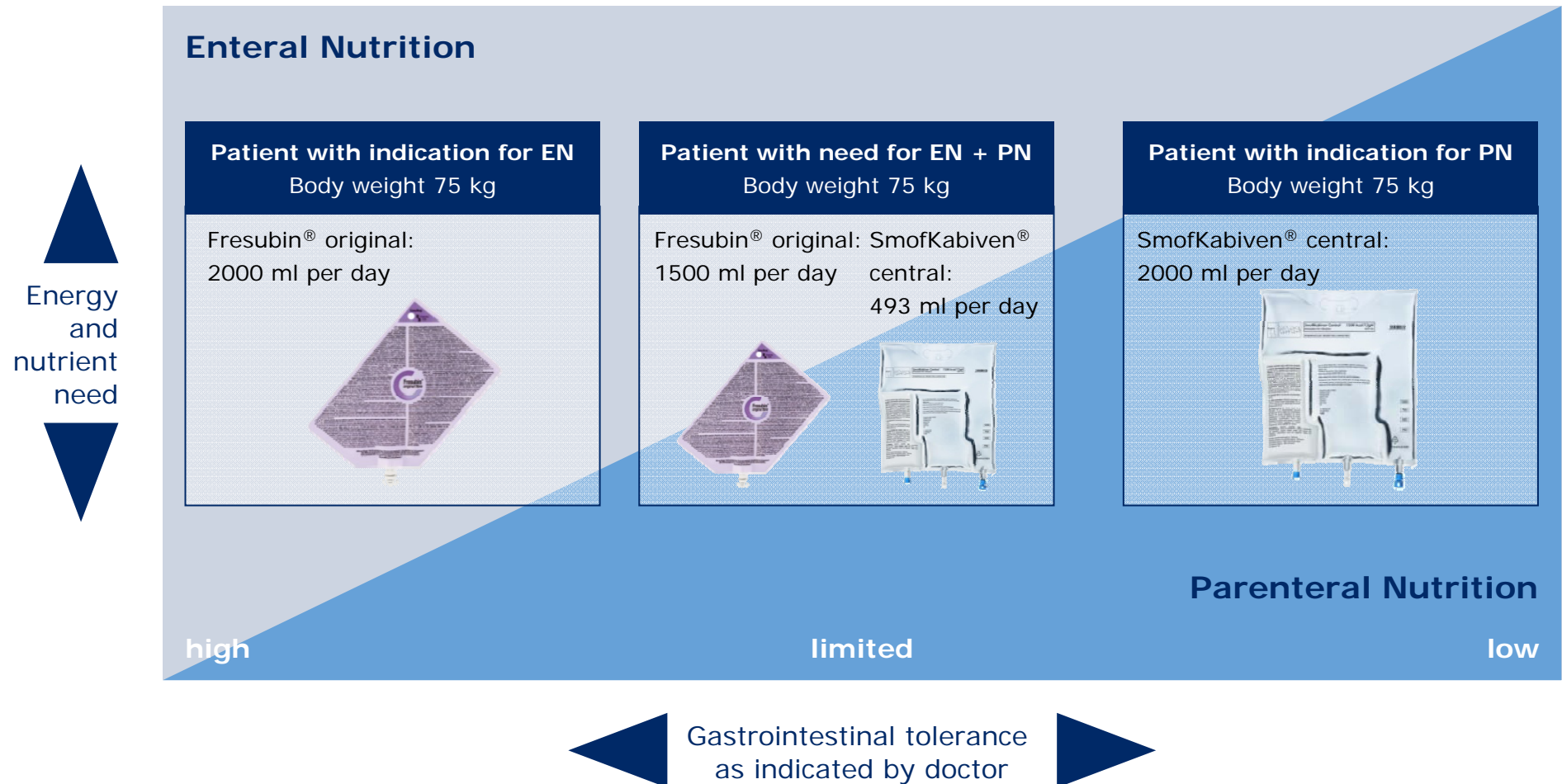
Tube Feed gastral

Tube Feed jejunal



# Fresenius Kabi Products and its Usage

## Offering Products for Enteral and Parenteral Nutrition

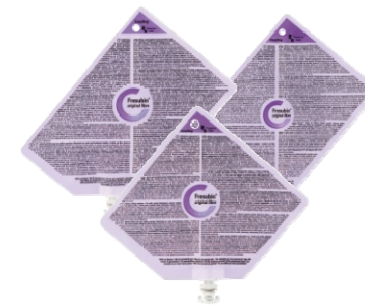


# Fresenius Kabi's Portfolio

## A Unique and Comprehensive Portfolio

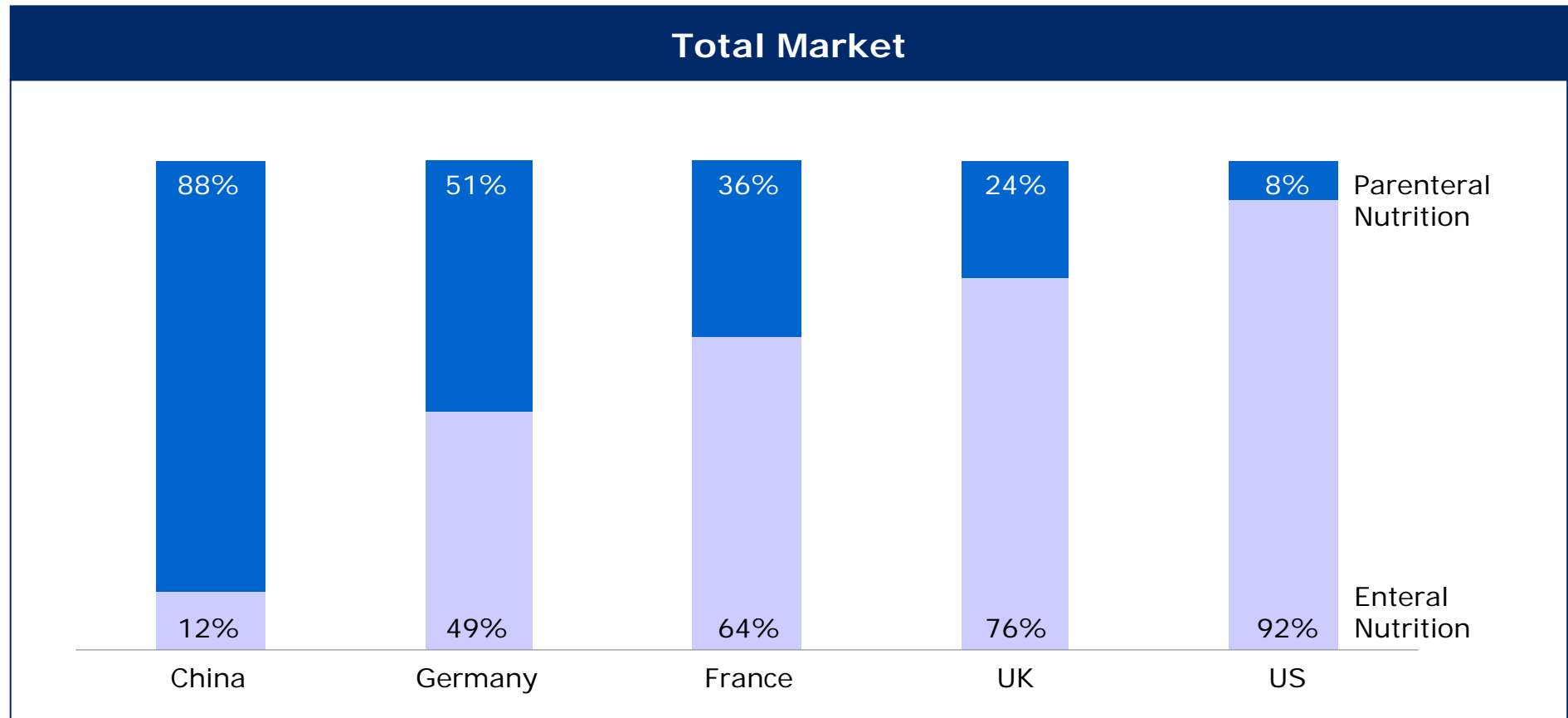


	Parental Nutrition			Enteral Nutrition	
	Multi-Chamber Bags	Single Components	Com-pounding	Tube Feed	Sip Feed
Pumps	✓	✓	✓	✓	NA
Disposables	✓	✓	✓	✓	NA



# The Clinical Nutrition Market

## Clinical Nutrition Portfolio to Cover All Different Needs

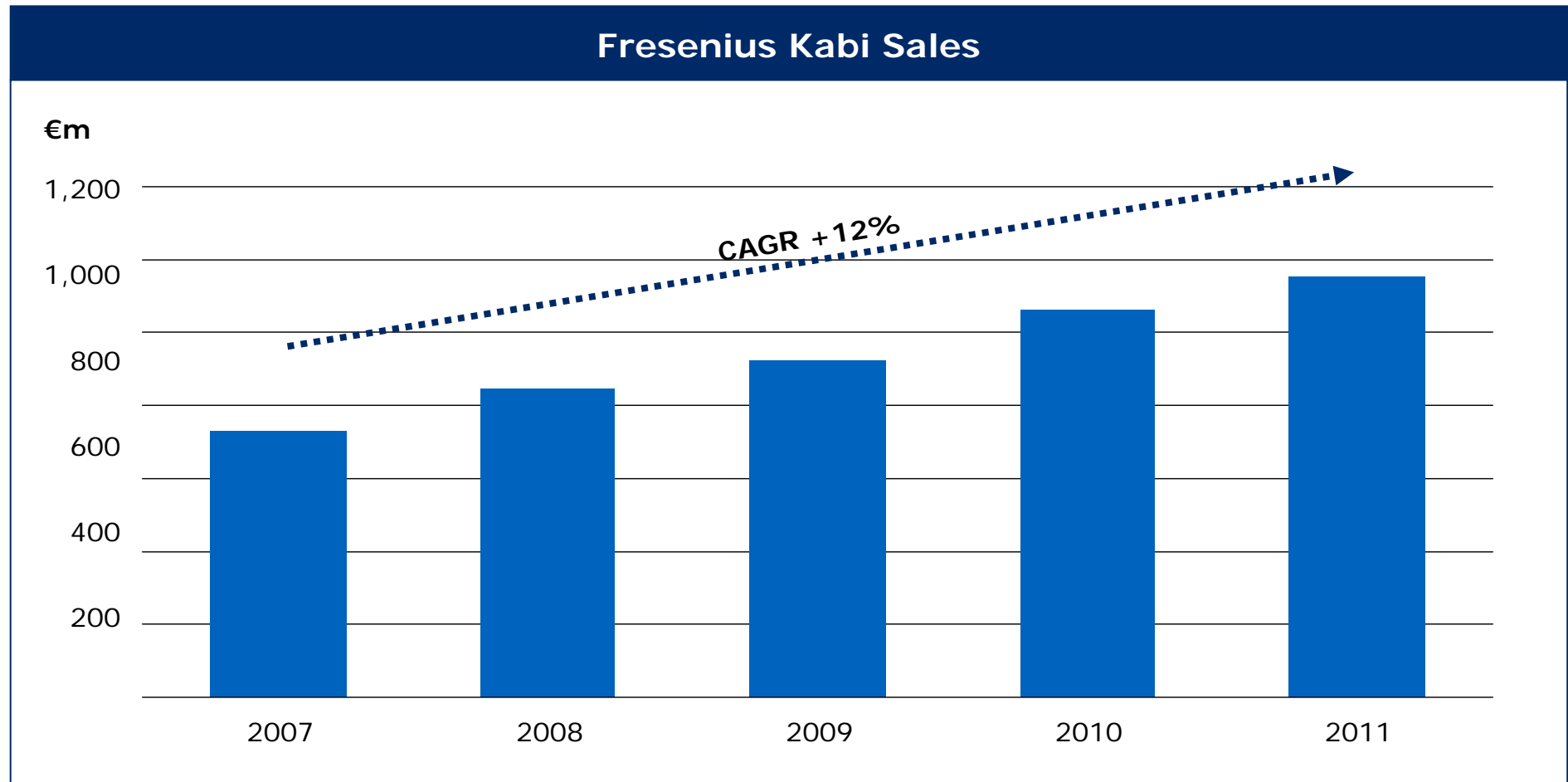


**Fresenius Kabi potential relevant market size worldwide: €6.2 bn**

Source: Fresenius Kabi Internal Analysis (2010)

# The Clinical Nutrition Market

## Fresenius Kabi Delivers Strong Growth

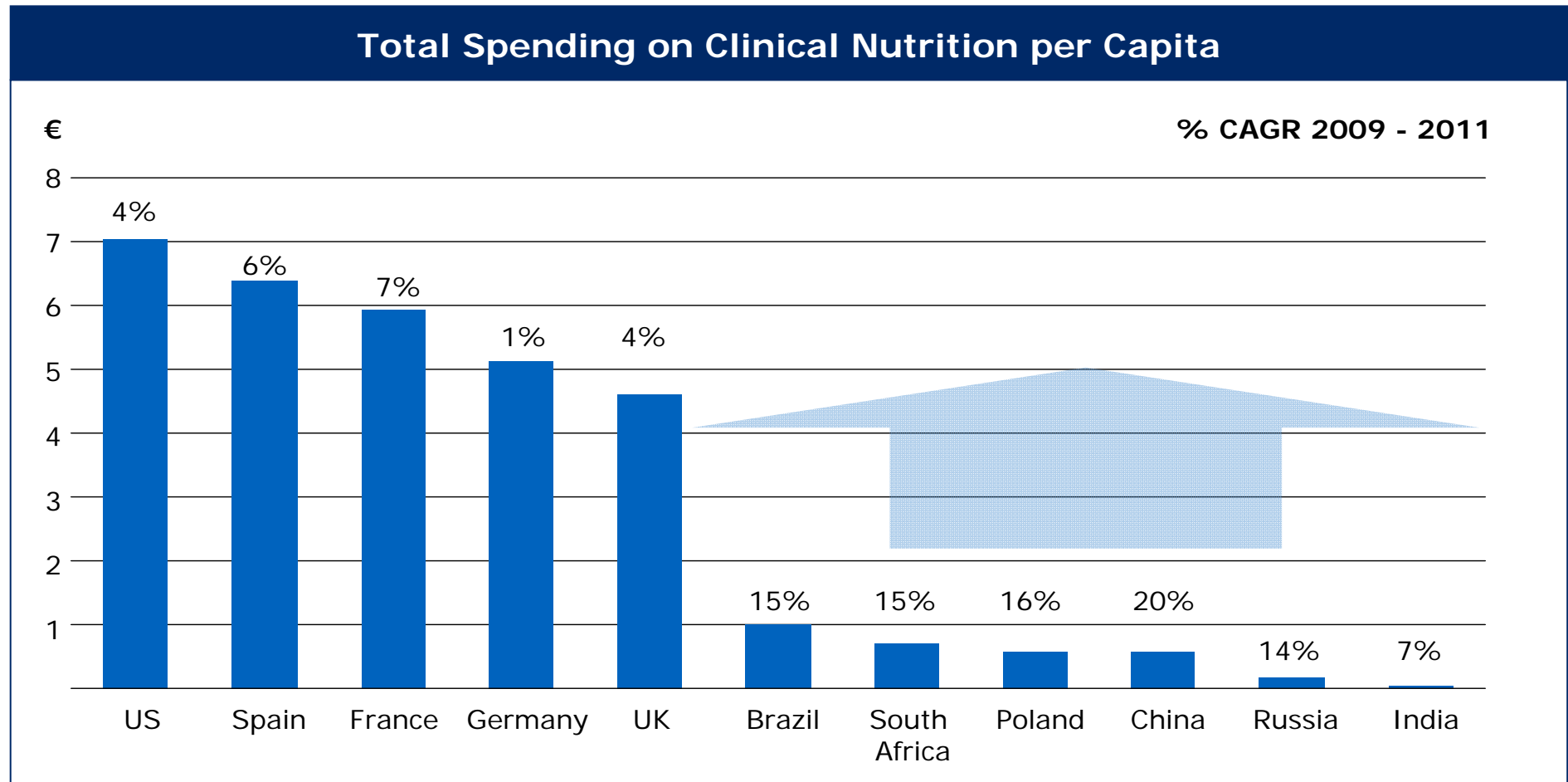


CAGR 2006-2011



# The Clinical Nutrition Market

## Huge Opportunity to Grow in Many Markets



Source: Fresenius Kabi Internal Analysis (2011)

# Fresenius Kabi's Position in the Market

## Unique Positioning vs. Competition



	Product Groups																
	PN					EN					MD		Compounding				
	EU	NAM	AP	LAM	MEA	EU	NAM	AP	LAM	MEA	PN	EN	EU	NAM	AP	LAM	MEA
<b>Fresenius Kabi</b>	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Baxter</b>	✓	✓	✓	✓	✓						✓		✓	✓	✓	✓	✓
<b>B.Braun</b>	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓			
<b>Hospira</b>		✓									✓						
<b>Abbott</b>						✓	✓	✓	✓	✓		✓					
<b>Nestlé</b>						✓	✓	✓	✓	✓		✓					
<b>Danone</b>						✓	✓	✓	✓	✓		✓					

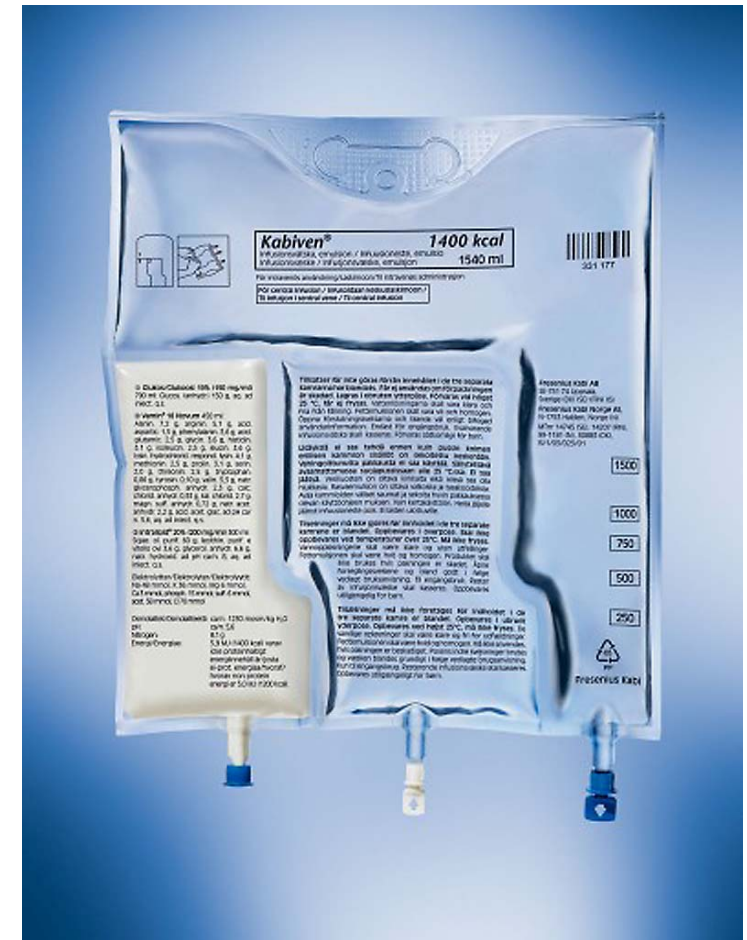
Source: Fresenius Kabi Internal Analysis (2011)

# Fresenius Kabi Success Stories

## 3-Chamber Bag Innovation Shaping the Global Market

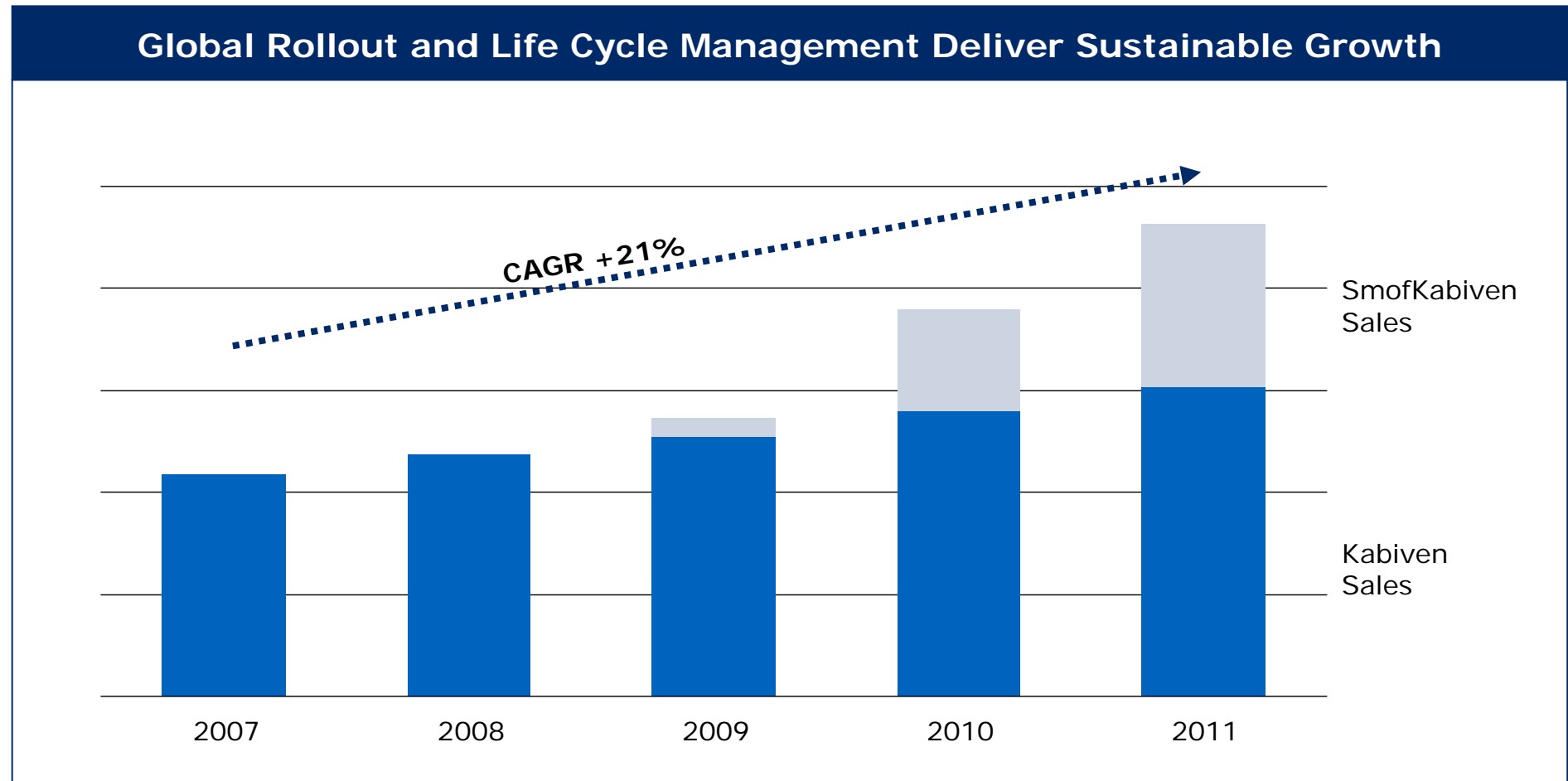


- Complete Parenteral Nutrition in a single container
- Different formulations to meet patients' requirements
- Can be used for approximately 80% of patients
- Convenient, quick and easy to handle
- 24 months shelf-life
- Improved safety: final sterilization and minimum risk of contamination



# Fresenius Kabi Success Stories

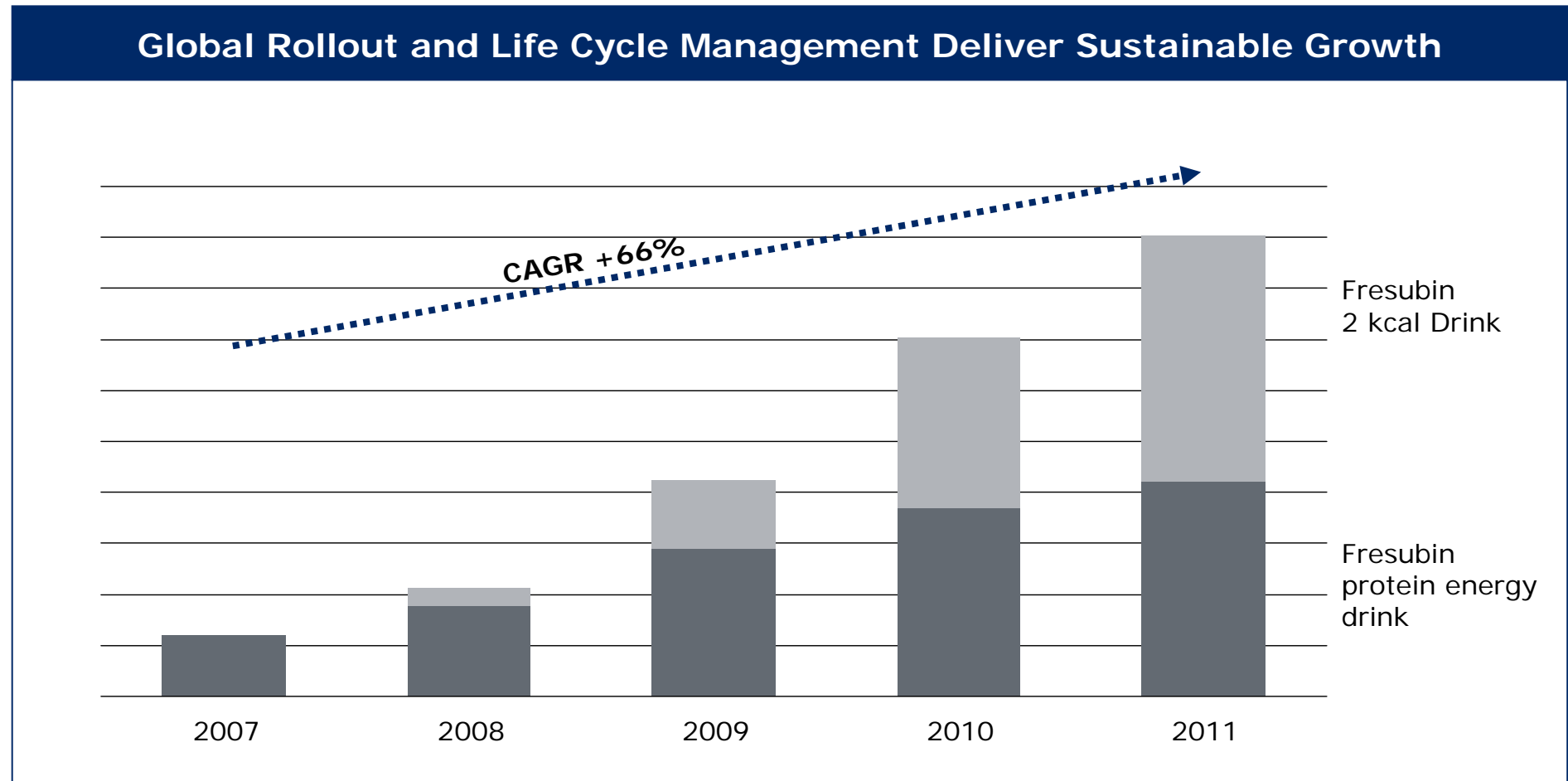
## Global Rollout and Life Cycle Management



CAGR 2006-2011

# Fresenius Kabi Success Stories

## Global Rollout and Life Cycle Management



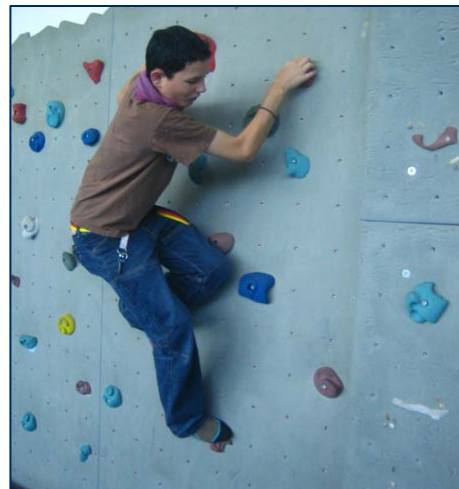
CAGR 2006-2011

# Fresenius Kabi Success Stories

## Clinical Nutrition Saving Lives



23 years of non-stop Parenteral Nutrition, including giving birth



Dependent on Parenteral Nutrition since early childhood & enjoying climbing



Mobile with Enteral Nutrition



## Safe Harbor Statement

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# Capital Market Day 2012

June 12, 2012





# Product Segments Infusion Therapy

**Marc Crouton**

Member of the Management Board

President Region West & South Europe, Latin America and Africa

Capital Market Day Fresenius Kabi, June 12, 2012

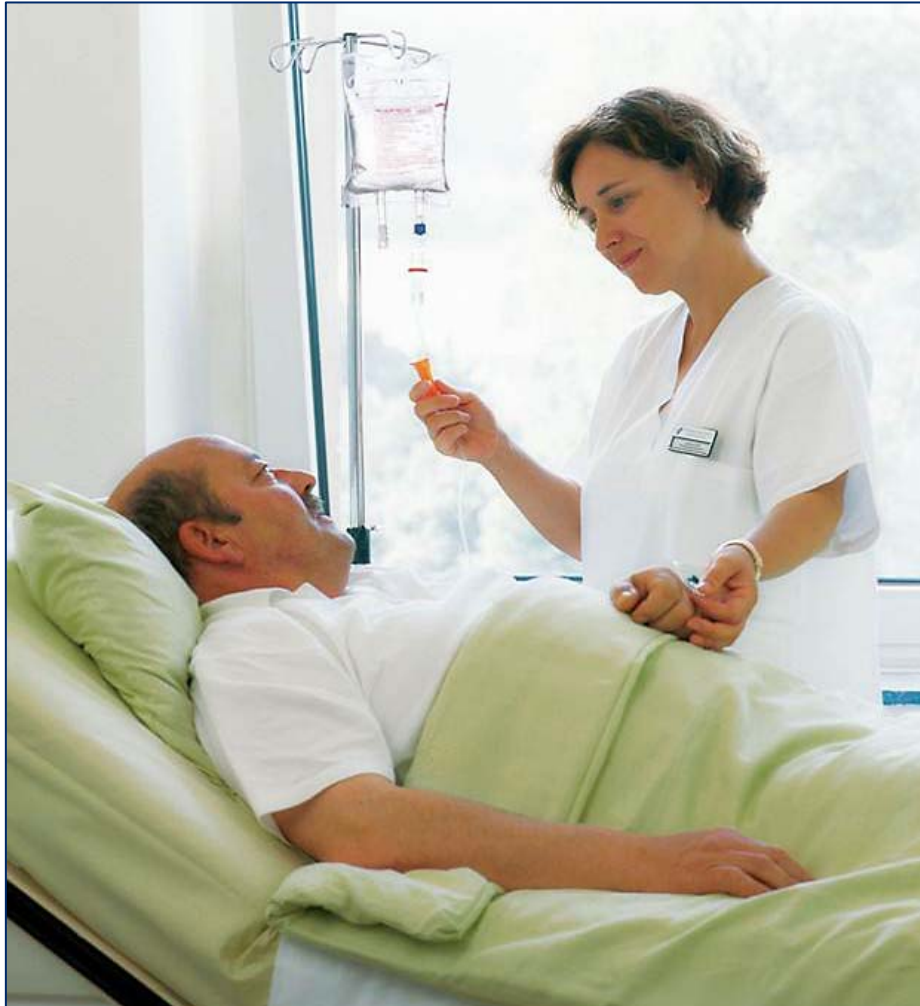
# Agenda

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- 1** What is Infusion Therapy
- 2** Fresenius Kabi's Portfolio
- 3** A Driver of Global Quality Standards
- 4** Business Model
- 5** Technology Leadership Applied to Infusion Therapy
- 6** Strong and Sustainable Business

# What is Infusion Therapy

## Basic But Crucial Product for Every Hospital



- Basic but crucial product for all hospitals
- Each day >18 million patients receive Infusion Therapy

# What is Infusion Therapy

## Mandatory to Substitute Blood Volume



### Basic Solutions & Colloids

Intravenously administered solutions to compensate loss of fluids and to balance electrolytes and plasma pH



Colloids are blood volume substitutes to maintain blood volume, hemodynamic circulation and tissue oxygenation



# Fresenius Kabi's Portfolio

## One of the Leading Global Specialists



### Longstanding Experience in Development, Production and Marketing

- >1.0 billion units p.a.
- Comprehensive product portfolio – content and containers
- Large volume business demanding highest production, logistics and service standards
- Efficiency, safety and compatibility with drug therapies proven in numerous studies
- Market-adapted container strategy with leading-edge technologies

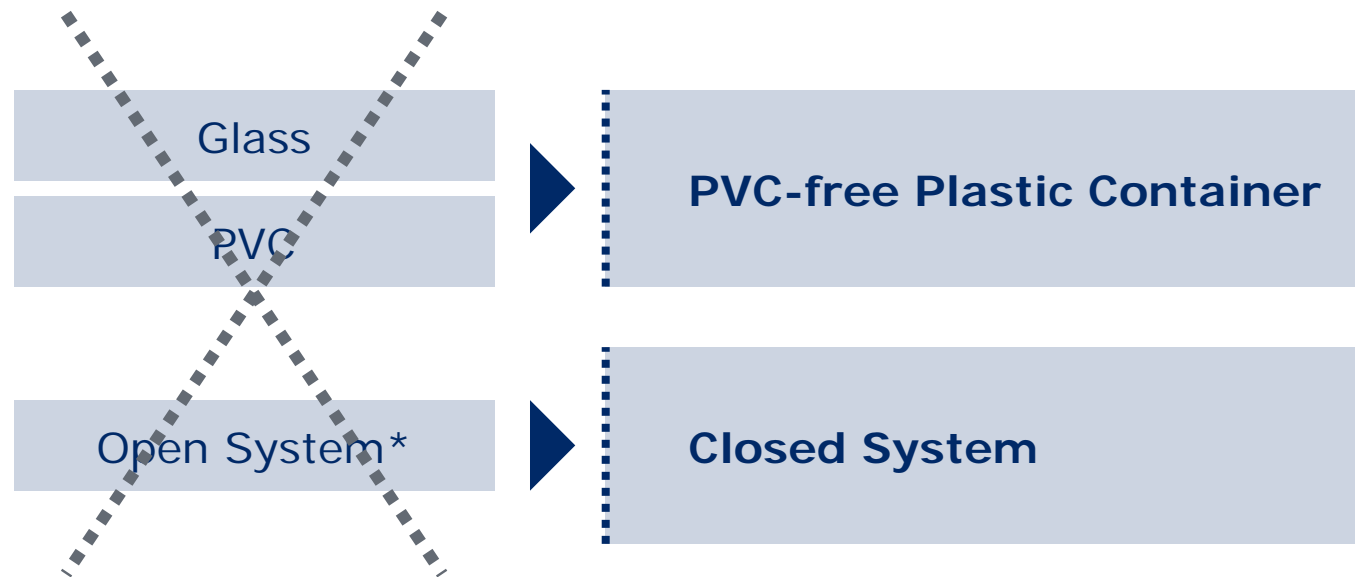


# A Driver of Global Quality Standards

## Fresenius Kabi in the Lead to Improve Standards



### Global Trend to Increase Quality Standards



\*Open System: A glass or semi-rigid plastic container, which must be externally vented to ambient air to allow fluid egress, risking contamination of the container content

# A Driver of Global Quality Standards Setting Global Trends to Convert Markets



## Leadership Pro-actively Translated into the Increase of Quality Standards Worldwide



### Fresenius Kabi Brazil

2007: Open System

+32% in units

2011: Closed System

# Business Model

## Successful Route of Expansion





# Technology Leadership Applied Standardization of Technologies

## KabiPac®

- Worldwide quality standard
- Clearly separated ports for injection and infusion
- Fully collapsible allows closed system during infusion
- Excellent drug compatibility
- PVC and latex free
- Attractive price positioning



# Technology Leadership Applied Standardization of Technologies



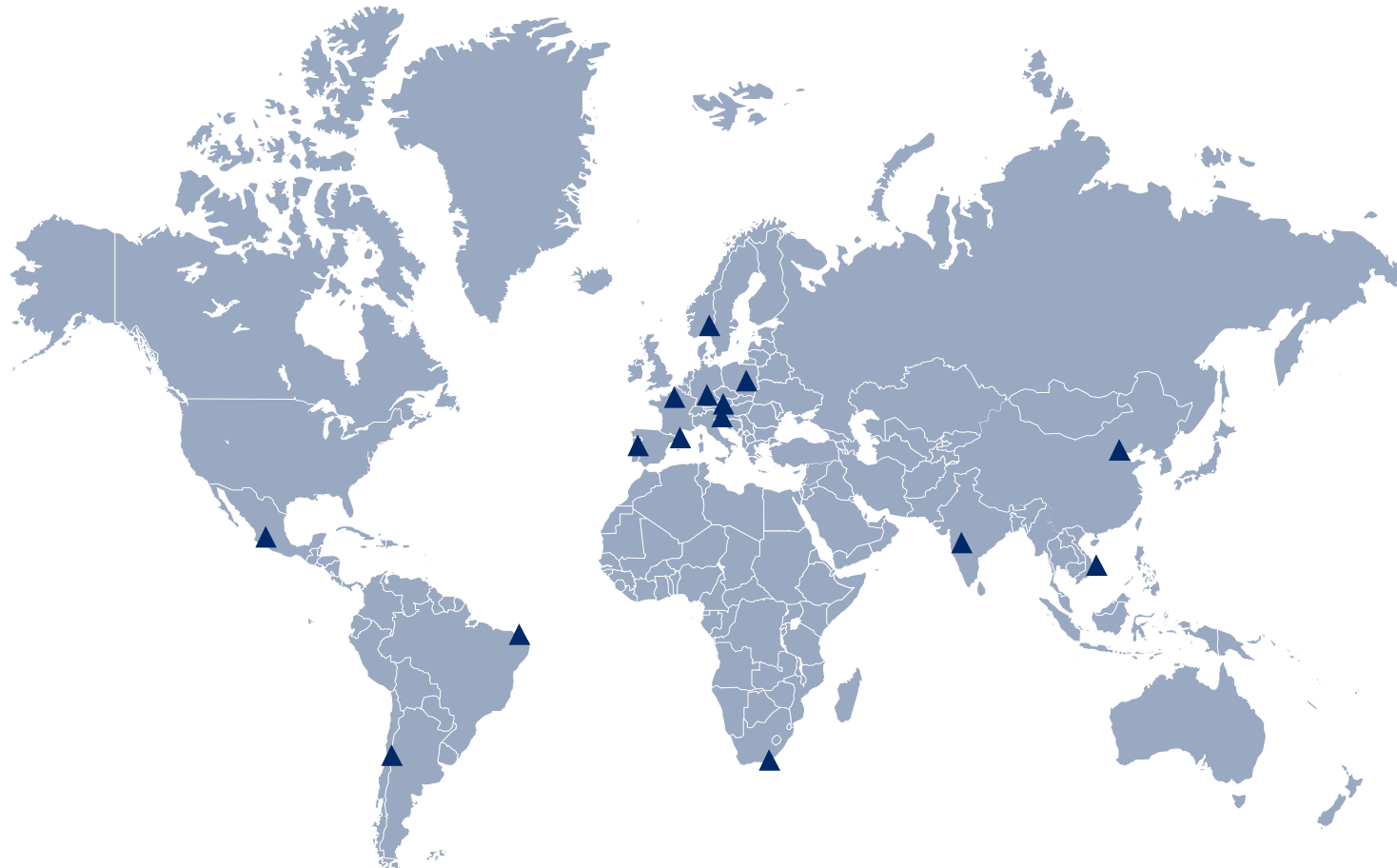
## freeflex®

- Sophisticated, leading-edge container
- Optimal and totally safe handling
- PVC-free
- Ideally adapted to demanding advanced markets



# Strong and Sustainable Business

## Manufacturing Locations – Being Internationally Local



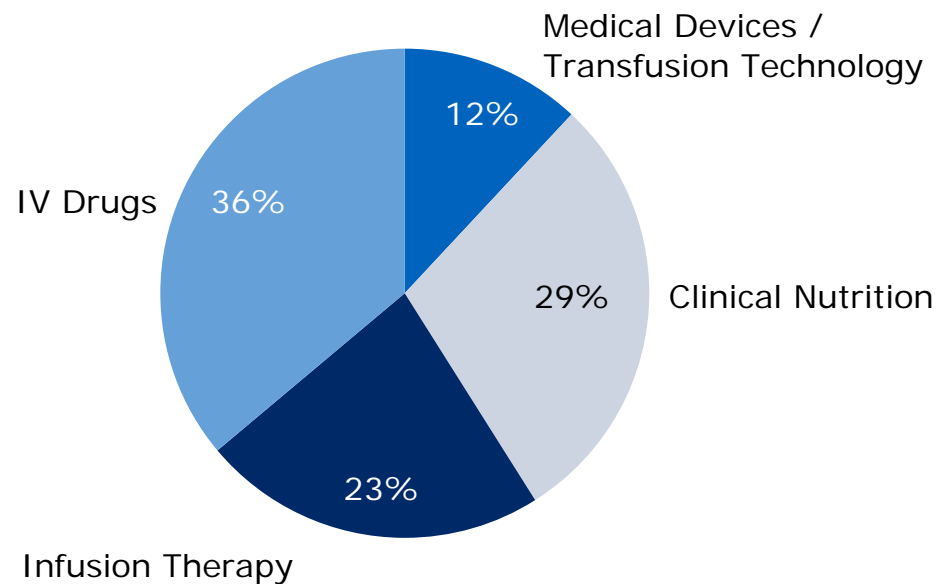
▶ International network of manufacturing sites:  
**Optimal supply chain is key to be competitive in Infusion Therapy**

# Strong and Sustainable Business

## A Solid Contributor to Fresenius Kabi's Success

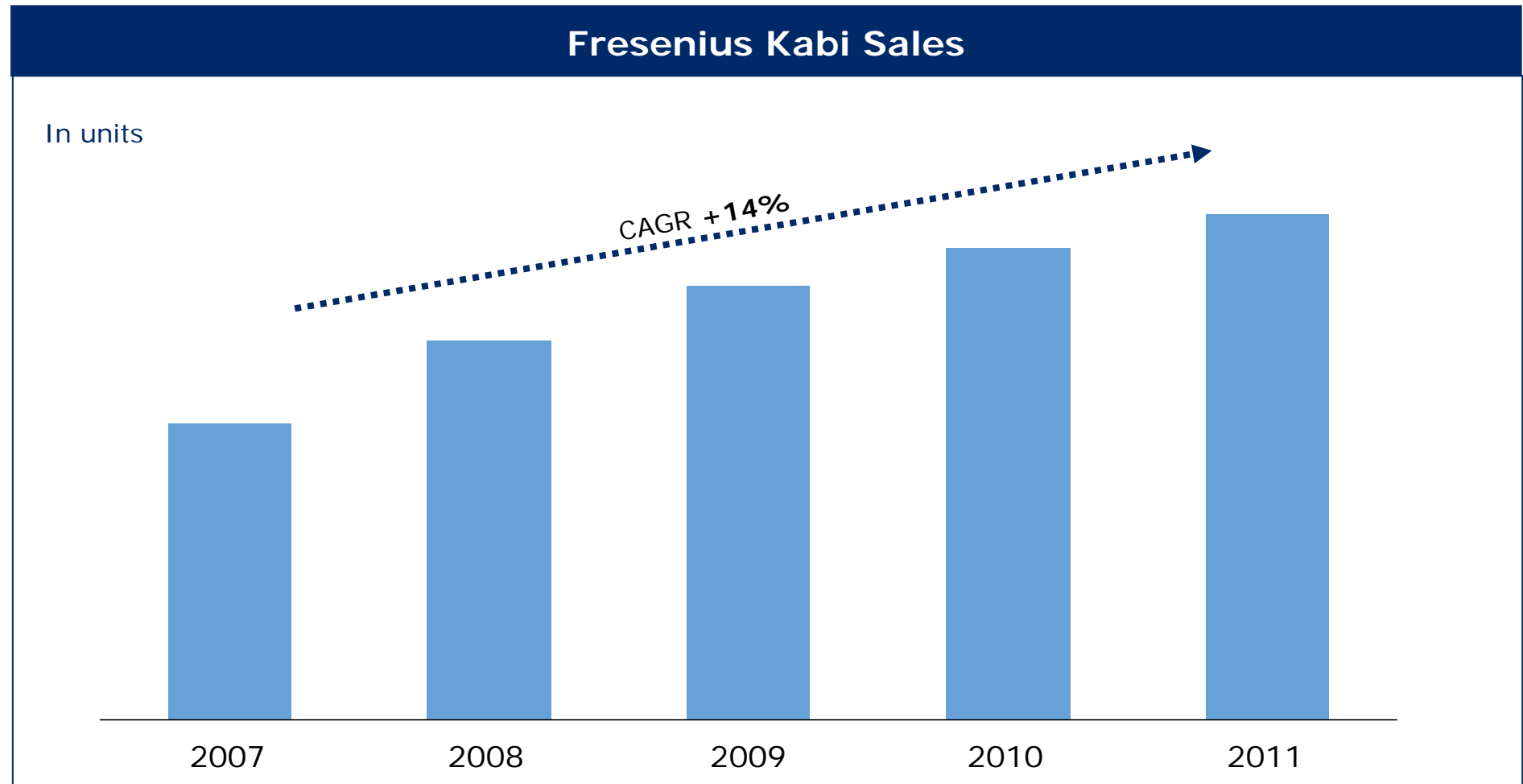


### Sales by Product Segment 2011



# Strong and Sustainable Business

## Consistent and Sustainable Growth



CAGR 2006-2011

# Infusion Therapy Summary

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- Entry point into a hospital
- For our customers: crucial and mandatory
- For Fresenius Kabi: consistent and sustainable





## Safe Harbor Statement

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# Capital Market Day 2012

June 12, 2012





# Product Segment IV Drugs

## **John Ducker**

Member of the Management Board  
President Region North America

Capital Market Day Fresenius Kabi, June 12, 2012

# Agenda

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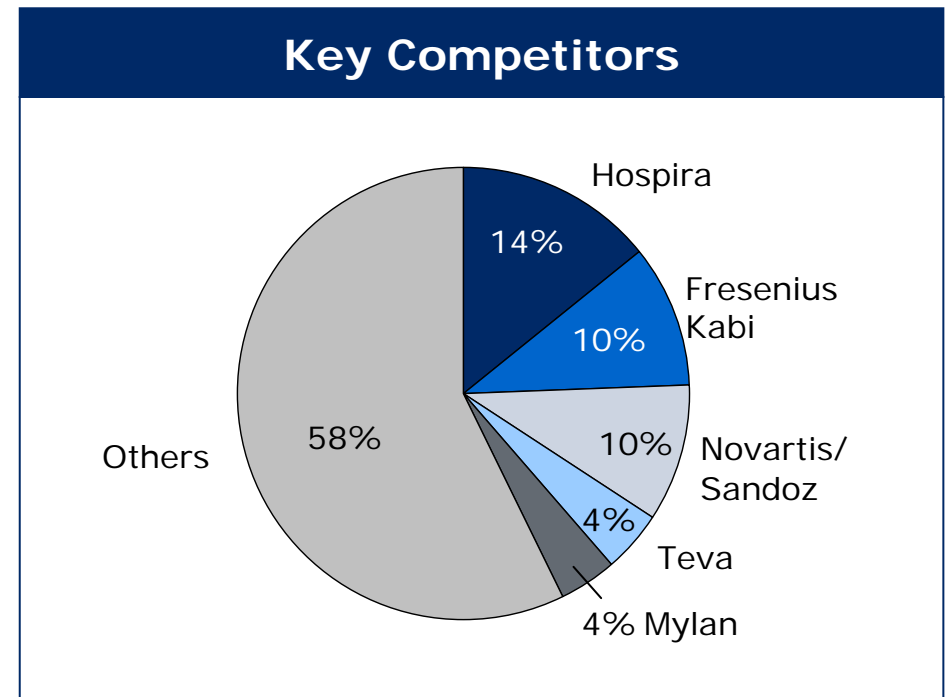
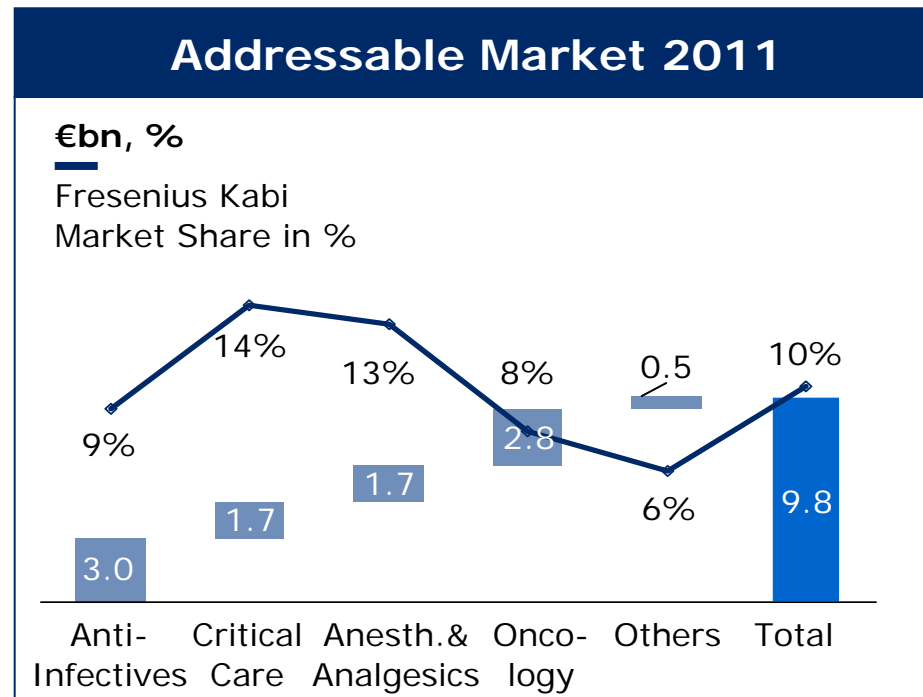
- 1** Market Characteristics
- 2** Fresenius Kabi Track Record
- 3** Growth Opportunities
- 4** Development Pipeline
- 5** Key Success Factors
- 6** Outlook and Summary

# Market Characteristics

## Global Injectable Generics Market



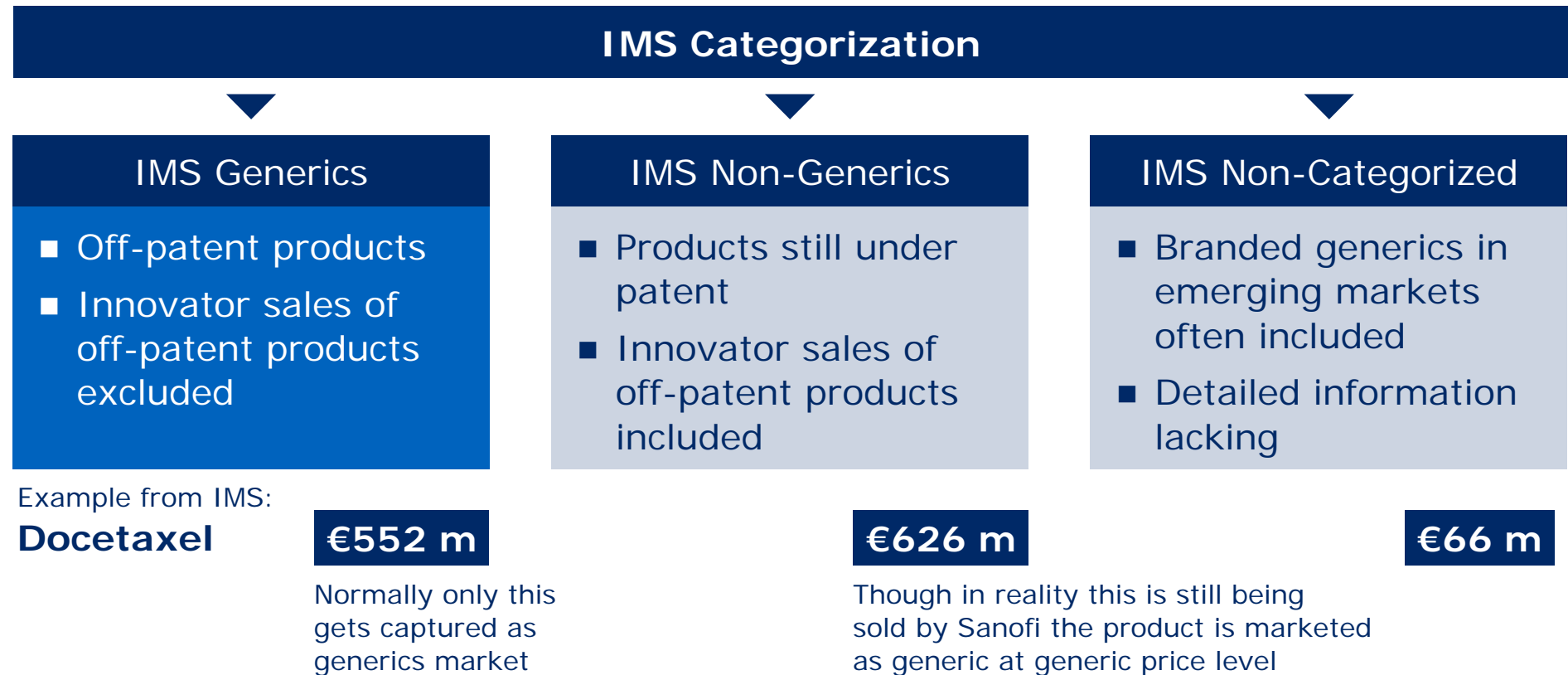
- Addressable market valued at €9.8 bn
- Huge opportunity for growth



Source: IMS MAT Dec 2011, IV Generics, excluding Enoxaparin, excluding Japan

# Market Characteristics

## IMS Categorization Limitations



**The size of the market depends on what you include!**

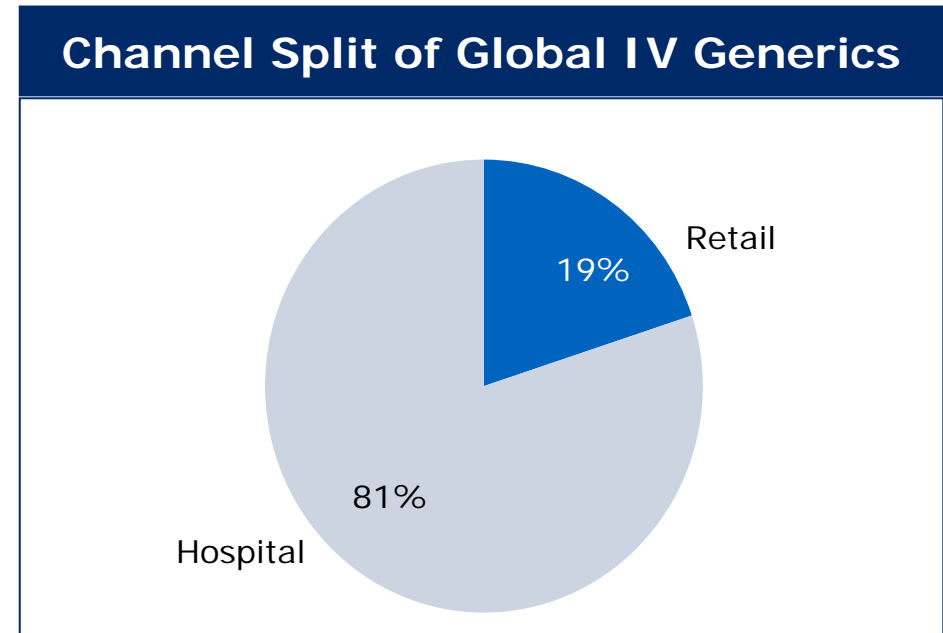
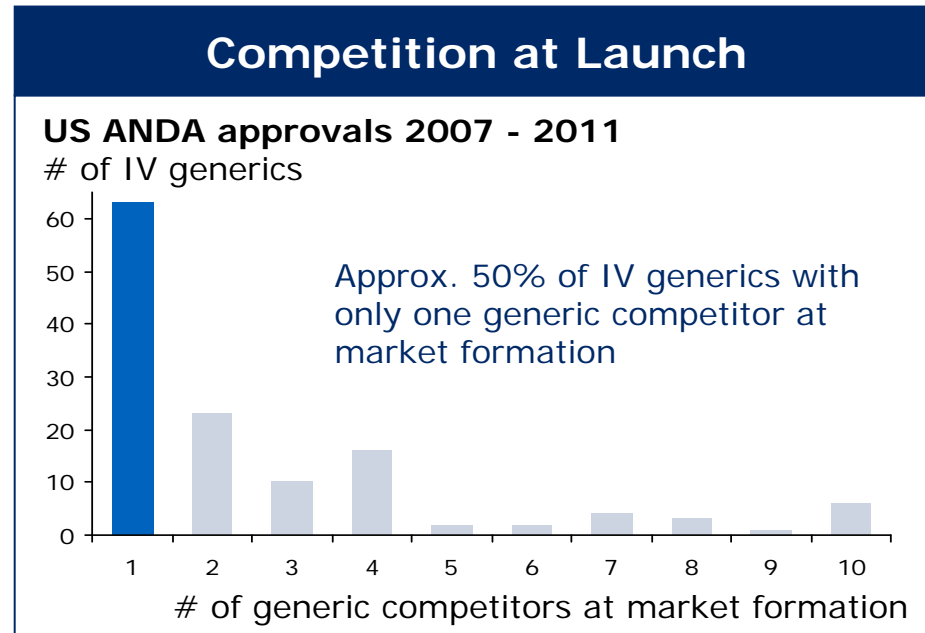
Source: IMS MAT Dec 2011

# Market Characteristics

## IV Generics – A Segment with High Growth



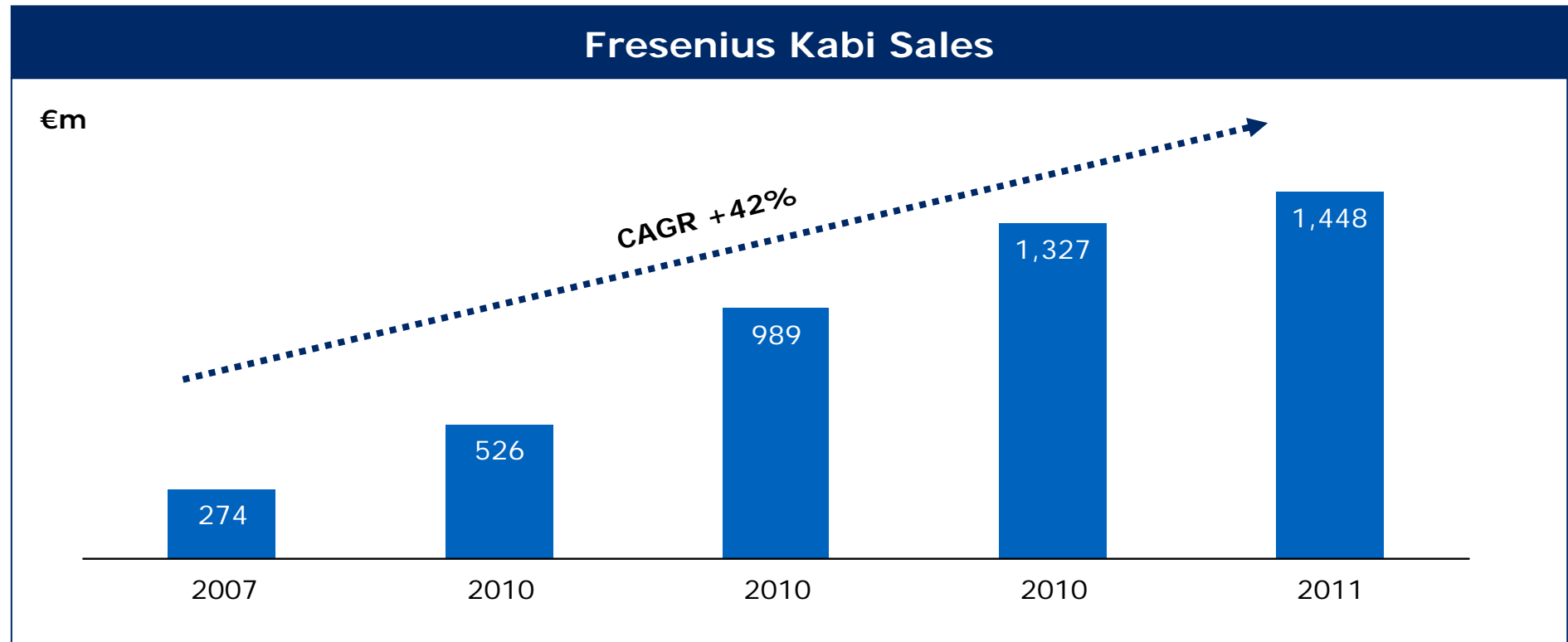
- Growth rate 50% higher than oral dose generics
- High barriers to entry
  - Fewer competitors than oral generics
- Aligned to our business model



Source: Scrip, Datamonitor, IMS MAT Dec 2011, IV Generics

# Fresenius Kabi Track Record

## Excellent Growth



- €1.45 bn business built in only six years
- Combination of successful acquisitions and global rollout of portfolio

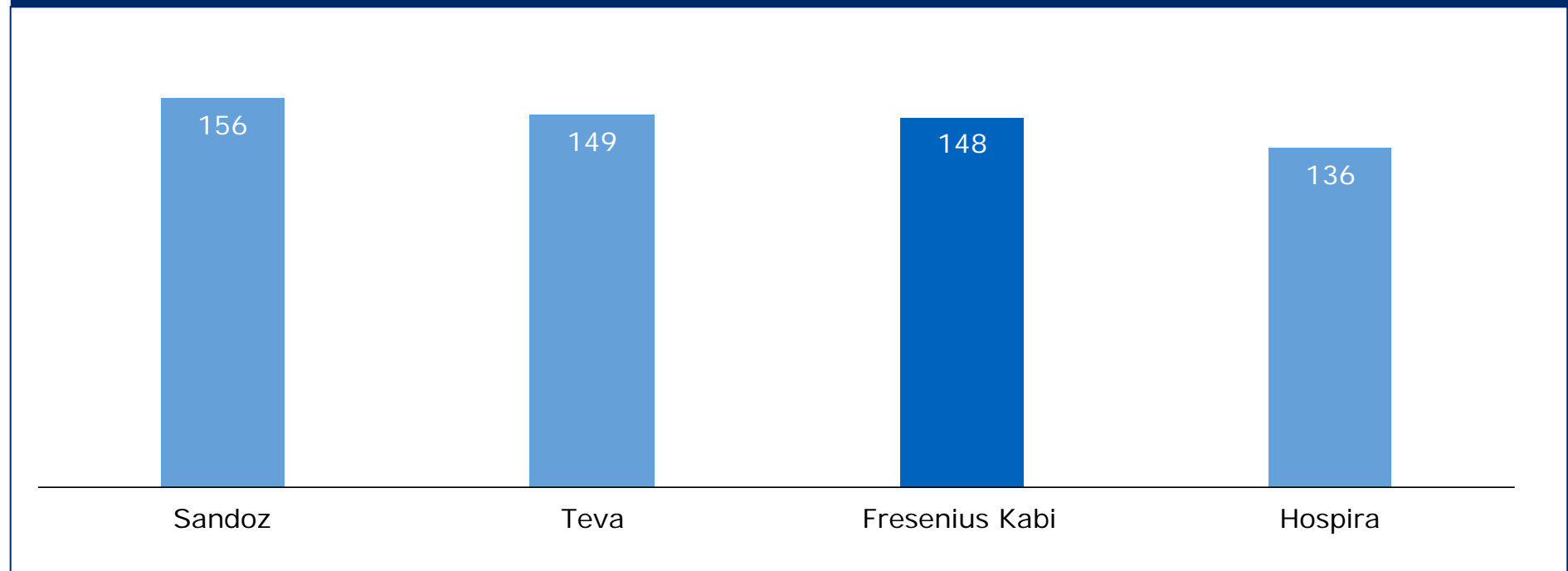
CAGR 2006-2011

# Fresenius Kabi Track Record

## A Top-Tier Portfolio



### Molecules in Fresenius Kabi Addressable Market



**Portfolio optimization remains one of the key factors driving revenues and margins**

Source: IMS MAT Dec 2011, IV Generics

# Growth Opportunity

## Patent Expiries Feed Our Pipeline



- Patent expiries of injectable drugs will continue to fuel generic market growth
  - €0.5 – 2.9 bn of originator sales expected to suffer generic competition in every year for the next decade (2011 branded EU and US markets)
  - In Fresenius Kabi's addressable therapy segments >10 molecules lose patent exclusivity each year until 2021 (Europe and US)
- In the US alone, 172 small molecule injectable products with over €15.5 bn\* (US\$20 bn) in branded sales face patent expiration over the next decade\*\*
- In IV Generics, the 'Patent Cliff' is more of a gentle slope extending ten years into the future

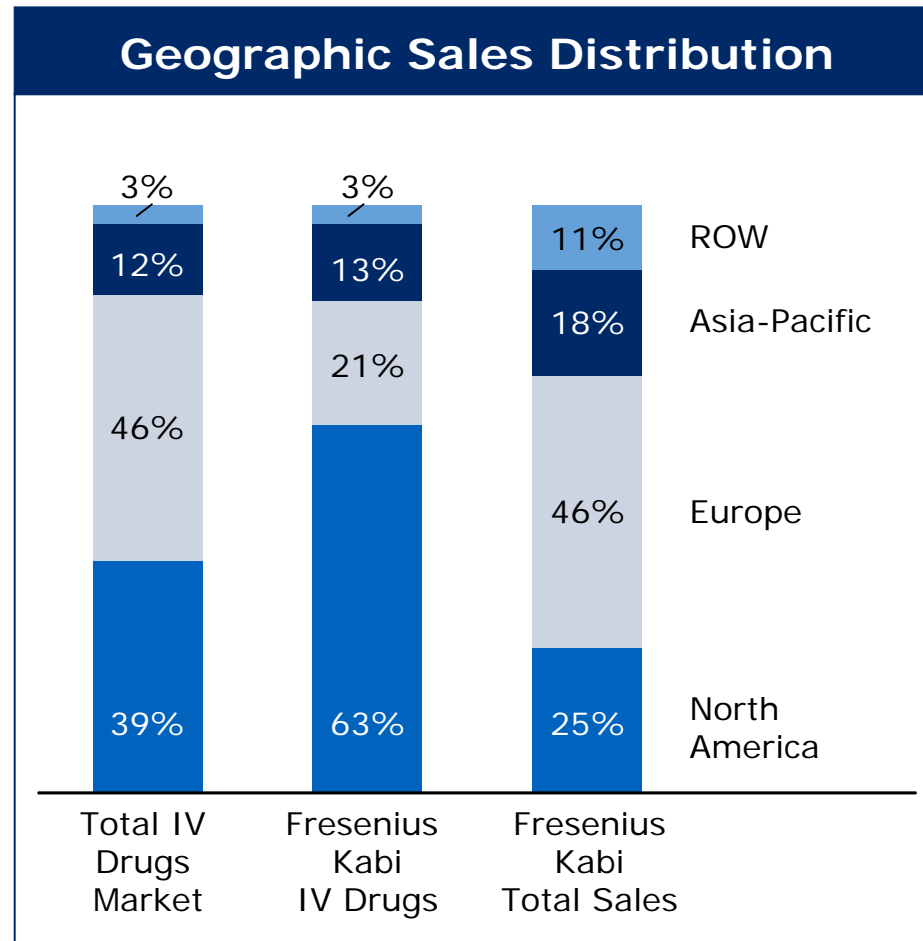
\*Exchange rate as of Dec 31, 2011: €/US\$ = 1.29

\*\*Source: IMS MAT Dec 2011, based on Orange Book last listed patent expiry year and internal IP intelligence



# Growth Opportunity

## Geographic Expansion

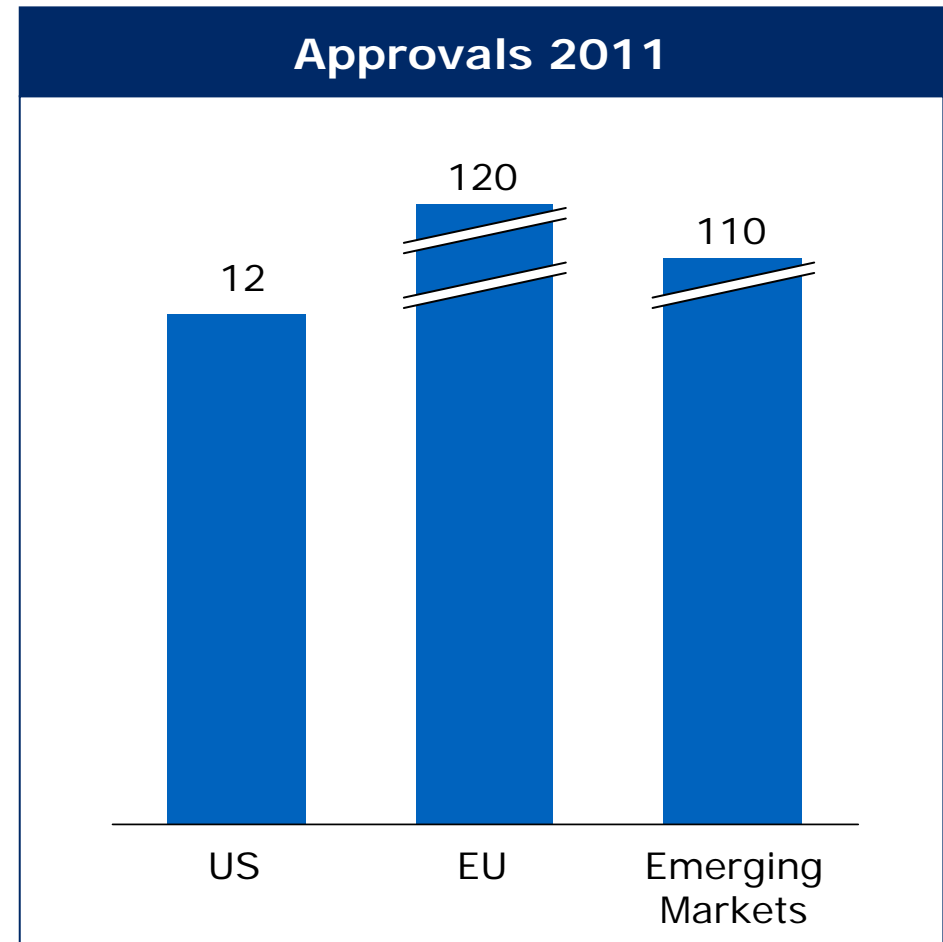
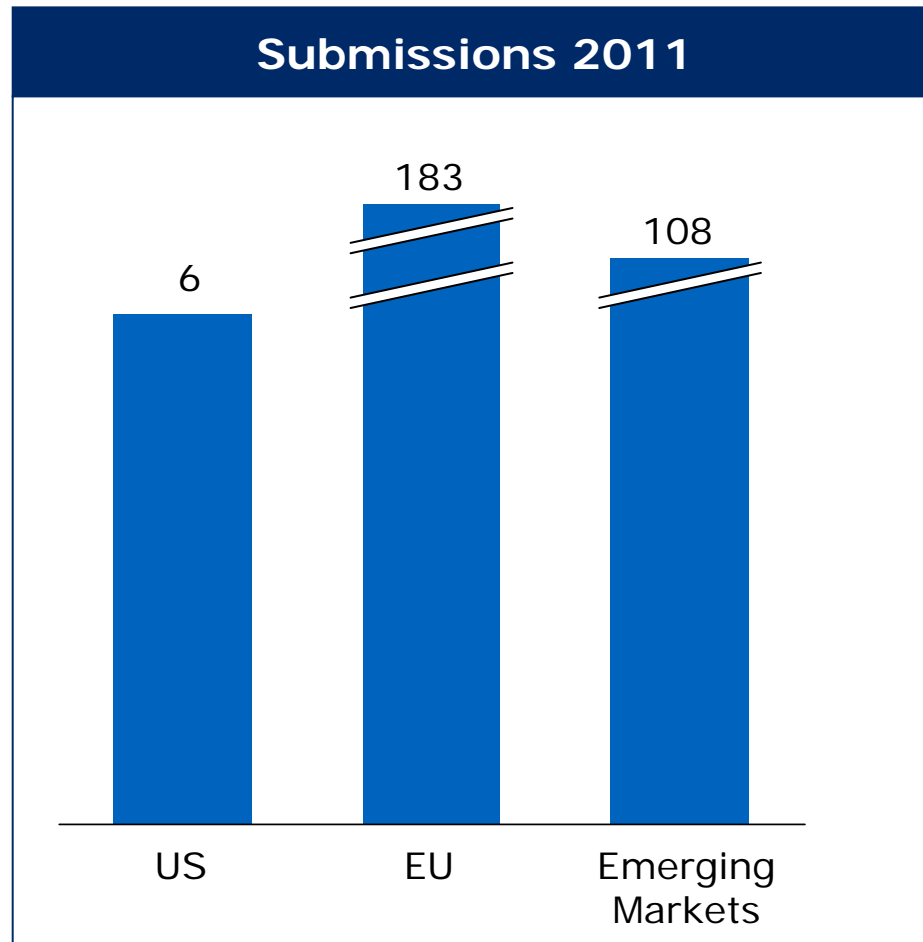


- Significant growth opportunity in EU and Asia-Pacific where Fresenius Kabi's market share is still relatively low
- Fresenius Kabi has demonstrated strength and success in these regions with Clinical Nutrition and Medical Devices, and is well positioned for successful rollout of IV Generics

Source: IMS MAT Dec 2011, IV Generics, excluding Enoxaparin, excluding Japan and China (except Propofol), Fresenius Kabi Internal Analysis (2011)

# Development Pipeline

## Submissions & Approvals in 2011



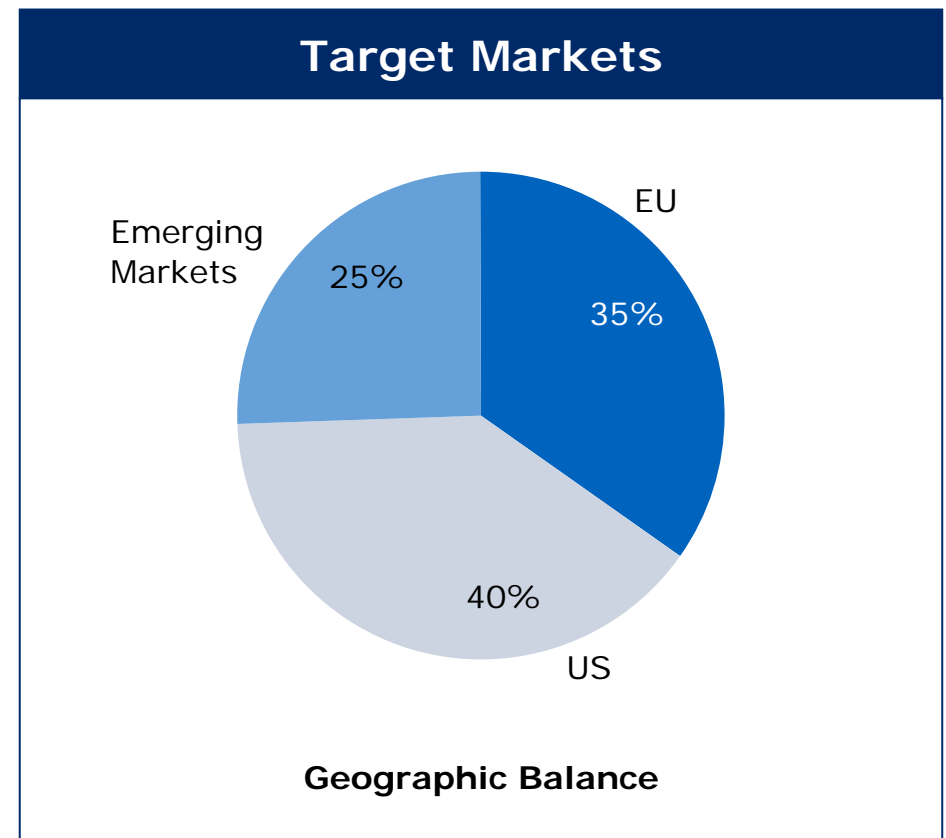
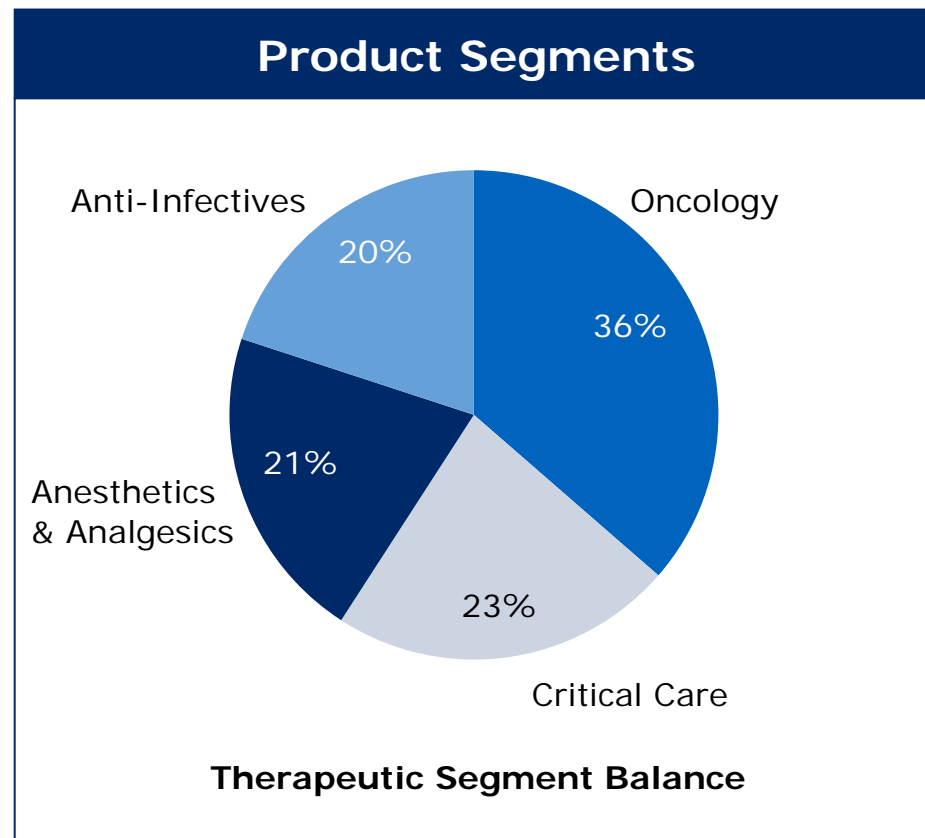
Source: Fresenius Kabi Internal Analysis 2012, molecules and markets

# Development Pipeline

## Future Portfolio



Fresenius Kabi currently runs 110 development projects



Note: Total > 108 as several projects are developed for several areas

# Key Success Factors

## Global Presence



### Participate in global market consolidation from a strong base

- Fresenius Kabi already sells IV Generics in 145 countries worldwide



# of Countries Fresenius Kabi is present	
North America	2
Europe	40
Asia-Pacific	41
Latin America	26
Africa	36

# Key Success Factors

## Fast to Market

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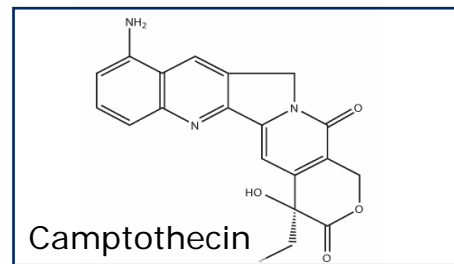
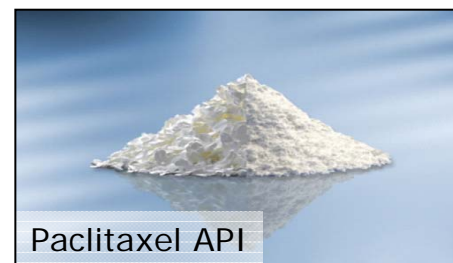
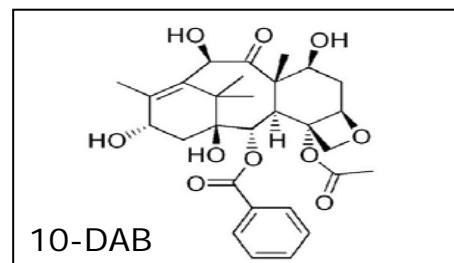


- Early market entry is vital to maximize market share and margins in injectable generics
- Fresenius Kabi has been steadily launching products at market formation in Europe, US and Asia-Pacific across all our therapeutic areas
  - Recent examples: Gemcitabine (US), Remifentanyl (Europe)
- We have filed 11 Paragraph IV certifications in the US since 2007
- Fresenius Kabi has employed innovative formulation and development techniques to allow product launch prior to patent expiry
  - Recent example: IV Paracetamol (Europe)

# Key Success Factors

## Cost Leadership

- World class expertise for development and manufacture of API\*, intermediates and final dosage forms
- All activities carried out in-house supported by stringent analytical and testing capabilities
- World class economies of scale



\*API = Active Pharmaceutical Ingredient

# Key Success Factors

## Quality Leadership – Dedication and Commitment

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- Quality, Safety and Reliability are our core values and the fundamental basis for patient safety and company success
- Global quality processes and standards:
  - Global Quality Management System and SOPs\*
- Best practice approach elaborated by qualified core teams and defined in Global Guiding Documents
- Regular training and quality meetings
- Electronic workflows and data base for critical processes:
  - Complaint management
  - Adverse events reporting
  - Corrective and preventive action management

\*SOP = Standard Operating Procedure

# Key Success Factors Differentiation



Our development and marketing teams are working on several initiatives to provide 'Generic Plus' differentiation:

- Safety labelling
- Dose banding
- Pre-filled syringes
- Consumer friendly forms (e.g. Lyo to Ready To Use)
- Dual chambered bags
- Bundling: Oncology with nutrition services
- Advanced safety concepts: TIVA\* and TCI\*\*
- Aseptic compounding of final dose



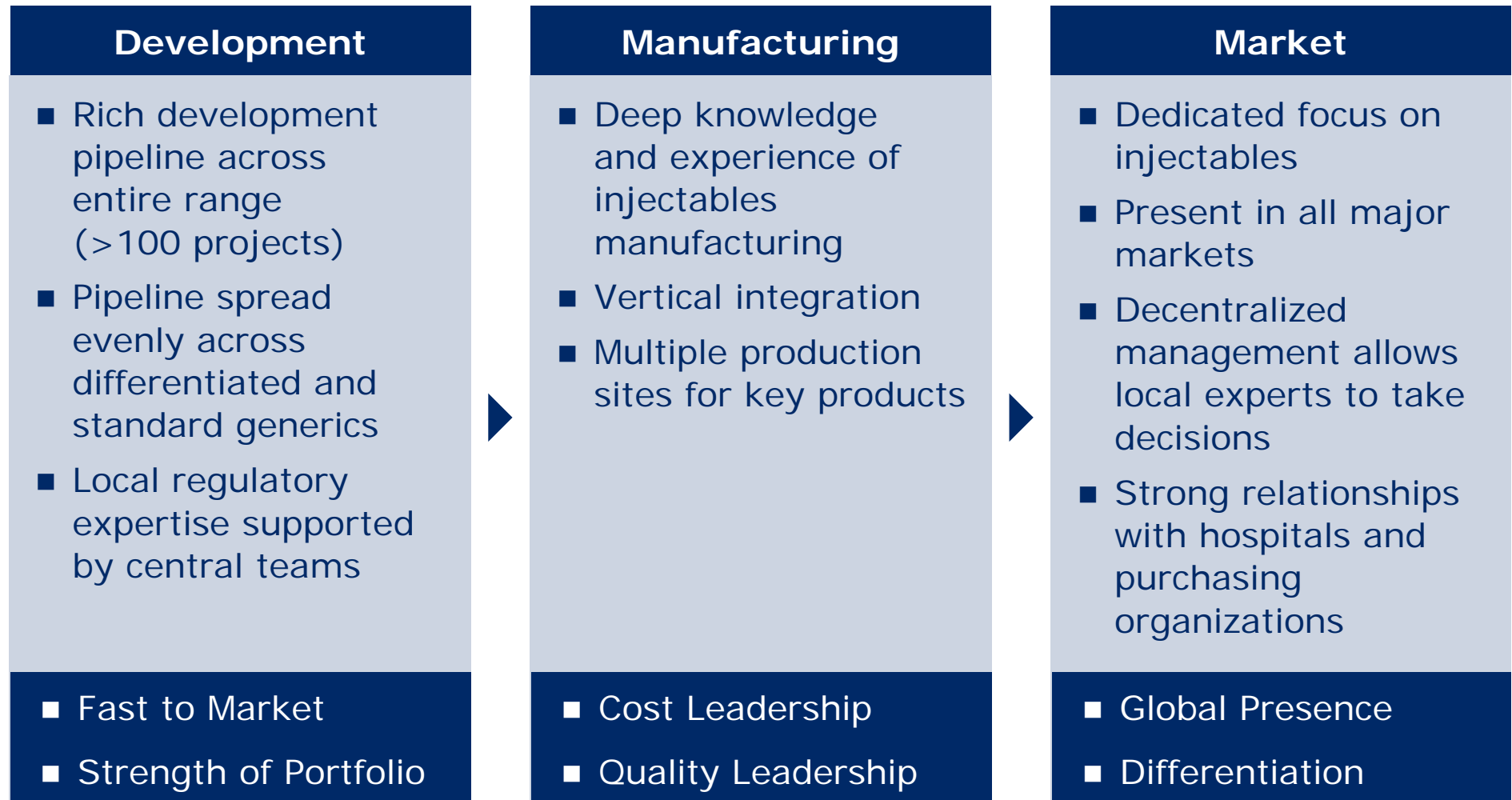
\*TIVA = Total IV Anesthesia

\*\*TCI = Target Controlled Infusion



# Key Success Factors

## Fresenius Kabi's Strengths Match Key Success Factors



# Outlook

## Increasing Focus on EU and AP

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- Strong growth in Europe and Asia-Pacific expected to continue
- Unwinding of drug shortage effect in US will normalize growth in North America
- Aggressive geographic expansion of US specific portfolio
- New key products being developed for global launch
- Demographic trends and related socio-economic factors will grow demand and accelerate conversion to generic medicines
- Carefully track biosimilar development

## Summary

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### **The injectable generics market is witnessing continued rapid growth**

- Driven by patent expiries, demographics, high entry barriers & technology

### **Fresenius Kabi is well positioned to profitably participate through increased market presence enabled by:**

- A robust pipeline managed by an international development team for global product availability at market formation
- Strong control of cost and quality across the entire value chain
- Flexibility in global production network to participate in short term opportunities (e.g. US shortages)
- A leading product portfolio which creates high value to our key customers and is managed by decentralized sales & marketing teams



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# Capital Market Day 2012

June 12, 2012



# Product Segment Medical Devices

**Dr. Christian Hauer**

Group Executive Vice President

Global Business Center Medical Devices

Capital Market Day Fresenius Kabi, June 12, 2012

# Agenda

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**1**

Medical Devices

**2**

Product Overview

**3**

Sustainable Sales Growth

**4**

Growth Driver

**4.1**

Innovation

**4.2**

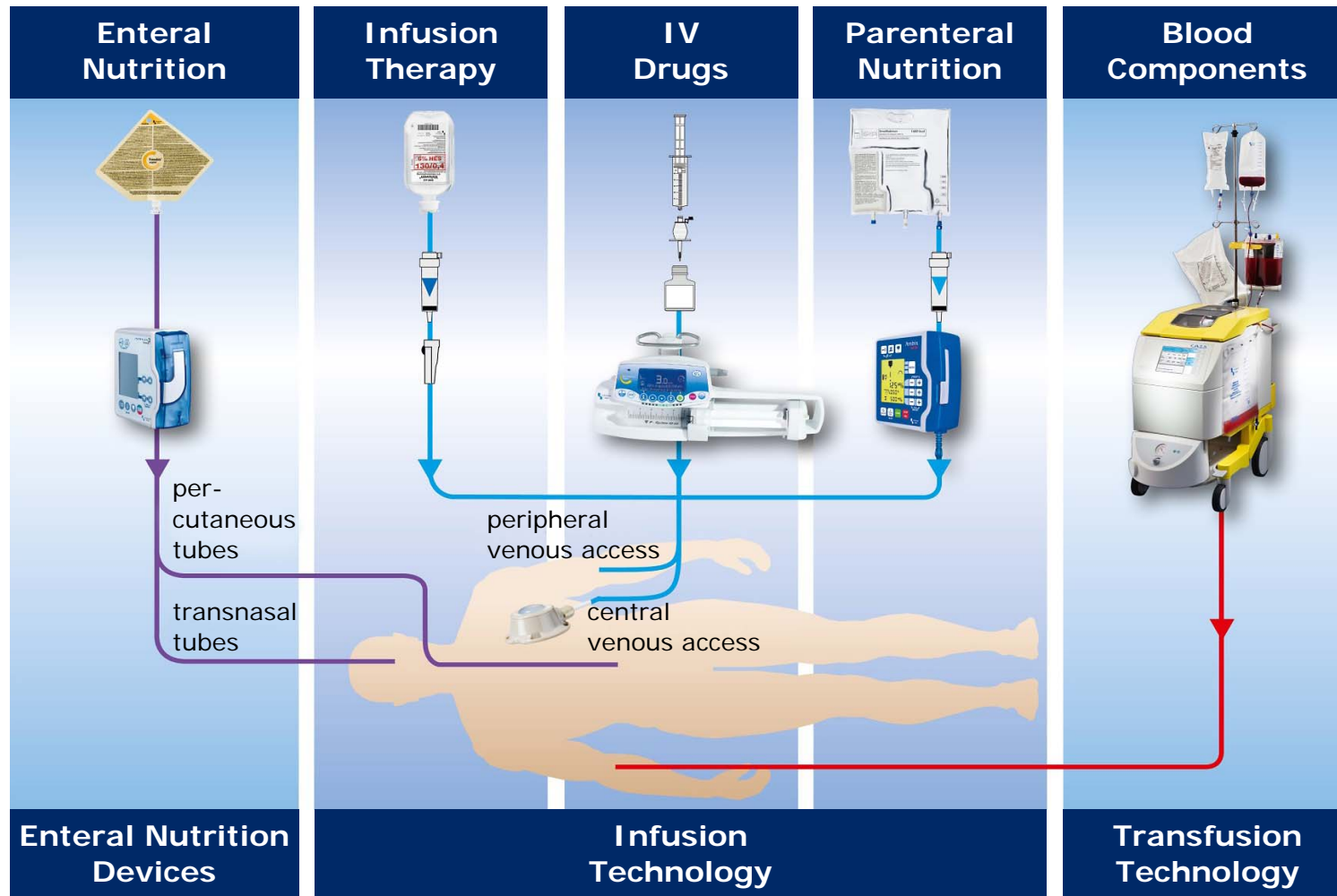
Geographic Expansion

**5**

Outlook

# Medical Devices

## Life-saving Fluids – Safe and Efficient





# Product Overview

## Medical Devices – Comprehensive Portfolio



### Infusion Technology

- Syringe and large volume pumps
- IV sets, filters, ports and needles
  
- Product portfolio for hospitals and homecare



### Enteral Nutrition Devices

- Pumps
- Transnasal & percutaneous tubes
  
- Product portfolio for hospitals and homecare

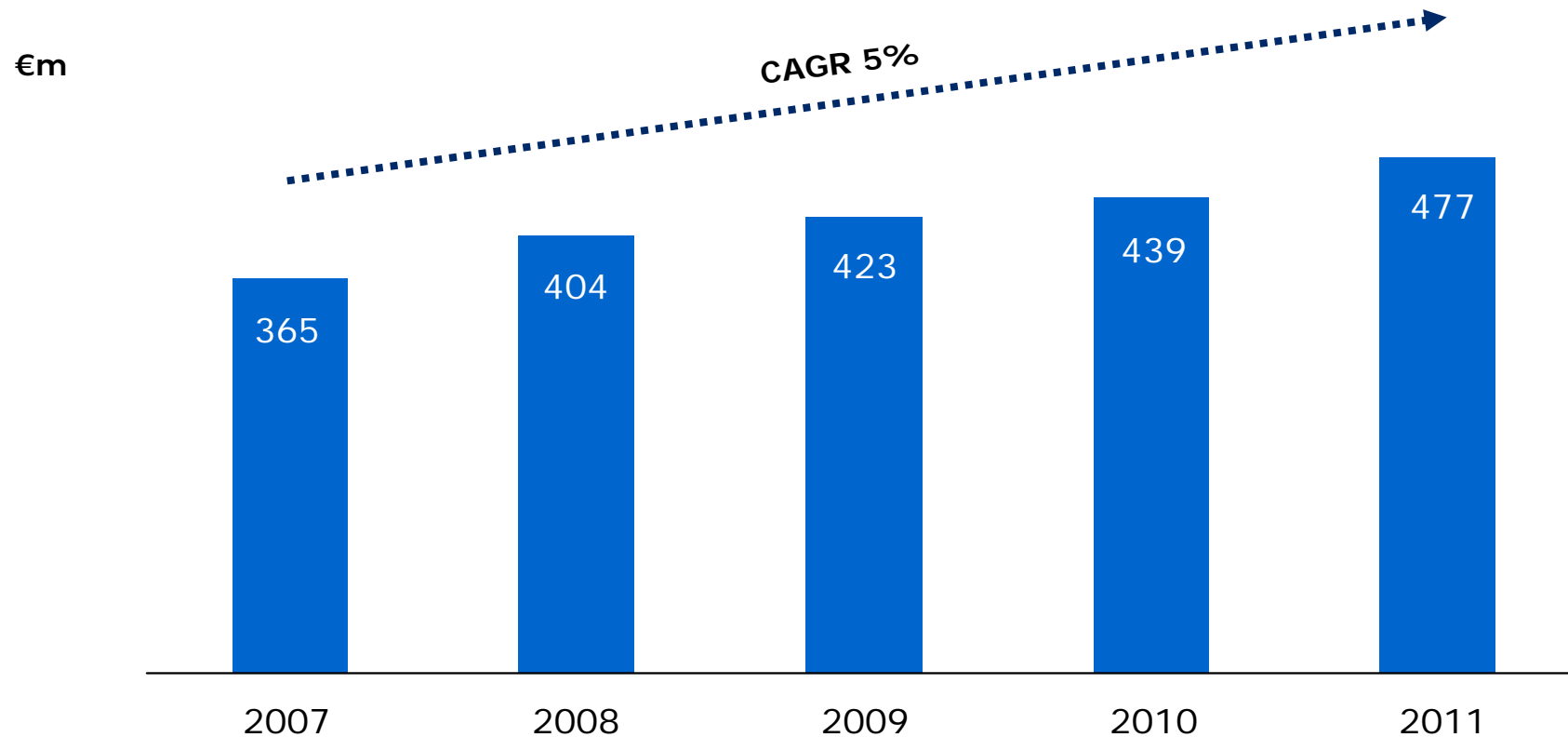


### Transfusion Technology

- Blood processing equipment and blood bags
- Apheresis devices
- Autotransfusion devices
  
- Product portfolio for blood services and hospitals



# Sustainable Sales Growth Performance 2007 - 2011



**Fresenius Kabi organic growth of 5% above market growth of 3 - 4%**

CAGR 2006-2011

# Growth Driver

## Discover the Full Opportunity

---



**Discover the full opportunity of our current product portfolio**

**Get market leadership in each product segment through**

- Innovation
- Geographic expansion
- Acquisition and partnering

**From €500 million to €1.5 billion sales within the next 5 years**

# Growth Driver Innovation

## Process Efficiency – CompoFlow® and CompoMat G5



- ~92 million whole blood donations collected annually\*
- Operators in blood centers opening manually up to 500 blood bags per day
- The CompoFlow® concept automates whole blood processing
  - Preventing repetitive strain injuries
  - Optimal product quality avoiding the destruction of red cells
  - Improved process time > 10%
- Full potential only with CompoFlow® bags



Manual Processing



CompoFlow Concept

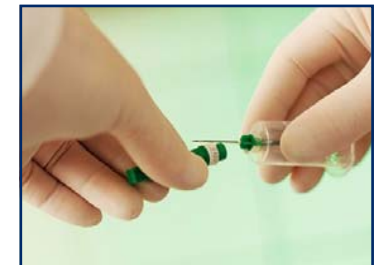


\*Source: <http://www.who.int/worldblooddonorday/en/index.html>

# Growth Driver Innovation

## Patient Safety – Intrastick® Safe

- Implantable ports allow long-term drug administration
- Annually more than 120,000 ports are placed in Germany with an increasing trend
- Strong market need to prevent needle stick injuries causing life-threatening contaminations or infections



**Calling for the introduction of safety devices**

# Growth Driver Innovation

## Clinical Outcome - TIVA / TCI\*

- Annually >230 million patients undergo anesthesia
- Historically inhalational anaesthesia is the standard
- In 2003 Fresenius Kabi launched TIVA\*, for precise drug concentrations
  - Reduction of drug side effects (nausea, vomiting)
  - Shorter operating time (faster initiation and recovery)
- In 2008 Fresenius Kabi launched TCI\*
  - Infusion pump automatically computes flow rate via pharmaco-kinetic model
- Large sales opportunity outside Europe
- Large market opportunity for sedation in ICUs\* and minimal surgical interventions



\*TIVA / TCI: Total Intravenous Anesthesia / Target Controlled Infusion

\*\*ICU: Intensive Care Unit

# Growth Driver Geographic Expansion

## Strong Growth Opportunities Outside Europe



Country	Total Market* (€m)	Fresenius Kabi Market Position
North America	2,112	Not present for main product lines
Europe	1,145	Market Leader
Asia-Pacific	695	Market Challenger
Latin America	260	Market Leader

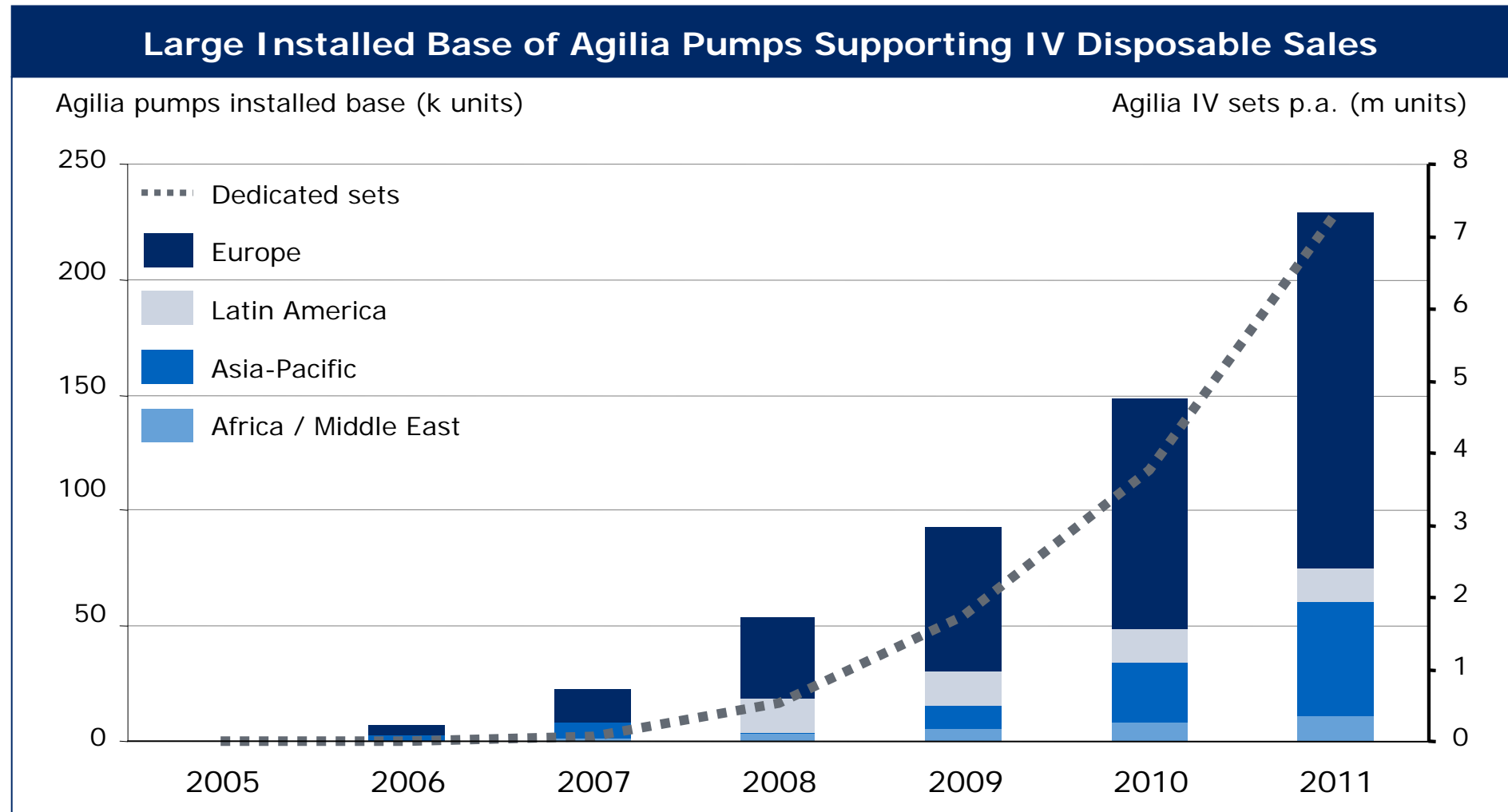
### Fresenius Kabi Market Position:

Market Leader (Rank 1 - 3)
  Market Challenger (Rank 4+)
  Not present for main product lines

\*Source: Fresenius Kabi Internal Analysis (2011), w/o Africa

# Growth Driver Geographic Expansion

## Successful Agilia Pump Rollout





# Medical Devices to Prepare and Administer Life-saving Fluids – Safe and Efficient



► **Our target: From €500 million to €1.5 billion sales within the next 5 years through innovation, geographic expansion, acquisition and partnering**



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# Capital Market Day 2012

June 12, 2012



# Product Segment Innovation & Operations

**Dr. Michael Schönhofen**

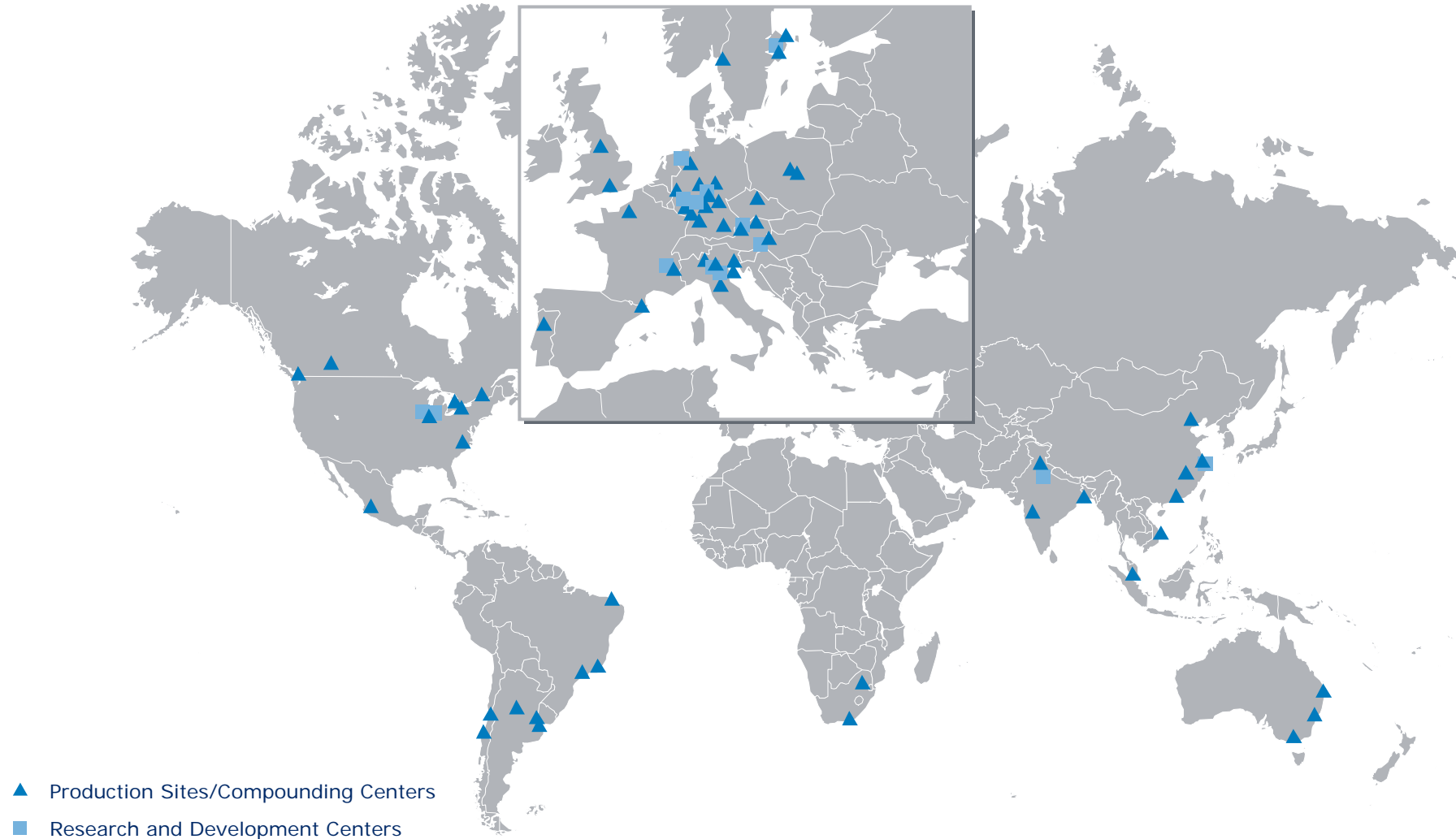
Member of the Management Board

President Science, Production & Technology

Capital Market Day Fresenius Kabi, June 12, 2012

# Fresenius Kabi

## Global Innovation and Operations Network



# Agenda

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**1**

Global Operations Network

**2**

Quality, Reliability and Safety

**3**

Innovation in Products, Processes and Systems

# Global Operations Network

Global Footprint for Leadership and Competitive Advantage



- Unique global operations network with 42 plants all over the world allows to **leverage synergies** across product groups, to **exploit network benefits** and to optimally support the **global rollout** of our products
- Specialized manufacturing expertise and **different plant mandates** (Local, Regional, Global) to fully exploit sources of competitive advantages – locally and globally
- 'Think Global – Act Local': Excellence in **each plant** and alignment & optimization of the overall **global network**
- Successful **integration** of acquisition targets and prepared for further **growth scenarios** (global and regional business opportunities)



# Global Operations Network

## Strong Global Manufacturing Footprint

### Network Characteristics



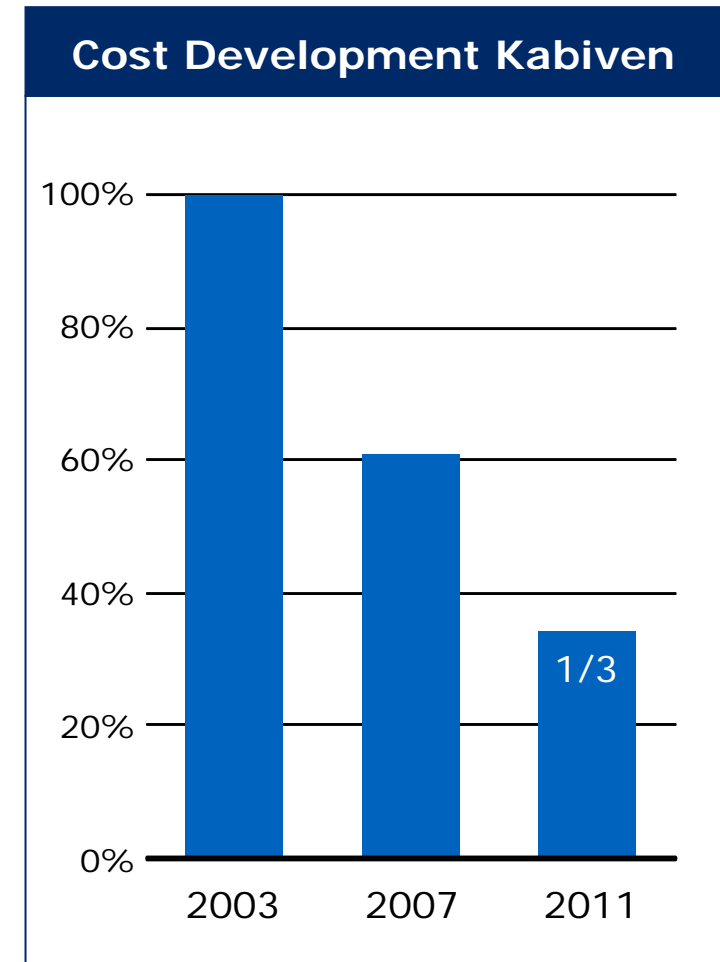


# Global Operations Network

## Achieving Cost Leadership

### Entrepreneurship and our global network is the base for achieving and maintaining cost leadership

- Continuous improvements in Overall Equipment Effectiveness (OEE)
- Rollout of global technology standards
- Best practice sharing and mutual learning within the network
- Economies of scale in operations
- Global footprint optimization



# Global Operations Network

## Competitive Advantage Along the Entire Value Chain



Vertical integration of products, technologies and processes as **core competence** and **strategic direction** to build and maintain competitive advantages in cost, quality, reliability and manufacturing competences

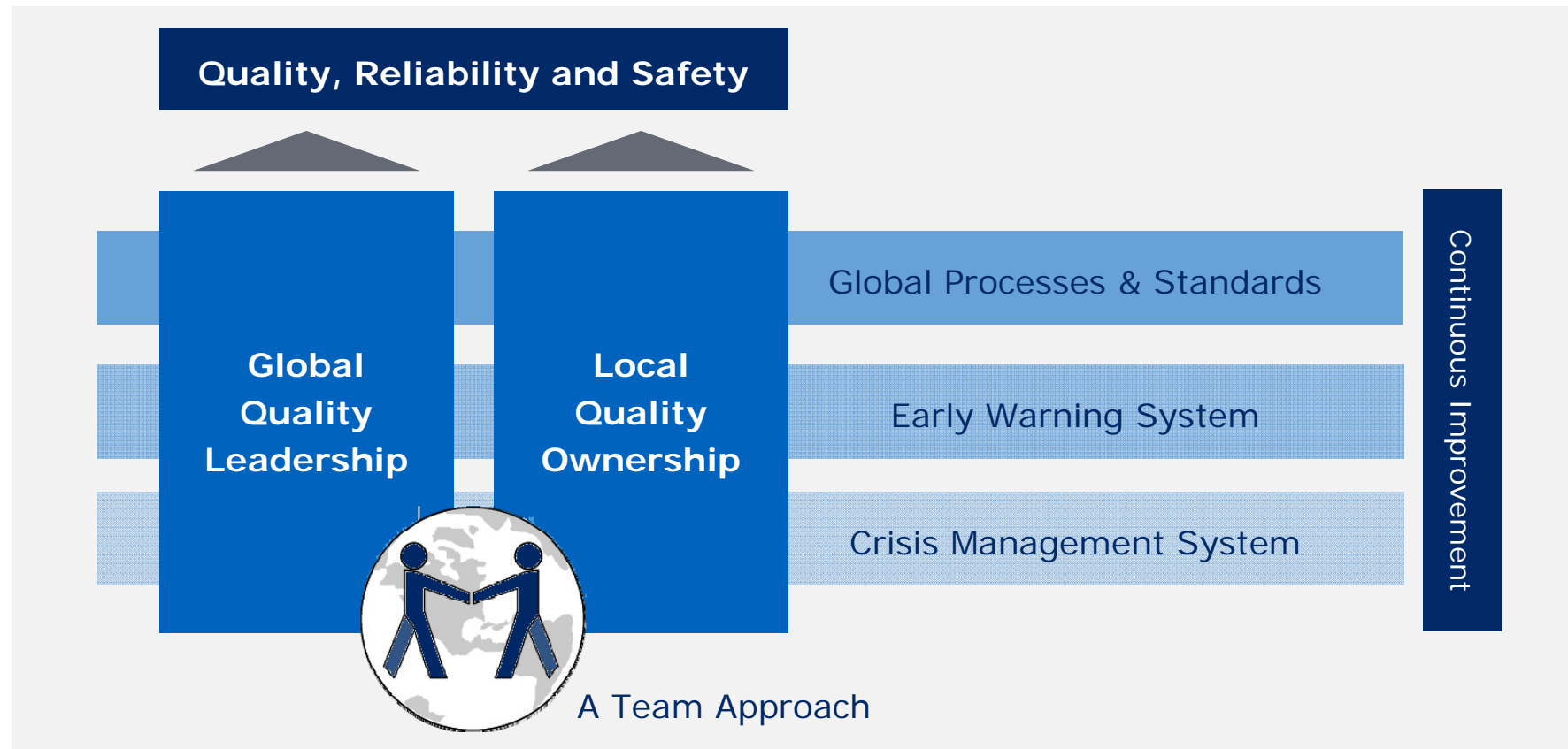
The long way to excellence	
from ...	to...
Granules	▶ Safe IV Application
Leaves	▶ Safe Application of Chemotherapy
Corn	▶ Volume Replacement Therapy
Hen Egg	▶ Clinical Nutrition



# Quality, Reliability and Safety

Our Principle: Think Global – Act Local

## Framework based on **Global Quality Leadership** and **Local Quality Ownership**



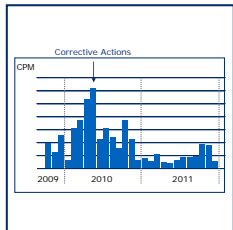
# Quality, Reliability and Safety

## Our Principle: Think Global – Act Local



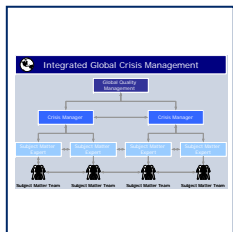
### Global Processes & Standards

Worldwide application of defined processes and standards and documented best practice approaches



### Early Warning System

Systematic and continuous monitoring to identify the need for Corrective and Preventive Actions (CAPAs) at the earliest possible stage



### Crisis Management System

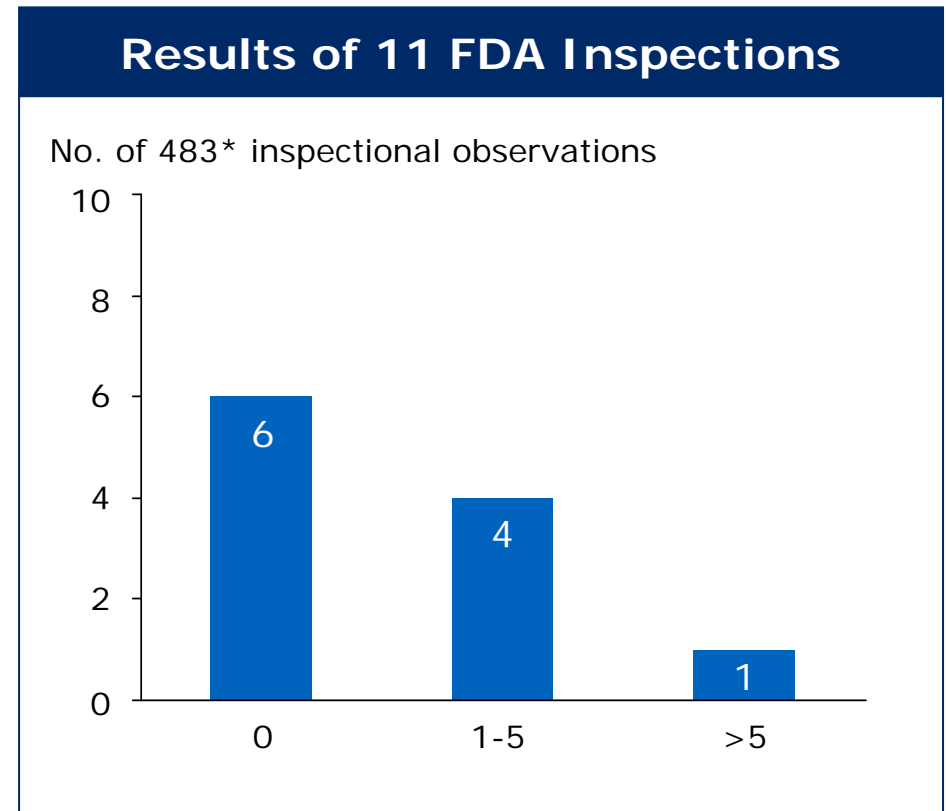
Ensure fast and appropriate reaction on any potential issue

# Quality, Reliability and Safety

## Global Quality Leadership – Local Quality Ownership



► In total 125 inspections by different authorities and organizations between 01/2011 - 05/2012



► The vast majority of FDA inspections resulted in zero or less than five 483\* observations

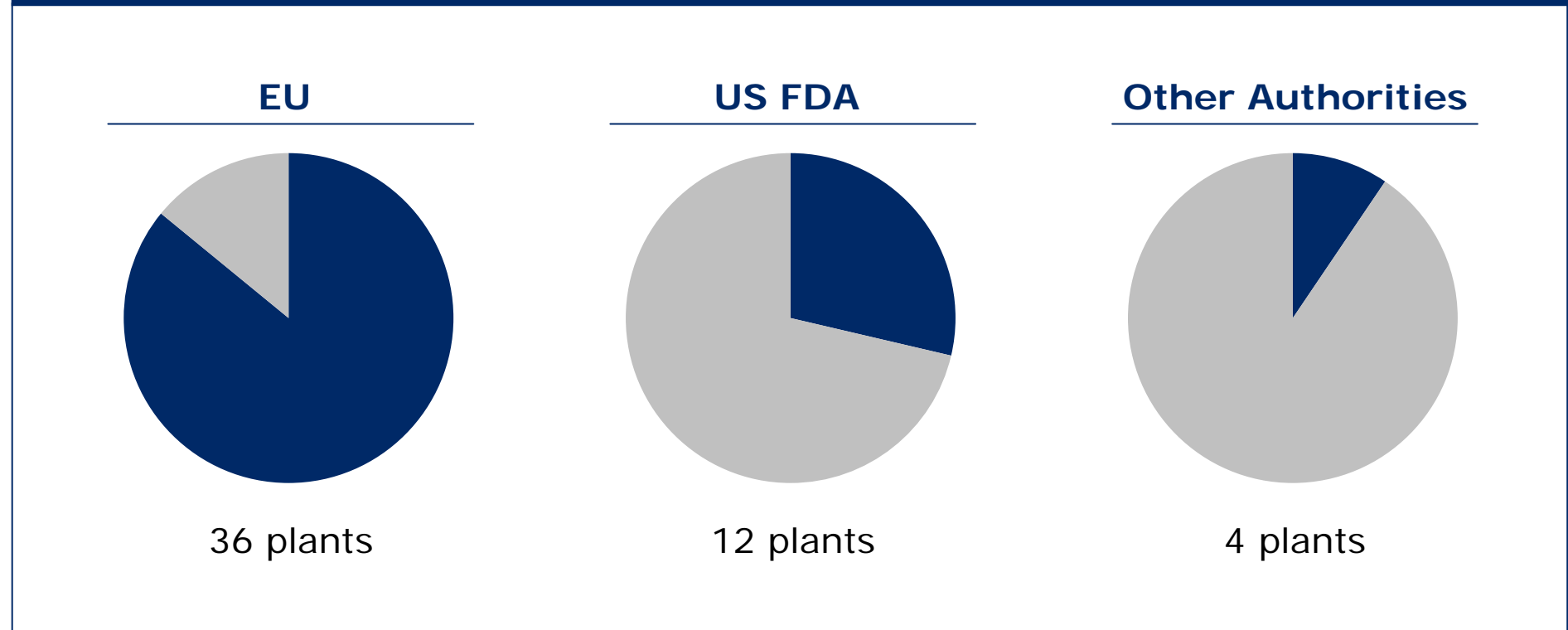
\*483 inspectional observations: Documented and communicated observation discovered during US FDA factory inspection

# Quality, Reliability and Safety

## Global Quality Leadership – Local Quality Ownership



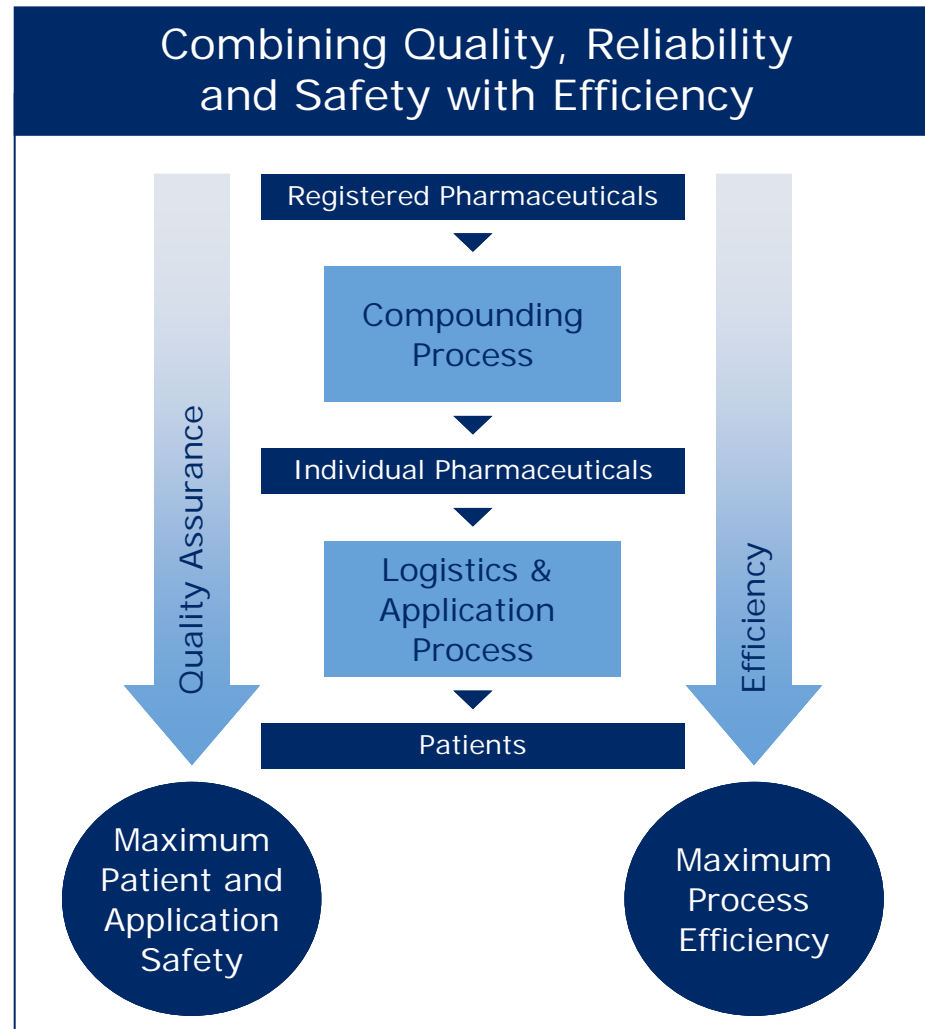
### 42 Plants Worldwide Approved by One or Multiple Authorities



▶ **Almost all our plants are approved by US FDA and/or the EU**

# Quality, Reliability and Safety

## Example: Oncology Compounding

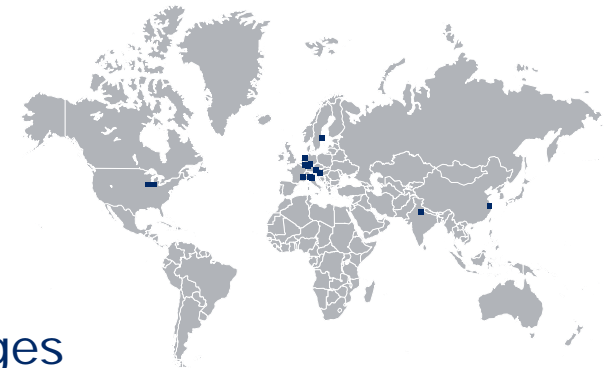


# Innovation at Fresenius Kabi

## Continuous Innovation for Sustainable Growth



- Global **Innovation Network** with Innovation & Development (I&D) Centers in all major regions offers direct access to best know-how and attract highly qualified talents
- Securing **technological leadership** and **continuous innovation** for competitive advantages through **differentiation** and **cost leadership**





# Innovation at Fresenius Kabi

## Global Innovation Network: 14 I&D Centers



Location:  
**Skokie, IL (United States)**  
Competence Field:  
**IV Drugs & Infusion Therapy**  
Geographical Focus:  
**U.S.**



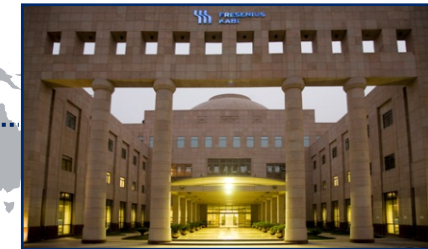
Location:  
**Uppsala (Sweden)**  
Competence Field:  
**Clinical Nutrition**  
Geographical Focus:  
**Global**



Location:  
**Brezins (France)**  
Competence Field:  
**Medical Devices**  
Geographical Focus:  
**Global**



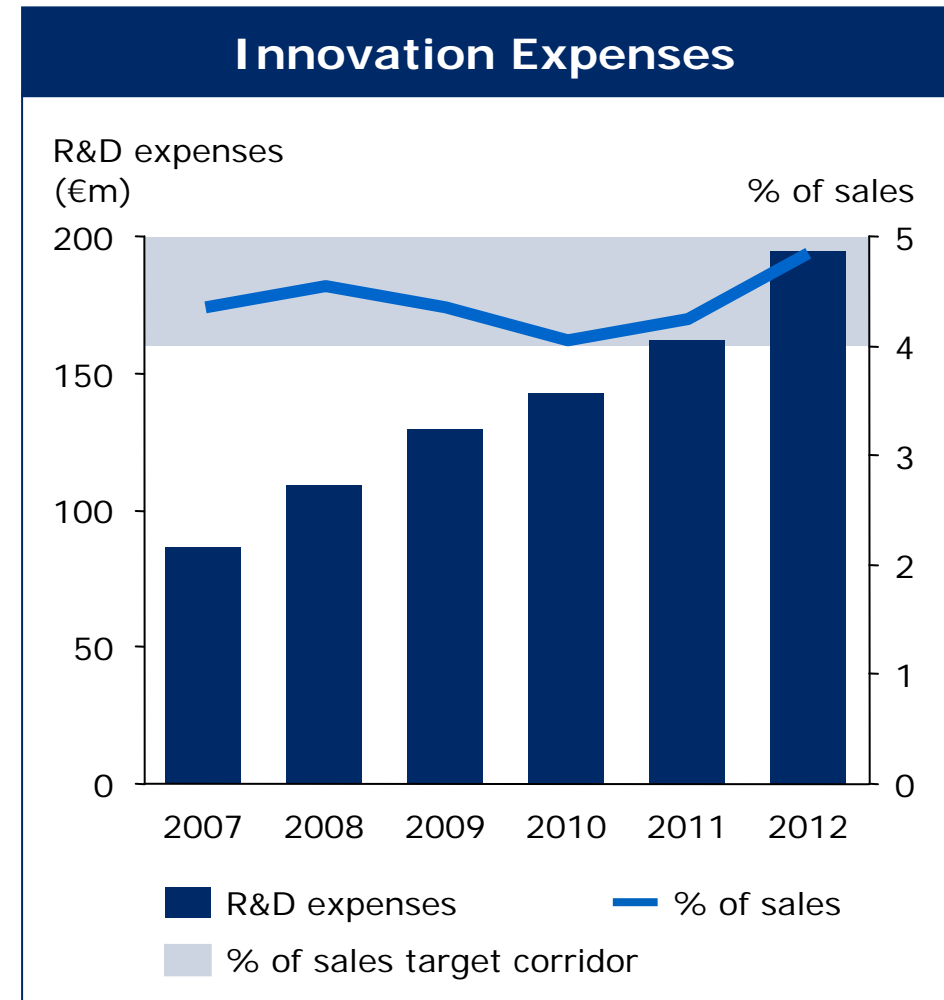
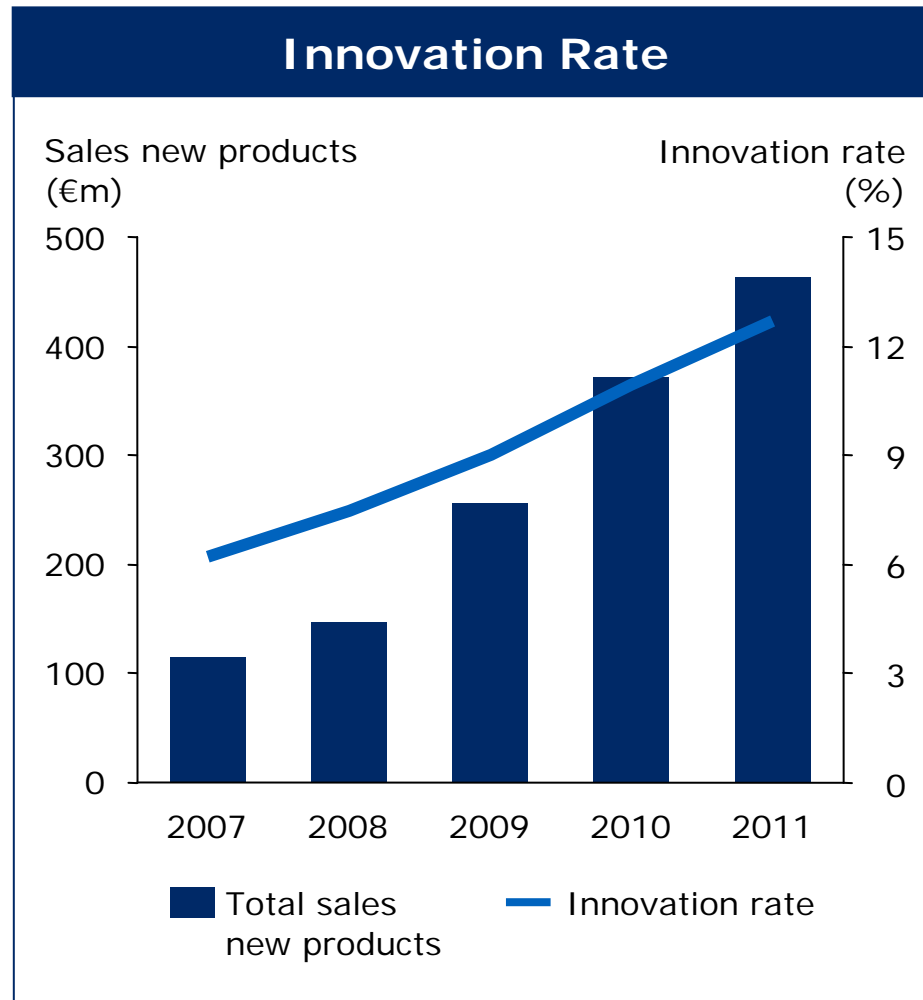
Location:  
**Graz (Austria)**  
Competence Field:  
**IV Drugs & Infusion Therapy**  
Geographical Focus:  
**Global**



Location:  
**Gurgaon (India)**  
Competence Field:  
**IV Drugs & Infusion Therapy**  
Geographical Focus:  
**Global**

# Innovation at Fresenius Kabi

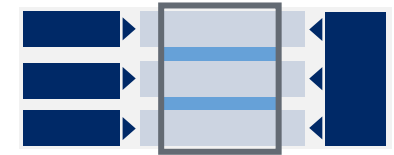
## Innovation Rate and Expenses



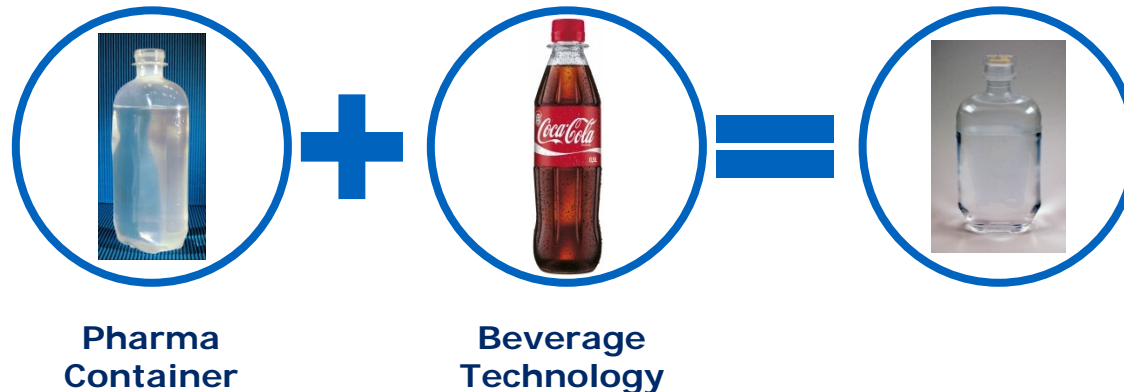
# Innovation at Fresenius Kabi Leadership in Technology



Infusion Solutions: There is still some music to play ...



**Next Generation Container Technology** delivering superior customer value and significant competitive advantages in manufacturing



- Transparency of bottle
- Ergonomic design
- Collapsibility
- Sterilization at 121°C
- Waste avoidance in production
- Higher output
- Competitive cost advantage

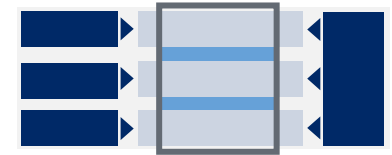
# Innovation at Fresenius Kabi

## Leadership in Technology



Combining innovative manufacturing technologies with existing core competences in one **technology cluster plant**

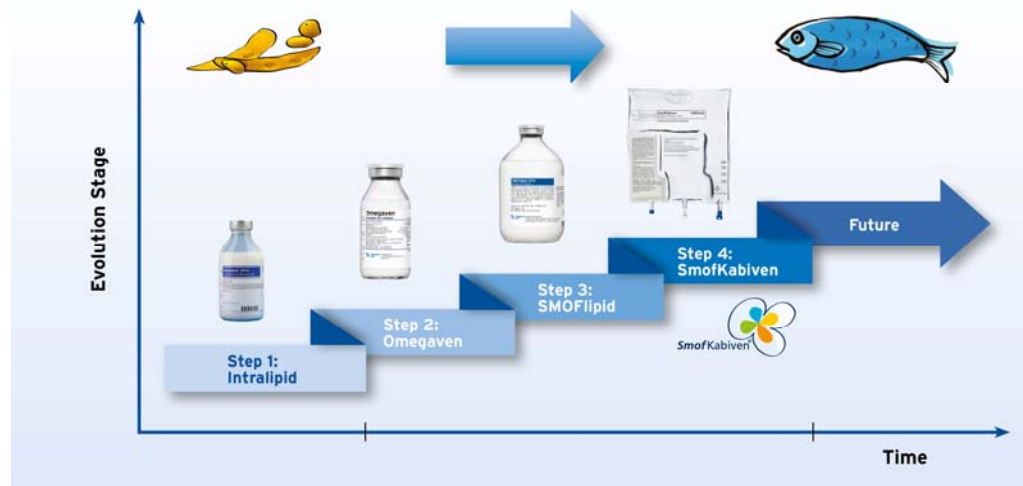
- Emulsion technologies
- Suspension technologies
- Liposomes
- Highly active compounds
- Lyophilization
- Aseptic production
- Further high-end technologies



# Innovation at Fresenius Kabi Competence Field Clinical Nutrition

## Selected Examples

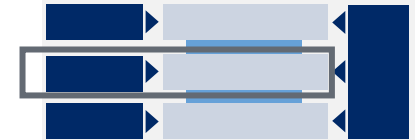
- Life-cycle management parenteral nutrition



- Enteral nutrition moving from supportive to therapeutic nutrition addressing special medical needs (e.g. tube and sip feed for cancer patients, anti-diarrhea tube feed)
- Outlook: All-in-One parenteral nutrition supplements

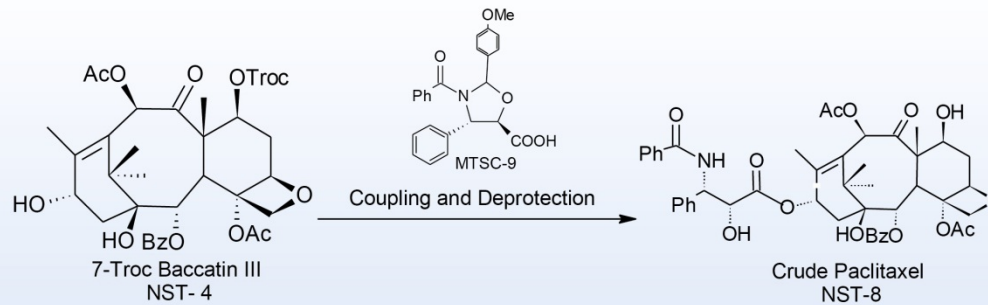
# Innovation at Fresenius Kabi

## Competence Field IV Drugs & Infusion Therapy

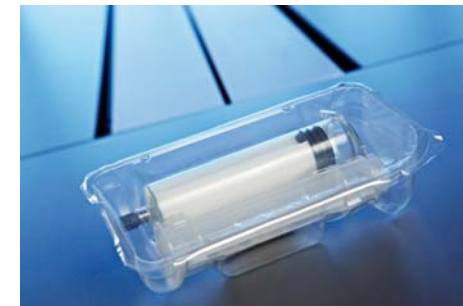


### Selected Examples

- >390 new marketing authorizations in 2011 worldwide
- Supporting **cost leadership**, e.g. API\* development



- Advanced packaging solutions to improve patient safety and enhance handling for **differentiation**, e.g. Propofol prefilled syringes
- Outlook: More than 50 IV Drug molecules launches in 2012 and 2013 expected



\*Active Pharmaceutical Ingredient

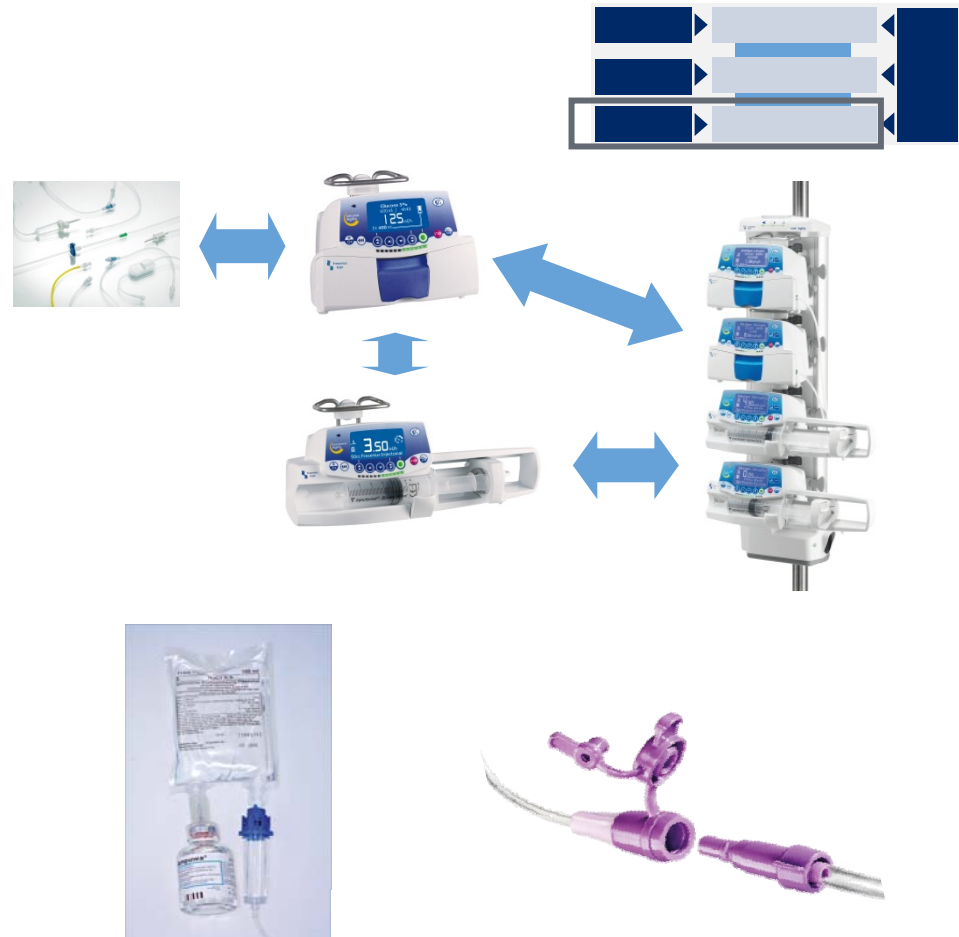


# Innovation at Fresenius Kabi Competence Field Medical Devices



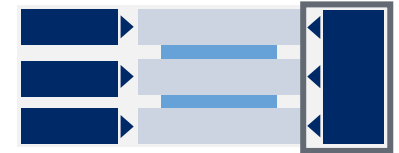
## Selected Examples

- Systems consist of various elements that have to play virtuously together
  - NLink+ as next generation of IV pump communicating backbone
- Advanced safety concepts and features
  - ENLock as safety connector for enteral nutrition disposables
  - Needlefree concept for improved safety, handling and convenience
- Outlook: Next generation enteral pump and next generation Intensive Care Unit (ICU) and general ward pump system



# Innovation at Fresenius Kabi

## Competence Field Integrated Systems



### Target Controlled Infusion (TCI)

- Total intravenous anesthesia with enhanced safety for the patients and ease of use for the hospital



### Extension of basic principle to other applications in areas like

- Glucose monitoring
- Clinical nutrition
- Antibiotics



# Innovation and Operations Summary



## **1 Global Operations Network**

- Strong Global Footprint
- Commitment to Cost Leadership
- Vertical Integration to Ensure Competitive Advantages

## **2 Quality, Reliability and Safety**

- Focused on Global Quality Leadership and Local Quality Ownership

## **3 Innovation in Products, Processes and Systems**

- Effective Collaboration Across Functions and Around the World
- Exploring New Horizons for Sustainable Innovation and Growth
- Highly Attractive Innovation Pipeline – The Journey Will Continue ...

## Safe Harbor Statement

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This presentation contains forward-looking statements that are subject to various risks and uncertainties. Future results could differ materially from those described in these forward-looking statements due to certain factors, e.g. changes in business, economic and competitive conditions, regulatory reforms, results of clinical trials, foreign exchange rate fluctuations, uncertainties in litigation or investigative proceedings, and the availability of financing. Fresenius does not undertake any responsibility to update the forward-looking statements contained in this presentation.

# Capital Market Day 2012

June 12, 2012



# Emerging Markets – Exploit Growth Opportunities Overview

**Mats Henriksson**

Deputy Chairman of the Management Board

Capital Market Day Fresenius Kabi, June 12, 2012

# Agenda

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- 1 Overview
- 2 Focus Asia-Pacific
- 3 Focus China
- 4 Focus India
- 5 Focus Latin America

# Agenda

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**1**

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Focus Asia-Pacific

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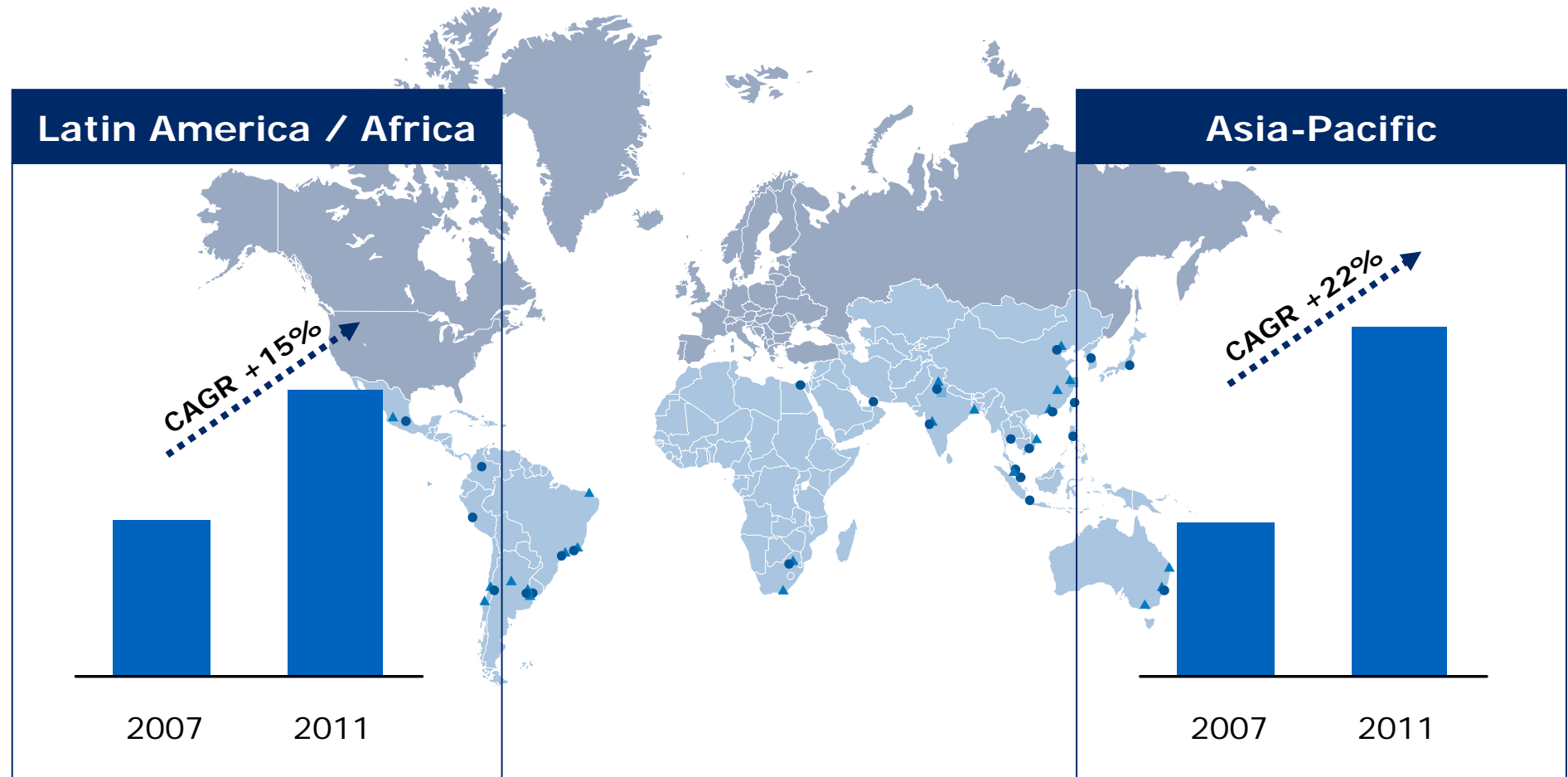
Focus India

5

Focus Latin America

# Fresenius Kabi

Strong Sales Growth in Asia-Pacific, Latin America & Africa



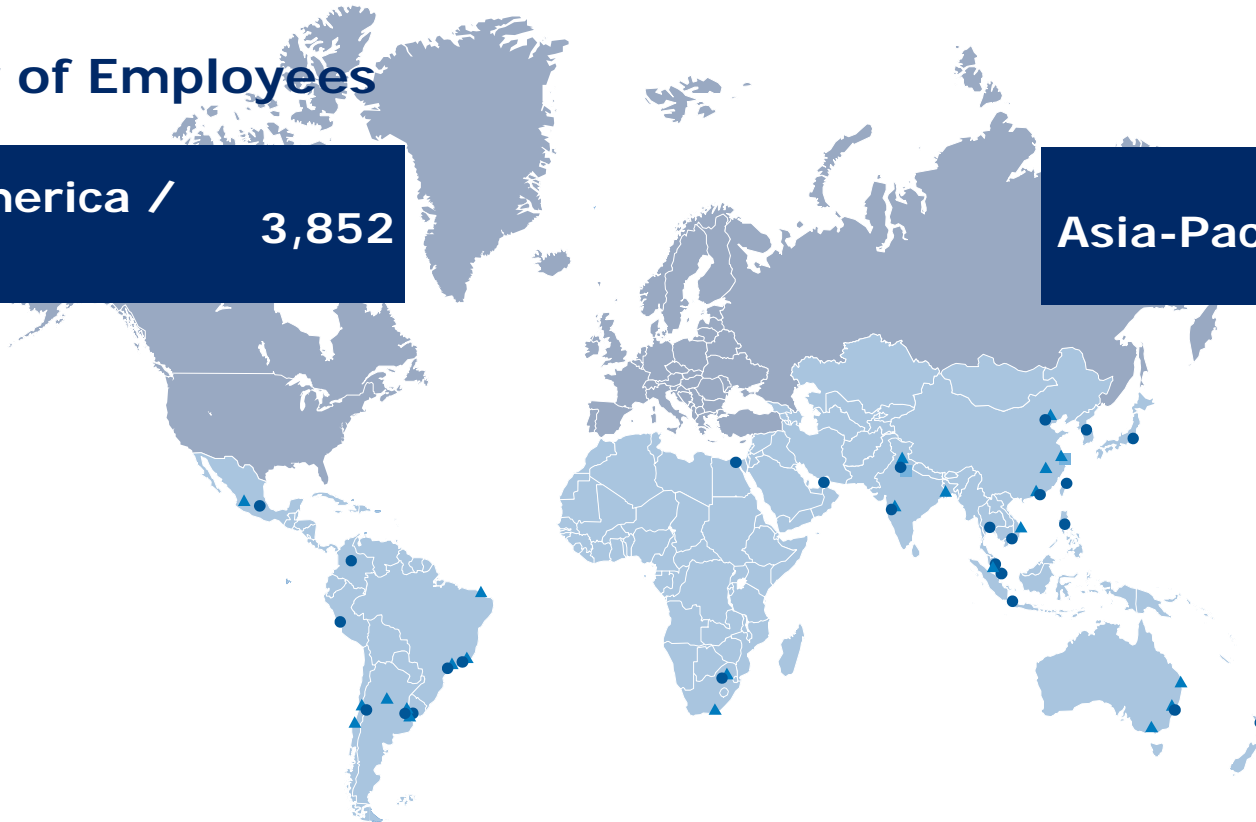
CAGR 2006-2011

## At a Glance

### Number of Employees

**Latin America /  
Africa** **3,852**

**Asia-Pacific** **7,319**



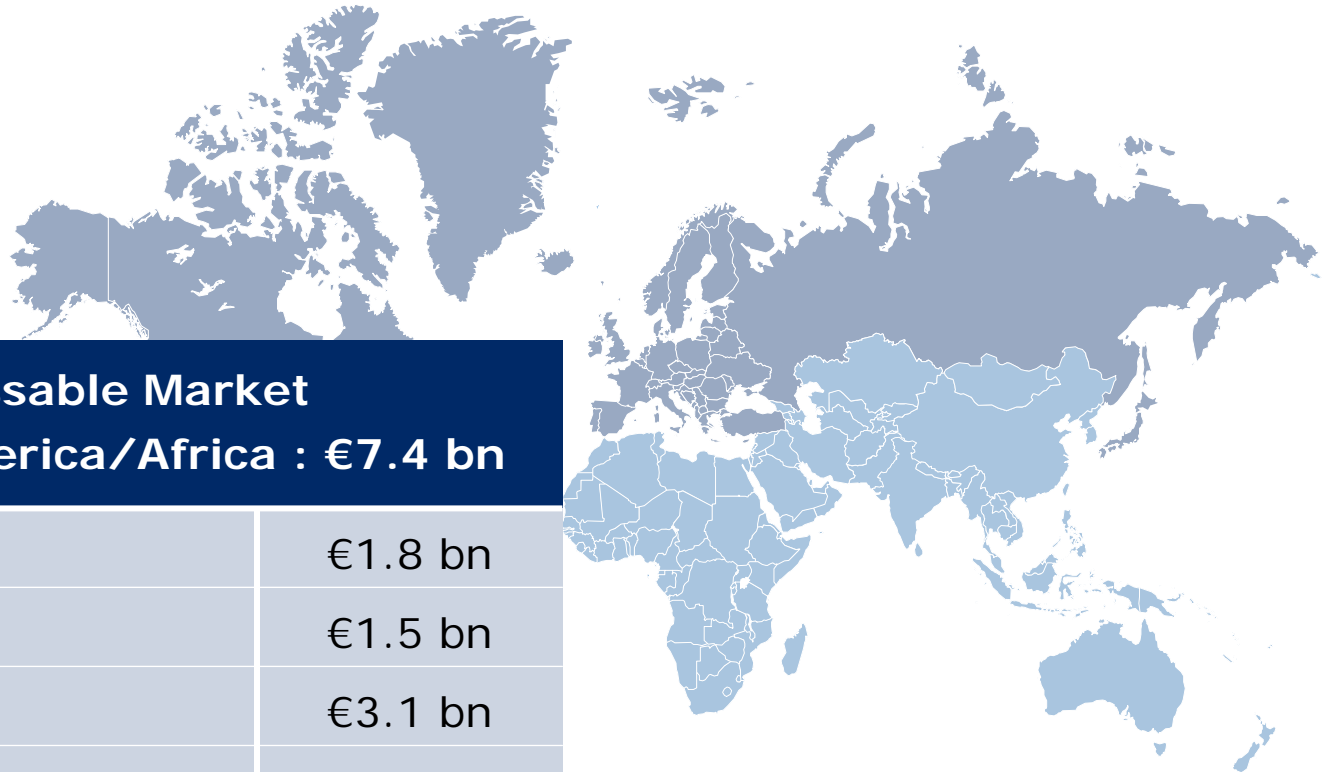
**26 Marketing & Sales organizations, 2 R&D centers, 23 Production plants – well positioned in key markets with strong local presence**



# Emerging Markets Characteristics

	Market Characteristics	Fresenius Kabi's Approach
<b>Reimbursement</b>	<ul style="list-style-type: none"> <li>■ Selective public and private insurance coverage</li> <li>■ Self payers</li> </ul>	<ul style="list-style-type: none"> <li>■ Portfolio for critically ill patients well positioned in markets where funds are limited</li> </ul>
<b>Competitive landscape</b>	<ul style="list-style-type: none"> <li>■ Local and multinational companies</li> </ul>	<ul style="list-style-type: none"> <li>■ Think Global – Act Local</li> </ul>
<b>Pricing</b>	<ul style="list-style-type: none"> <li>■ Health care reforms aiming to reduce prices</li> </ul>	<ul style="list-style-type: none"> <li>■ Robust pipeline supports systematic product life cycle approach</li> <li>■ Cost leadership</li> </ul>
<b>Regulatory &amp; safety/quality standards</b>	<ul style="list-style-type: none"> <li>■ Increased complexity</li> </ul>	<ul style="list-style-type: none"> <li>■ Global quality standards and documentation</li> <li>■ Local expertise</li> </ul>
<b>Sales model</b>	<ul style="list-style-type: none"> <li>■ Tender with promotion</li> </ul>	<ul style="list-style-type: none"> <li>■ Dedicated sales force per product line</li> <li>■ Branded generics</li> <li>■ Education</li> </ul>

# Market Size



## Fresenius Kabi Addressable Market Asia-Pacific, Latin America/Africa : €7.4 bn

Clinical Nutrition	€1.8 bn
IV Drugs	€1.5 bn
Infusion Therapy	€3.1 bn
Medical Devices	€1.0 bn

**Market growth rate for Emerging Markets in the range of 8 - 10%**

\*Regions Asia-Pacific (excluding Japan), Latin America and Africa

Source: Fresenius Kabi Internal Analysis (2011)

Capital Market Day – Emerging Markets – Exploit Growth Opportunities – Overview, Mats Henriksson, © Fresenius Kabi, June 12, 2012

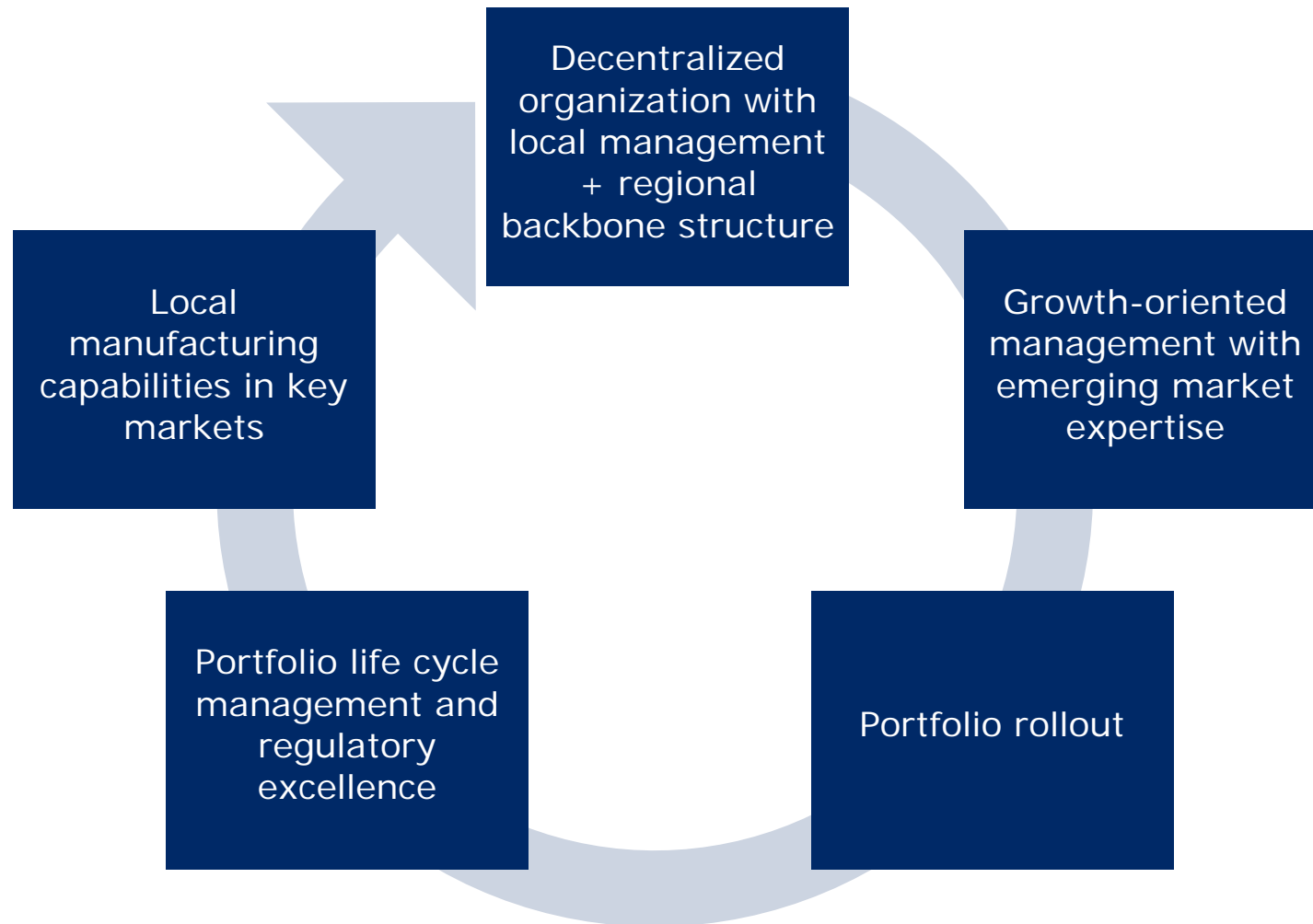
## Emerging Markets Growth Opportunities

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- Demographics, increased wealth and investment in health care infrastructure support strong underlying market growth
- Rollout of Fresenius Kabi's product portfolio and further market penetration hold significant growth opportunities
- Fragmented competitive landscape provides complementary acquisition opportunities
- Increased quality standards strengthen Fresenius Kabi's position to provide high quality, affordable products



# How to Capture the Growth Opportunities?



# Emerging Markets Focus Asia-Pacific

**Thomas Mechtersheimer**

Member of the Management Board

President Region Asia-Pacific

Capital Market Day Fresenius Kabi, June 12, 2012

# Agenda

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Focus Asia-Pacific

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Asia-Pacific At A Glance

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Fresenius Kabi's Presence in Asia-Pacific

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Competitive Landscape in Asia-Pacific

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Focus China

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Focus India

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Focus Latin America

# Region Asia-Pacific at a Glance

## Broadly Present in the Region



### Early Market Entry

- China in 1982
- India in 1995

### Leading market positions

- No. 1 in Clinical Nutrition
- No. 2 in Anesthetics
- No. 1 in Artificial Colloids

### Customer Proximity

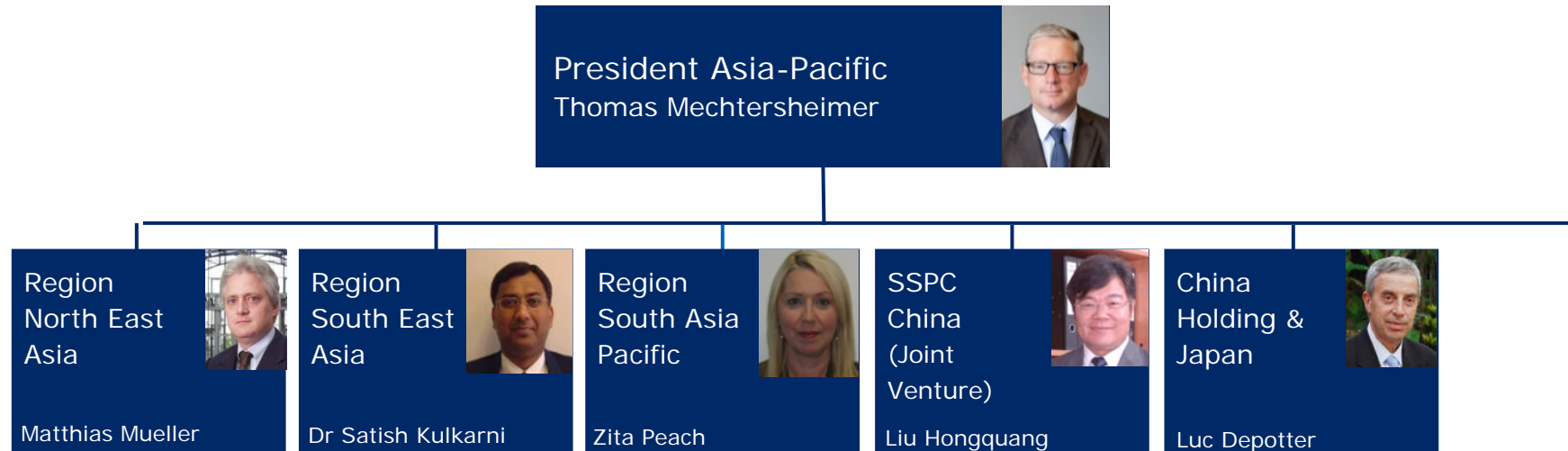
- 7,319 employees, thereof 4,304 in production and R&D and 3,015 in sales & marketing
- 15 local Marketing/Sales teams
- 8 production sites

### Main Product Portfolio

- Clinical Nutrition, especially Parenteral Nutrition
- IV Drugs, mainly Anesthetics and Oncology
- Blood Volume Therapy
- Oncology Compounding

**Key strengths: Local management experience and local manufacturing**

# Fresenius Kabi's Presence in Asia-Pacific Management Team



- 200 years of experience in health care
- 150 years of experience in Asia-Pacific
- We invest heavily in talent management and leadership development

Finance & Business Development  
Juergen Lauterbach (CFO)

Regional Business Support  
Dr Annemarie Diederich

Regional Medical & Clinical Services  
Dr Jonathan Asprer  
Dr Hrishikesh Kulkarni



# Fresenius Kabi's Presence in Asia-Pacific

## The Development of Local Presence



# Fresenius Kabi's Presence in Asia-Pacific Products Segments in Key Markets



Clinical Nutrition	Medical Devices	Infusion Therapy	IV Drugs
Indonesia	China	Australia	Australia
Taiwan	Indonesia	China	China
Australia	Korea	Hong Kong	India
China	Taiwan	India	Indonesia
India	Australia	Indonesia	Korea
Korea	India	Korea	Philippines
Philippines	New Zealand	Thailand	Taiwan
Thailand	Thailand	Taiwan	Vietnam
Vietnam	Vietnam	Vietnam	Thailand

Market Challenger  
 Market Leader (position 1-3)

**Substantial growth opportunity by becoming market leader in more markets**

# Competitive Landscape in Asia-Pacific

## Diversified Region With Diversified Challenges

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- Strong growth potential attracts local and multinational competitors
- >60 countries in AP mean fragmented markets & different cultures
  - Regulations, reimbursement, health personnel, health education all differ a lot
  - Economic fundamentals differ from country to country
- Increasing generic penetration and public price reforms / mandates
- Many countries skip the development of OECD type public health care structures to a mix of (private) open markets but with price controls

# Competitive Landscape in Asia-Pacific

## Status Price Cuts

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- In Korea, Taiwan and Japan price cuts took place and remained at our budgeted / anticipated level for 2012
  
- Status China
  - Expecting news in July on cuts related to Oncology, digestive and blood system products. Level of cuts expected to correspond to budgeted assumptions
  - News for nutrition products foreseen in Q3/Q4 2012 at the anticipated level
  - 'Drug and Price Comparison and Relationship Regulation' published in early 2012, providing insight on calculation methods and scope of attention
  
- Confident to have all effects for 2012 included in guidance

# Competitive Landscape in Asia-Pacific

## Current Leadership Drives Future Growth

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### **We are currently leading due to**

- A comprehensive structural footprint with long local experience in our teams
- Long local manufacturing experience and an Asia-Pacific wide coverage
- A strong presence with our key businesses in the key countries

### **And we will accelerate future growth by**

- Using our tremendous market know how, networks and experience
- Leveraging on the resources and strength of our global group
- Focus on people and organizational development throughout Asia-Pacific
- Strong organic sales growth and selective acquisitions

# Emerging Markets Focus China

**Thomas Mechtersheimer**

Member of the Management Board

President Region Asia-Pacific

Capital Market Day Fresenius Kabi, June 12, 2012

# Agenda

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China at a Glance

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Fresenius Kabi's Presence in China

3.3

Growth Opportunities in China

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Focus India

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Focus Latin America

# China At A Glance

## Demonstrating Strong and Sustainable Growth

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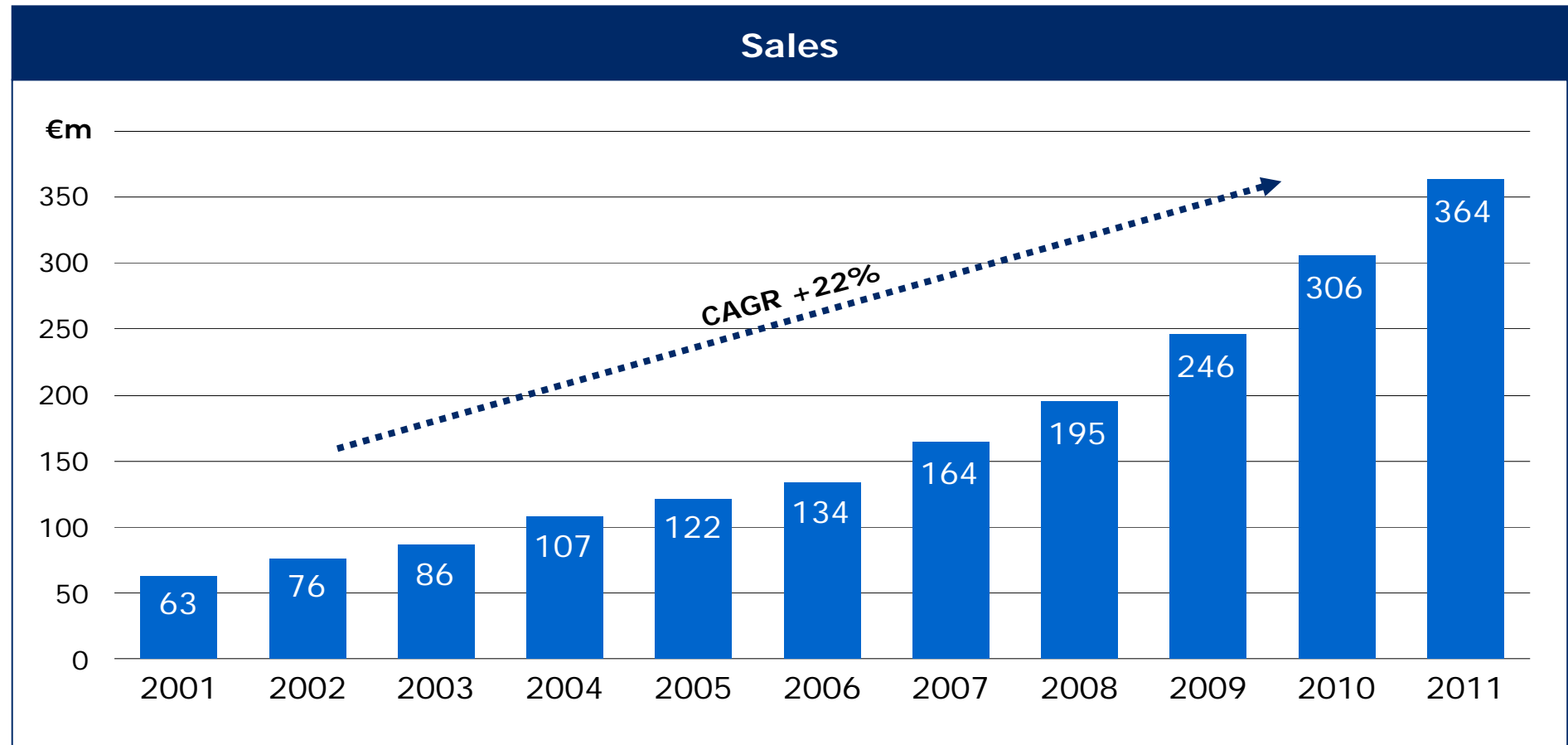
- Early market entry in 1982
- Long-term organic growth of team and organization
- Leadership in Clinical Nutrition and Anesthetics
- Good and established local relationship to suppliers, clinicians and government
- Important manufacturing location for global export
- International R&D Center for Clinical Nutrition
- GMP approved facilities with an area of more than 260,000 m<sup>2</sup> for production





# Fresenius Kabi's Presence in China

## Strong Sales Growth Continues



**Third largest market for Fresenius Kabi**

CAGR 2006-2011

# Fresenius Kabi's Presence in China

## China Operations – Overview of Sites



**Beijing:** Infusion Therapy, Clinical Nutrition



**Beijing:** Holding to support entities in China



**Wuxi:** Clinical Nutrition, R&D site (under construction)



**Guangzhou:** Medical Devices



**Nanchang:** Medical Devices

**4,014 employees**

# Fresenius Kabi's Presence in China

## Competitive Environment

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### Growth potential

- Rapidly aging and middle class population
- Expanding medical insurance coverage – now 95% of population covered
- Improving fundamental health care system increases affordability and accessibility

### Markets change as well

- Increasing restrictions on drug consumption in hospitals
- The **National Essential Drug Lists** bring price cutting pressure  
Health structure reforms also lead to cost control measures
- Increasing regulation favors local manufacturers – a chance for Fresenius Kabi
- Local generic companies are rapidly expanding – at the same time the ongoing consolidation of local companies brings us opportunities

# Growth Opportunities in China

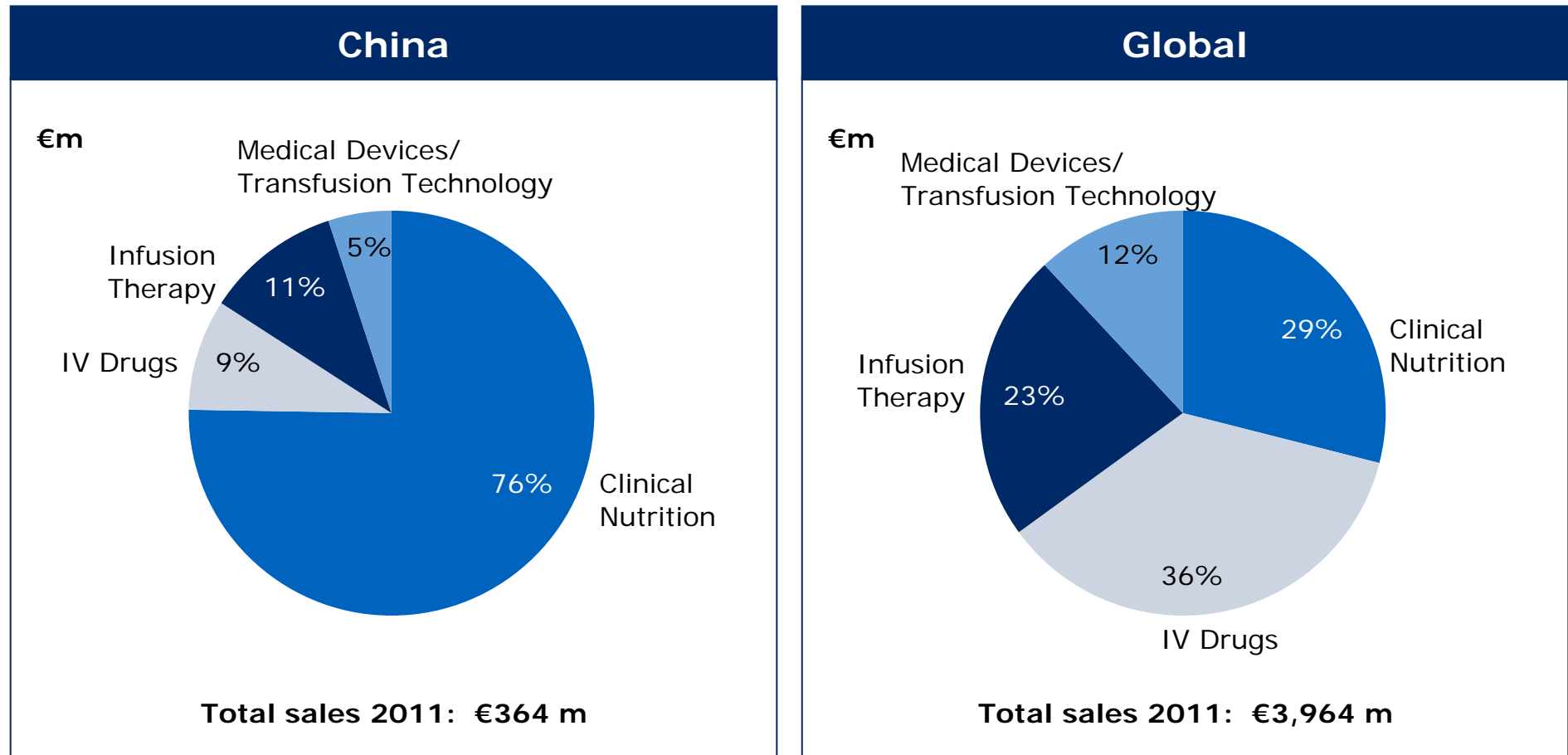
## Geographic Business Expansion Opportunity



- 80% of Fresenius Kabi's sales in China are generated in 14 provinces
- Strong growth opportunity through geographic and business area expansion

# Growth Opportunities in China

## Sales Split Demonstrates Growth Opportunities



**Strong growth through product portfolio rollout and acquisitions**

# Growth Opportunities in China

95% of Population Now Covered by Medical Insurance



Type	Covered	Description
Urban Employee Basic Medical Insurance Scheme (UEBMI)	219 m	Urban employee, Payer: employee & employer
Urban Resident Basic Medical Insurance Scheme (URBMI)	181 m	Urban residents not covered by UEBMI university students, Payer: local government & individual
New Rural Co-operative Medical Insurance Scheme (NCMS)	833 m	People in rural area, Payer: government & individual
Medical Assistance	N/A	Low income patients, Payer: local government
Private Medical Insurance	5 - 7% urban population	Supplement basic medical insurance, Payer: individual

## Government's Plan for Health Care Infrastructure

- Strengthen grassroot hospitals, clinic infrastructure and network
- Establish and develop the procurement of essential drugs in grassroot hospitals
- Improve drug supply system & restructuring of pharmaceutical distribution sector
- Create consolidated purchasing groups

# Growth Opportunities in China

## Future Key Success Factors for China



Continue strong organic growth

**Continuous product rollout in fast growing IV generic and medical devices market**

Tackle price pressure trends by systematic product life cycle management and new launches

**Continue development of strong leadership and qualified talented people**

Continuous localization of manufacturing and selected R&D activities

**Continue strong rollout of compliance program**

# Emerging Markets Focus India

**Dr. Satish Kulkarni**

Executive Vice President Region South East Asia

Capital Market Day Fresenius Kabi, June 12, 2012



# Agenda

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**4 Focus India**

**4.1 India at a Glance**

**4.2 Fresenius Kabi's Presence in India**

**4.3 Growth Opportunities in India**

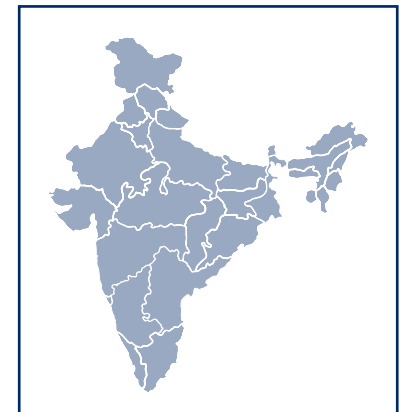
5 Focus Latin America

# India at a Glance

## Executive Summary

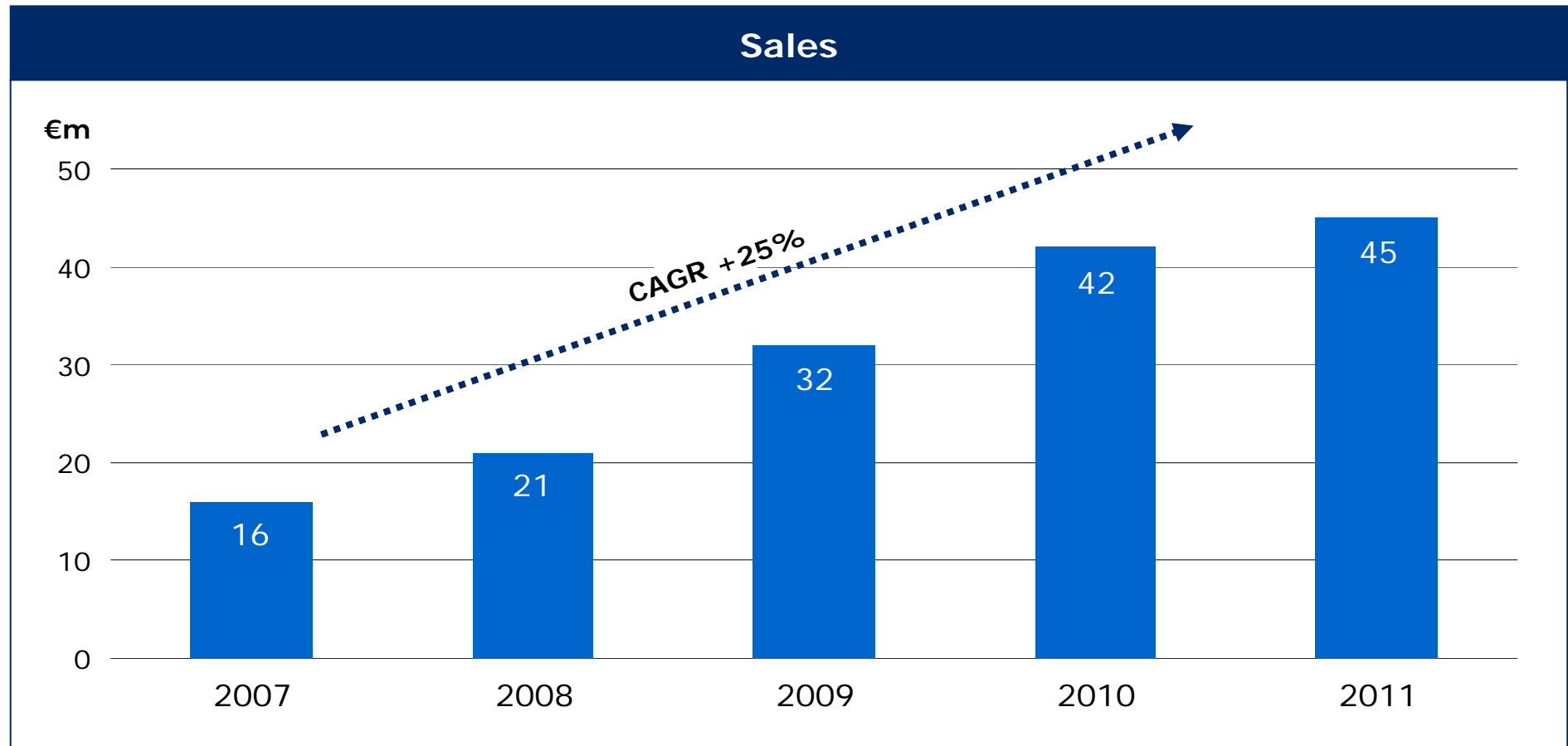
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- Early market entry in 1995
- Important oncology generics hub: development, manufacturing and global export
- Innovative products manufactured in Europe are imported
- Local adaptation of selected products
- Local management with Fresenius Kabi value culture
- Geographical challenges answered by regional approach



# Fresenius Kabi's Presence in India

## Sales 2007 - 2011



**Key market for Fresenius Kabi in Asia-Pacific**

CAGR 2006-2011

# Fresenius Kabi's Presence in India

## Overview of Sites



**Baddi:** IV Drugs



**Ranjangaon:** Infusion Therapy, IV Drugs



**Gurgaon:** Corporate Office, R&D facility



**Kalyani:** IV Drugs, API\*






**1,878 employees**

\*API = Active Pharmaceutical Ingredient

# Fresenius Kabi's Presence in India

## Production and R&D Facilities for International Markets



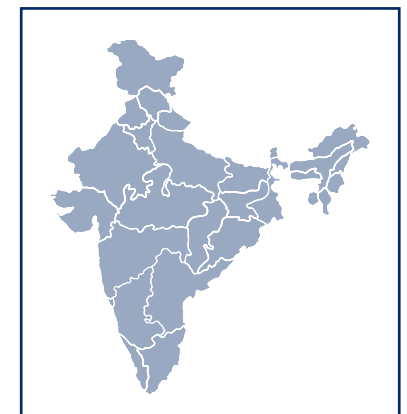
	<p>Baddi</p>	<ul style="list-style-type: none"> <li>■ Dedicated plant for manufacturing of formulation</li> <li>■ USFDA, MHRA and KFDA approved</li> </ul>
	<p>Gurgaon</p>	<ul style="list-style-type: none"> <li>■ State-of-the art R&amp;D facility covering over 5,000 m<sup>2</sup> with more than 160 scientists</li> <li>■ Safe, healthy and conducive working environment for scientists</li> <li>■ Advanced equipment such as 400 MHz Nuclear Magnetic Resonance*</li> </ul>
	<p>Kalyani</p>	<ul style="list-style-type: none"> <li>■ API production</li> <li>■ Specialized in Taxol chemistry, Organo platinum chemistry and semi synthesis from plant origin molecules</li> <li>■ USFDA, TGS and EDQM approved</li> <li>■ Reg. Approvals in more than 30 countries</li> </ul>
	<p>Ranjangaon</p>	<ul style="list-style-type: none"> <li>■ IV fluids and IV drugs production</li> <li>■ Site approved for India GMP, EU GMP, WHO GMP</li> </ul>
	<p>North East and West India</p>	<ul style="list-style-type: none"> <li>■ Plantation arrangements for raw material production</li> </ul>

\*NMR spectroscopy exploits the magnetic properties of atomic nuclei to determine physical and chemical properties of atoms or the molecules in which they are contained

# Growth Opportunities in India

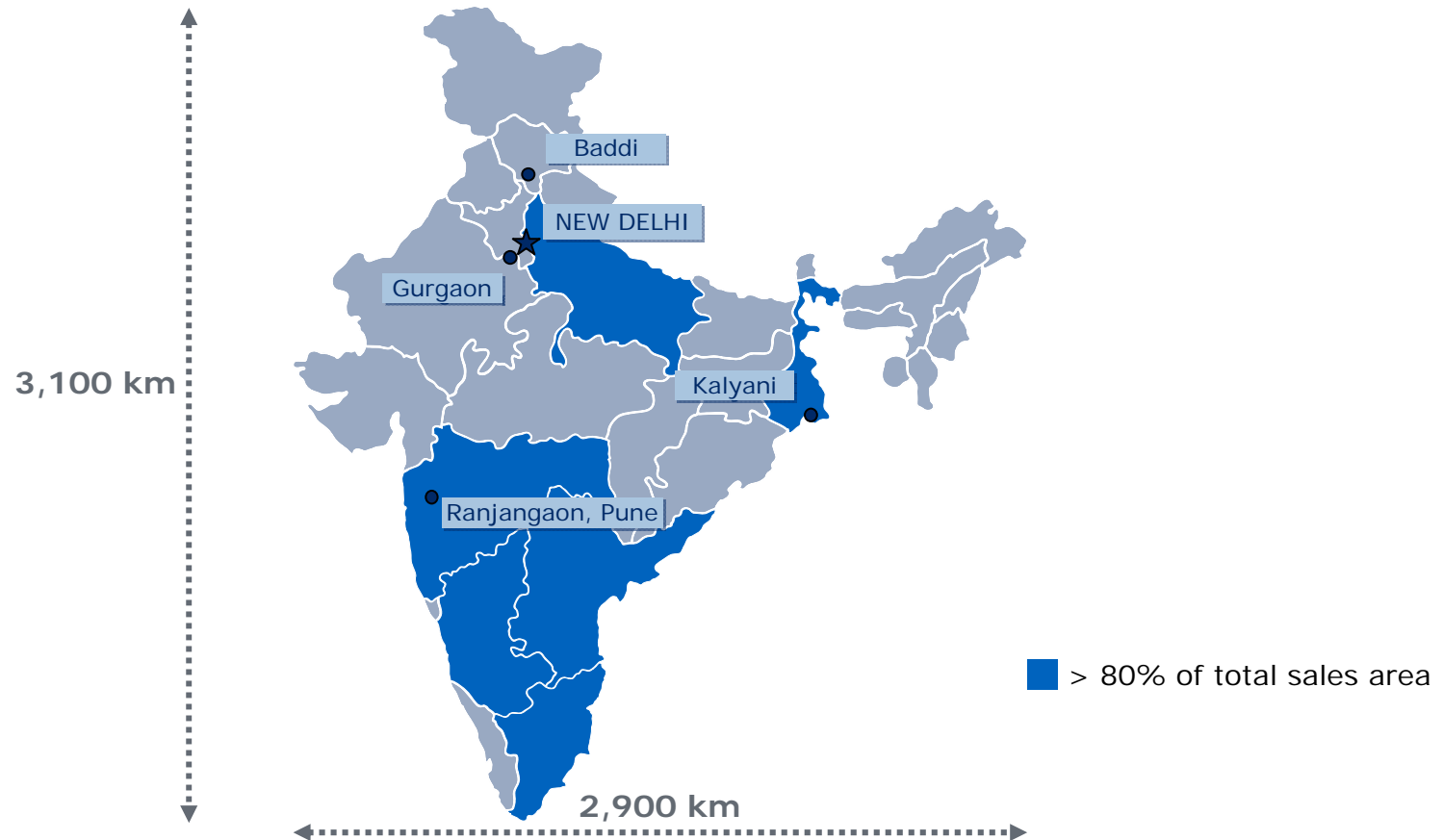
## Competitive Environment

- Intense local competition – especially for ‘Me too’ products and generics
- Fresenius Kabi as global quality player preferred in the fast growing top hospitals
- Increased focus of multinational companies on the emerging Indian market
- Opportunity for growth: Local manufacturing is still essential for most products due to import duty and transportation cost
- Cost effective distribution within India is a challenge our strategy responds to



# Growth Opportunities in India

## Geographical Business Expansion Opportunity

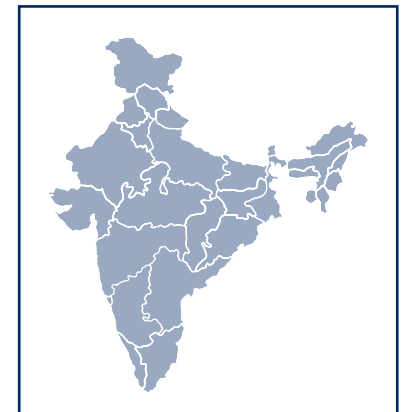


- >80% of Fresenius Kabi's sales in India are generated in 6 states
- Regional production strategy for standard solutions

# Growth Opportunities in India

## Indian Health Care System & Insurance

- Health care expenditure around €60 billion, growing at 12%
- 90% out of pocket payments, 6% of population covered by insurance
- Main providers of health insurance are public sector companies, government and army
- Increasing governmental price control: standard solutions and some IV drugs are regulated already, more drugs will be under price control in the future
- Private health insurance and private hospitals to dominate the treatment of critical and chronic diseases





# Growth Opportunities in India

## Future Key Success Factors for India



### **Product life cycle management to drive growth amidst increased competition**

Capture market share in high IV Generics growth and maintain leadership in Medical Devices market

### **Penetrate new geographic areas and customer segments**

Local manufacturing and cost leadership

### **Further utilize local R&D and production infrastructure for global market**

Secure quality excellence on all levels

# Emerging Markets Focus Latin America

**Marc Crouton**

Member of the Management Board

President Region West & South Europe, Latin America and Africa

Capital Market Day Fresenius Kabi, June 12, 2012

# Agenda

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Focus Latin America

5.1

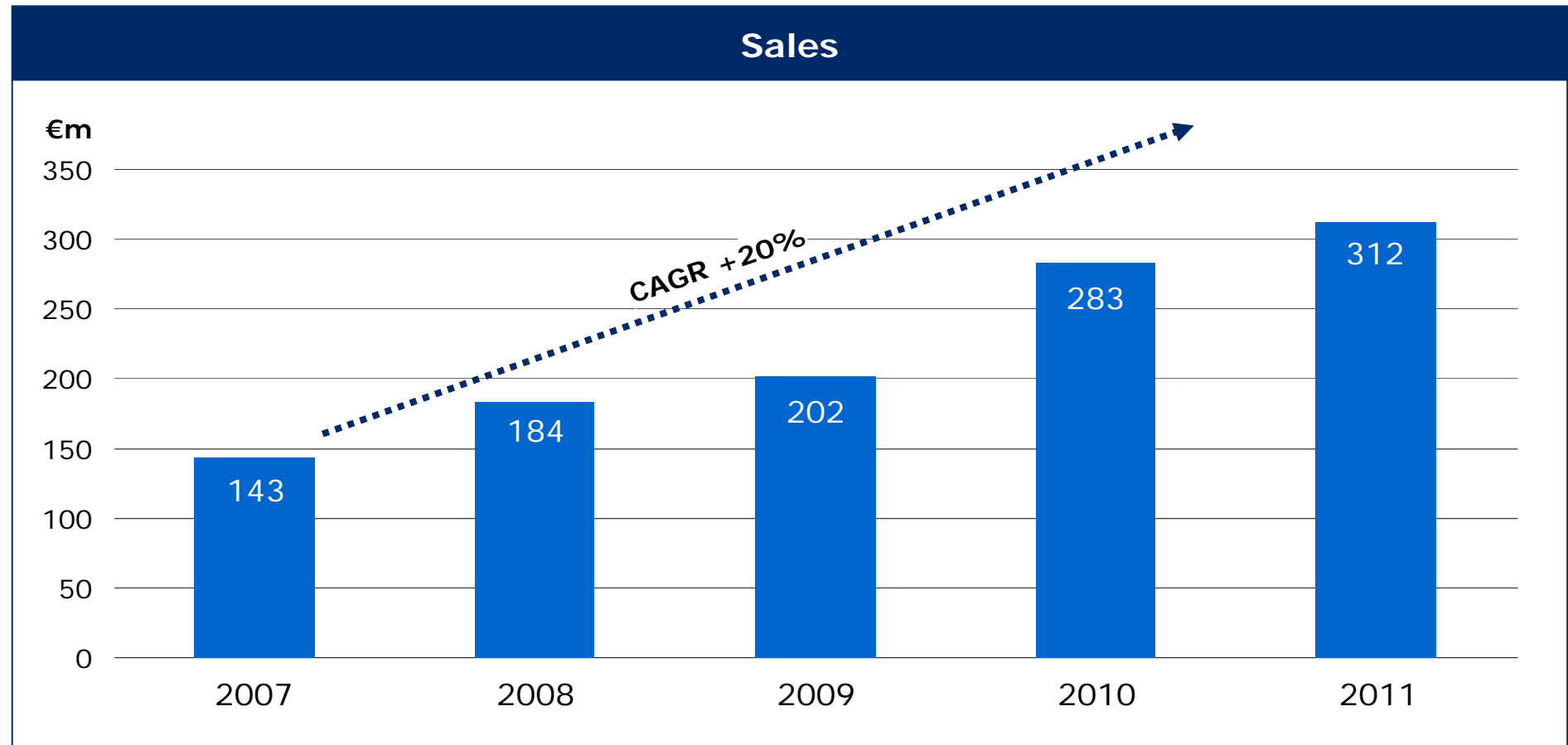
Fresenius Kabi's Presence in Latin America

5.2

Growth Opportunities in Latin America

# Fresenius Kabi's Presence in Latin America

## Sales 2007 - 2011



**Strong organic sales growth and successful integration of acquired companies**

CAGR 2006-2011

# Fresenius Kabi's Presence in Latin America

## Fresenius Kabi Operations



**Guadalajara (Mexico):**  
 Infusion Therapy, Clinical Nutrition,  
 IV Drugs



**Santiago (Chile):**  
 Infusion Therapy, IV Drugs



**Aquiraz, Fortaleza (Brazil):**  
 Infusion Therapy, IV Drugs



**Buenos Aires (Argentina):**  
 Infusion Therapy, IV Drugs

**3,040 employees**

# Fresenius Kabi's Presence in Latin America

## Market Position Latin America



Clinical Nutrition	Infusion Therapy	Medical Devices	IV Drugs
Peru	Peru	Peru	Peru
Argentina	Argentina	Argentina	Brazil
Colombia	Colombia	Colombia	Colombia
Mexico	Mexico	Mexico	Mexico
Brazil	Brazil	Brazil	Argentina
Chile	Chile	Chile	Chile

Market Challenger  
 Market Leader (1-3 position)

**Leading positions for key product segments in key markets**  
**Identified areas of growth**

# Growth Opportunities in Latin America Health Care Environment

- Argentina and Colombia offer the most comprehensive public sector health care systems covering up to 90% of the population
- Elsewhere the range of treatments covered is limited and the quality of care not optimal yet, but continuously improving
- Regulatory requirements vary in terms of specifications and timelines:  
Trend to align to international standards
- IP protection is weak in some countries (i.e. Argentina):  
Ideal playground for IV Generics



# Growth Opportunities in Latin America

## Competitive Environment

---

### **Pharmaceutical markets**

- Sustained growth linked to overall economical situation
- Volume sales driven by local (generics) manufacturers
- Value sales dominated by innovative products from EU and US
- Local companies expand to other Latin American countries
- Hospital sector: Segmented in public and private sector

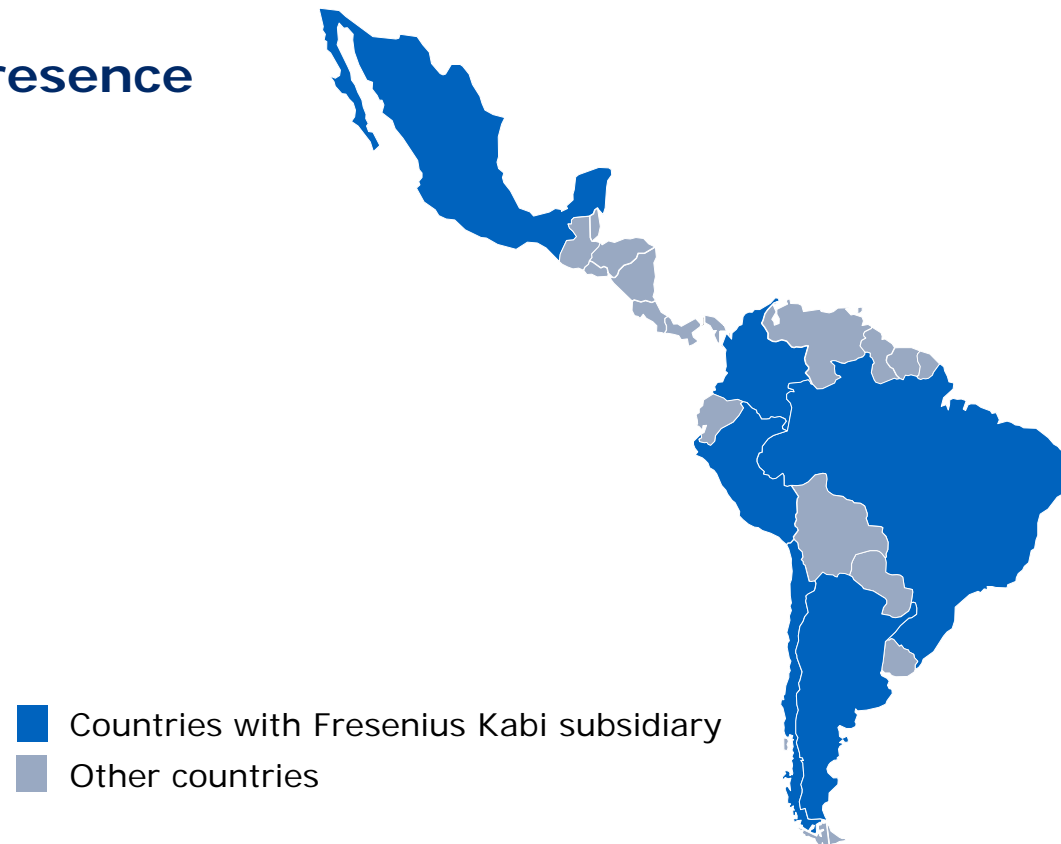




# Growth Opportunities in Latin America

## Geographical Expansion

### Geographical presence



- Strong growth opportunities through geographical business expansion
- Priority countries are Uruguay, Ecuador and Costa Rica

# Growth Opportunities in Latin America

## Key Success Factors Looking Forward

---



### **Clinical Nutrition:**

- Grow and consolidate Parenteral Nutrition through the expansion of Compounding
- Expand and rollout product portfolio with a focus on Enteral Nutrition

### **Infusion Therapy:**

- Increase value of our market share focusing on profitable segments
- Continue our two-container strategy based on market dynamics



# Growth Opportunities in Latin America

## Key Success Factors Looking Forward

---



### IV Drugs:

- Increase our presence in IV Drugs, especially Oncology, with the continuous launch of new molecules
- Expand the success of Oncology Compounding (optimizing synergies with Parenteral Nutrition)

### Medical Devices:

- Invest aggressively in bundling of equipment and disposables
- Optimize Fresenius Kabi presence and rollout of Transfusion Technology



# Growth Opportunities in Latin America

## Key Success Factors Looking Forward

---

### **Mexico:**

- Local production
- Leader in growing Infusion Therapy and Parenteral Nutrition markets

### **Brazil:**

- Local production
- Local expansion of Compounding competence
- Leader in growing Parenteral Nutrition, Infusion Therapy and Medical Devices markets
- Expansion of IV Drugs, especially Oncology



# Growth Opportunities in Latin America

## Key Success Factors Looking Forward



### Argentina:

- Local production
- Leader in growing Clinical Nutrition market and unique Compounding competences
- Regular launch of Fresenius Kabi portfolio based on strategic priorities

### Chile:

- Local production
- First generics company in the country
- Leader on all core product segments of Fresenius Kabi
- Leader in both Parenteral Nutrition and Oncology Compounding
- Successful and fast growing market, bridgehead for expansion to other LAM countries (Peru, Bolivia, Ecuador, Venezuela)

**And in general, THINK GLOBAL, ACT LOCAL**

## Safe Harbor Statement

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This presentation contains forward-looking statements that are subject to various risks and uncertainties. Future results could differ materially from those described in these forward-looking statements due to certain factors, e.g. changes in business, economic and competitive conditions, regulatory reforms, results of clinical trials, foreign exchange rate fluctuations, uncertainties in litigation or investigative proceedings, and the availability of financing. Fresenius does not undertake any responsibility to update the forward-looking statements contained in this presentation.

# Capital Market Day 2012

June 12, 2012



# Established Markets – Deliver Sustainable Growth Overview

**Gerrit Steen**

Member of the Management Board

Chief Financial Officer

Capital Market Day Fresenius Kabi, June 12, 2012



# Agenda

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**1** Established Markets Overview

**2** Focus Germany

**3** Focus USA

# Agenda

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**1** Established Markets Overview

**2** Focus Germany

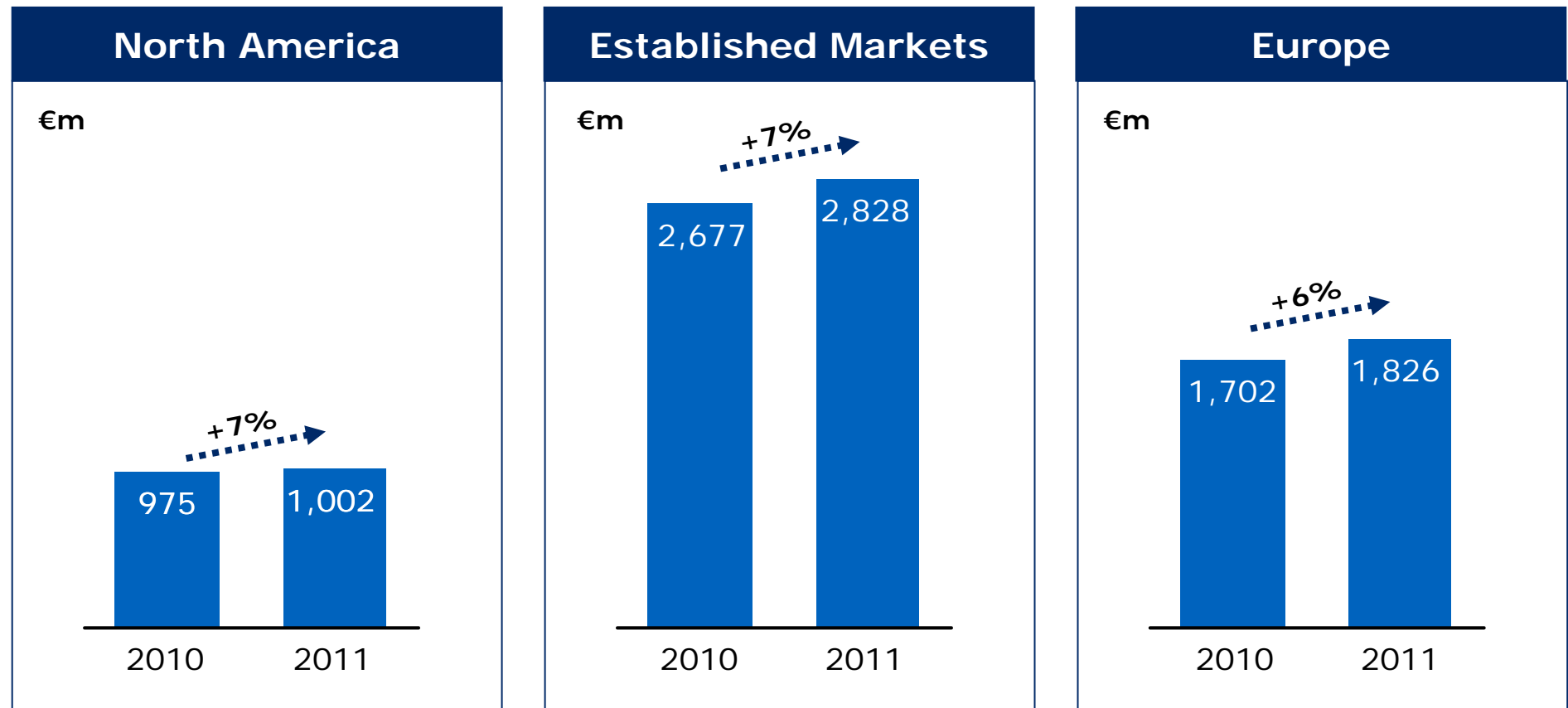
**3** Focus USA

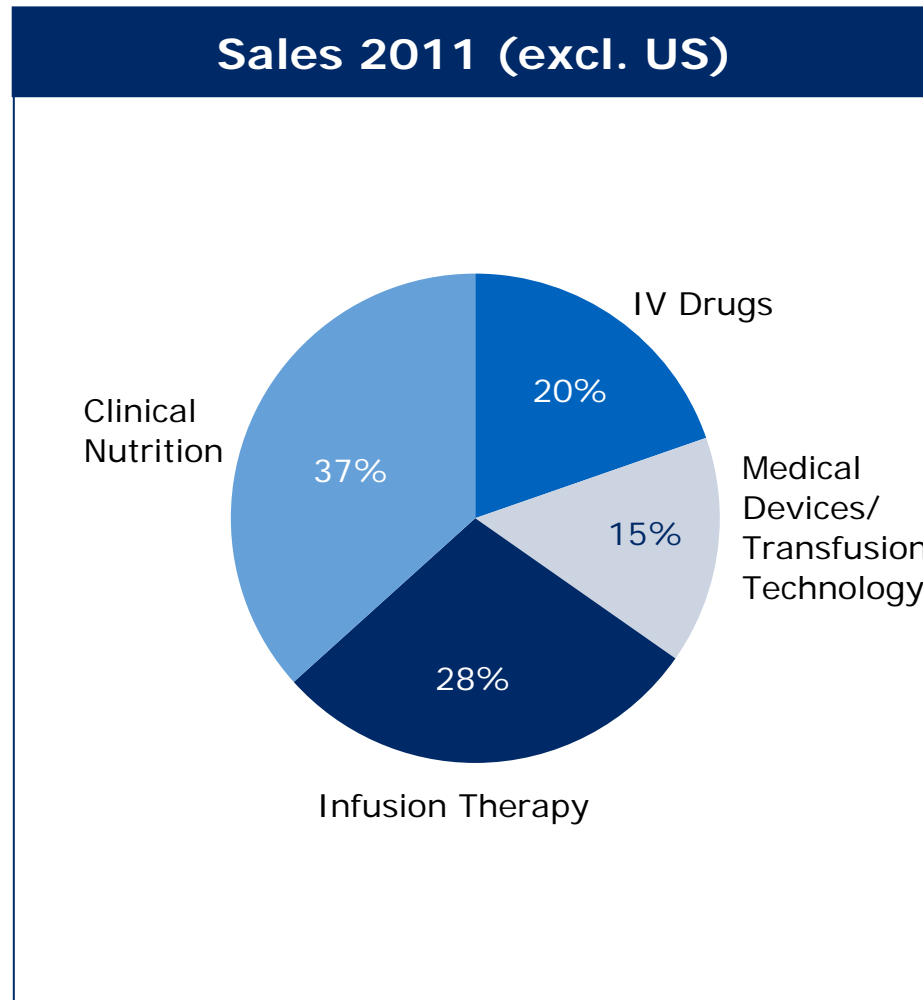
# Fresenius Kabi

## Strong Organic Sales Growth in Established Markets



### 71% of global Fresenius Kabi sales





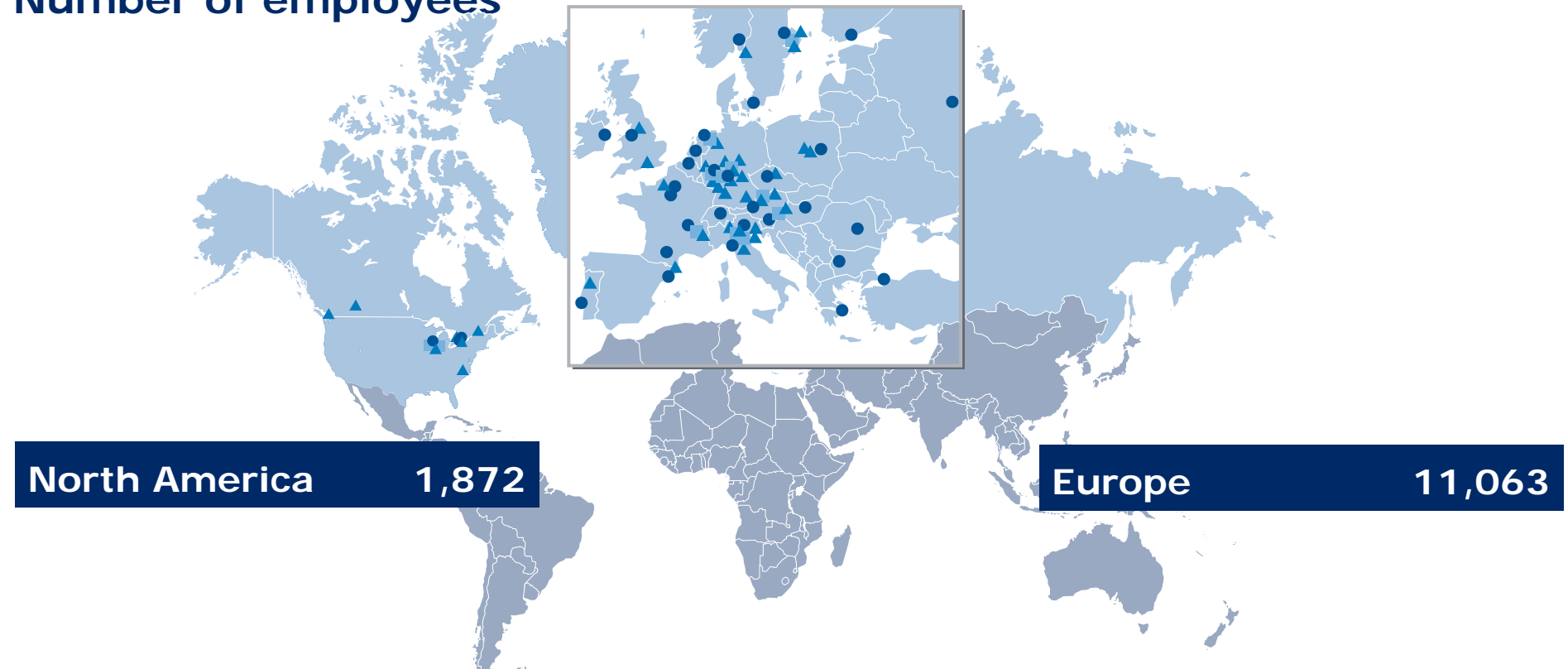
- Comprehensive product offering in many established markets
- Upside through further product rollout, especially in Medical Devices and Enteral Nutrition
- US so far focused on IV Drugs, significant opportunities in the coming years: Clinical Nutrition, Medical Devices and Infusion Therapy

# Fresenius Kabi

## Established Markets at a Glance



### Number of employees



**33 Marketing & Sales organizations, 12 R&D centers, 38 Production plants – well positioned in key markets with strong local presence**

# Fresenius Kabi

## Market Size and Growth Established Markets

A light blue world map is visible in the background of the slide, showing the outlines of continents and countries.

### Fresenius Kabi - Addressable Market Established Markets\* €18.1 bn

Clinical Nutrition	€4.4 bn
IV Drugs	€8.3 bn
Infusion Therapy	€2.1 bn
Medical Devices	€3.3 bn

**Long-term Fresenius Kabi sales growth rate for Established Markets  
of 5-7% expected**

\*Source: Fresenius Kabi Internal Analysis (2011)

# Fresenius Kabi

## Established Markets Characteristics



	Market Characteristics	Fresenius Kabi's Approach
<b>Health care Environment</b>	<ul style="list-style-type: none"> <li>■ Continuous reforms to cope with increased spending</li> <li>■ Further privatizations</li> <li>■ Increased overall scrutiny of industry</li> </ul>	<ul style="list-style-type: none"> <li>■ Activities focus on offering full product range defending strong market presence</li> <li>■ Generics penetration to increase in order to achieve cost savings</li> <li>■ Adherence to absolute compliance leads to competitive advantage</li> </ul>

# Fresenius Kabi

## Established Markets Characteristics



	Market Characteristics	Fresenius Kabi's Approach
<b>Regulatory &amp; safety/quality standards</b>	<ul style="list-style-type: none"> <li>■ Increased demand from regulators and customers</li> <li>■ Safety first</li> <li>■ Quality issues in production lead to shortages</li> </ul>	<ul style="list-style-type: none"> <li>■ Standardized registration processes to meet patent expiries and market formation</li> <li>■ Focus on highest global quality standards</li> <li>■ Quality/regulatory requirements and market demand limit new competitors</li> </ul>



# Fresenius Kabi

## Established Markets Characteristics



	Market Characteristics	Fresenius Kabi's Approach
<b>Competitive Positioning</b>	<ul style="list-style-type: none"> <li>■ Mostly global players, significant consolidation under way</li> <li>■ Competitors from emerging markets insignificant till now</li> <li>■ Customer consolidation esp. in the US (GPOs)</li> <li>■ In Europe diverse landscape with tender markets (e.g. UK) and some local purchasing (e.g. GER)</li> <li>■ Overall increasing stake of tendering/central purchasing</li> </ul>	<ul style="list-style-type: none"> <li>■ Reliable supply, full product offering, superior quality and integrated systems at competitive prices provide further growth</li> <li>■ Marketing either focused on scientific message (e.g. Parenteral Nutrition or Colloids) or on supply chain and cost (e.g. Standard Solutions and IV Drugs)</li> <li>■ Comprehensive product portfolio key asset in tenders</li> </ul>

# Fresenius Kabi

## Established Markets Growth Opportunities

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- Mature markets offer attractive growth due to demographics
- Significant scale in most markets makes Fresenius Kabi a key partner for its customers
- Supply reliability and market demand with respect to quality/safety expectations support Fresenius Kabi to grow faster than market
- Activities focusing on offering full product portfolio and integrated systems
- Continued rollout of product portfolio leads to growth opportunities
- Further upside in forward-integration – Compounding, HomeCare

# Established Markets Focus Germany

**Manfred M. Köhler**

Member of the Management Board

President Region Central/Eastern Europe, Nordics & Middle East

Capital Market Day Fresenius Kabi, June 12, 2012

# Agenda

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1	Overview Established Markets
2	Focus Germany
2.1	Macroeconomics
2.2	Business Model, Channels and Stakeholders
2.3	Portfolio Split
2.4	Market Position
2.5	Proven Track Record
2.6	Market Growth Drivers
2.7	Outlook
3	Focus USA

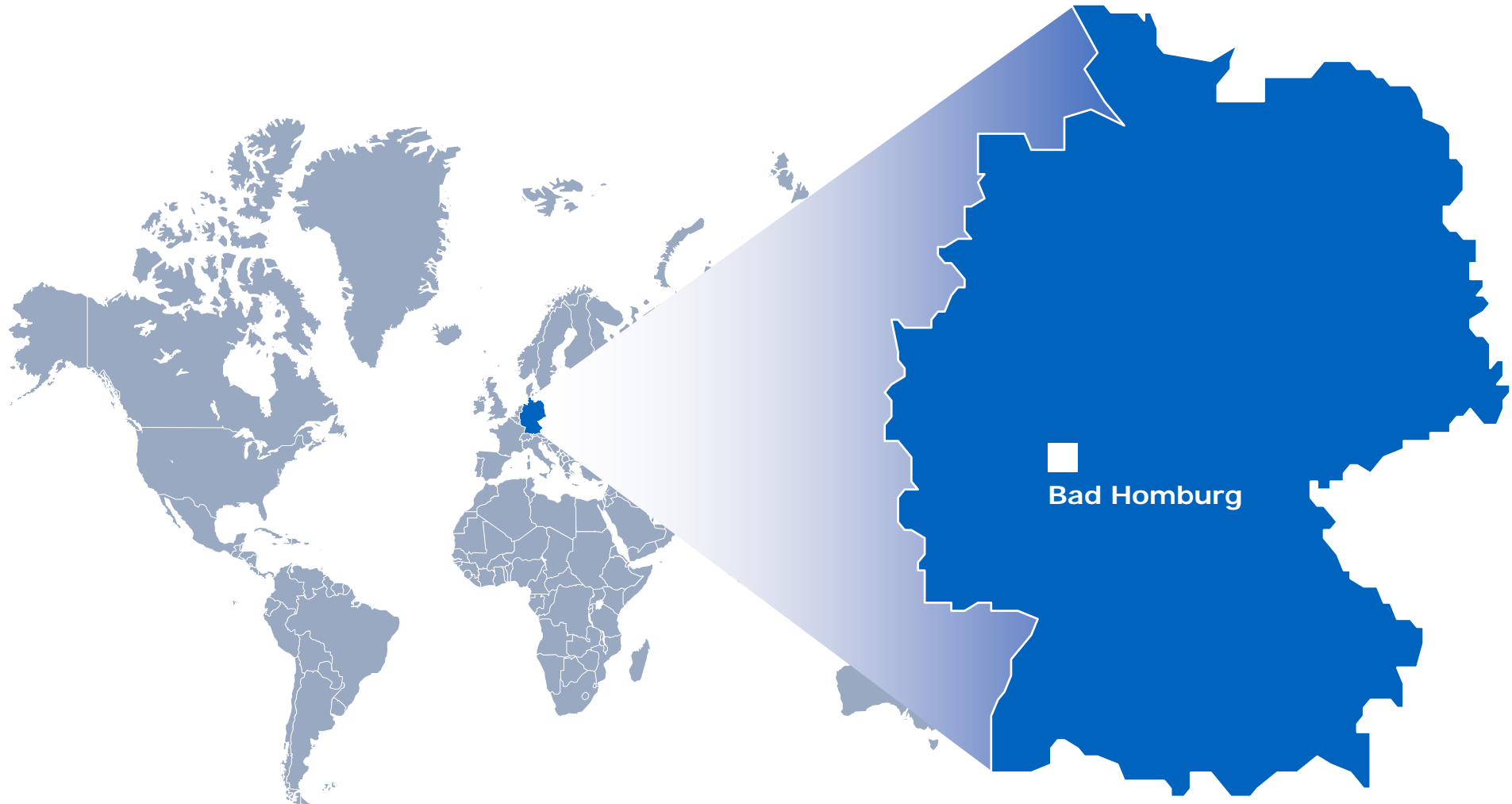
# Macroeconomics

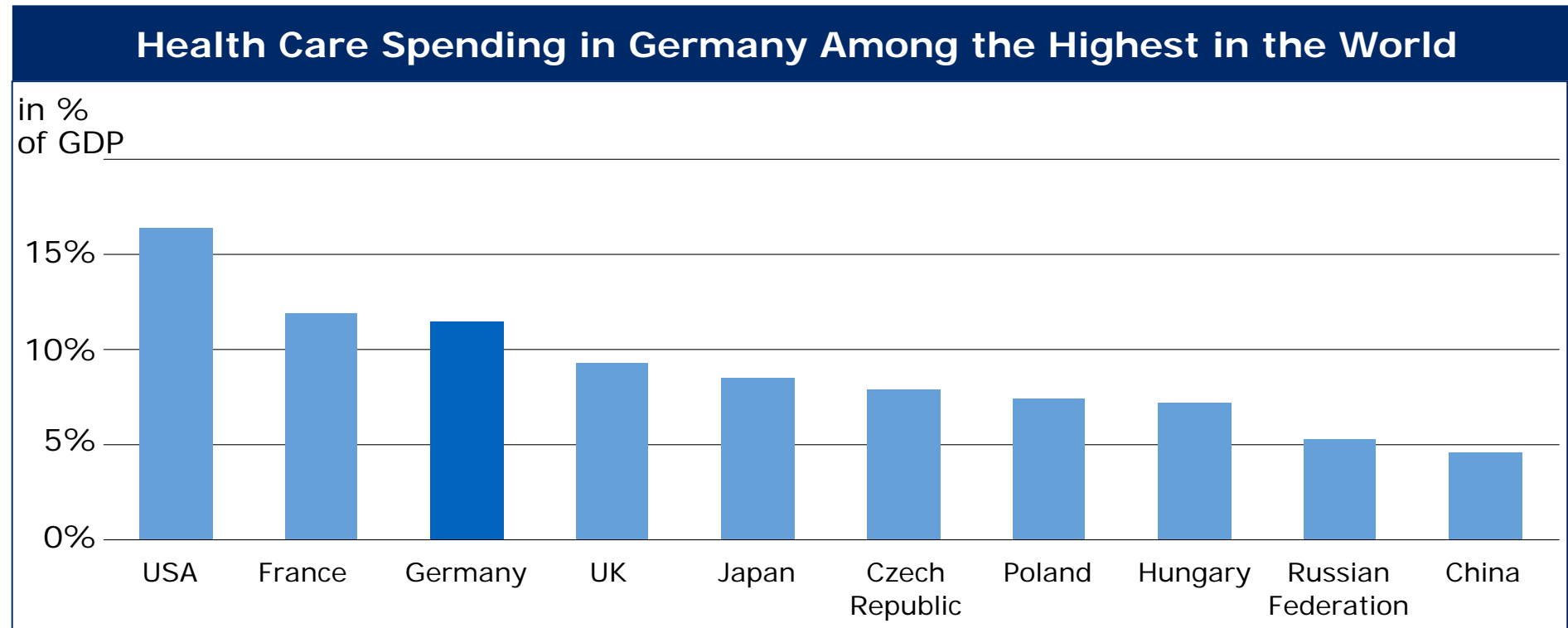
## Germany – Fresenius Kabi #1 Market in Europe



# Macroeconomics

## Germany – Fresenius Kabi #1 Market in Europe



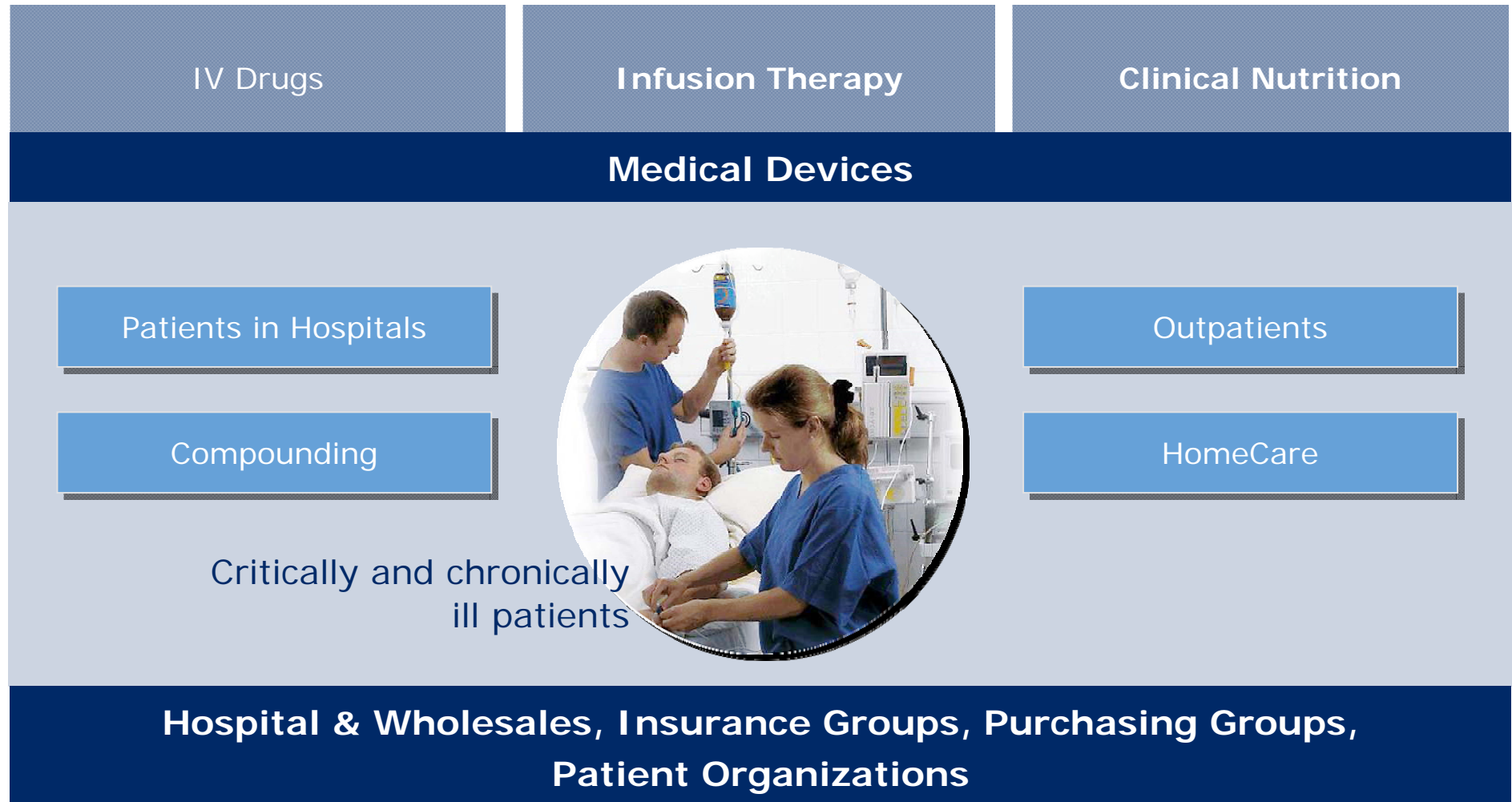


▶ **Germany represents the biggest pharma market in Europe (€278.3 bn\*)**  
**11.5% of German GDP is spent on health care**

\*Source: [http://www.statistik.at/web\\_de/statistiken/gesundheit/gesundheitsausgaben/index.html](http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitsausgaben/index.html) and internal data (Medical Fact Book 2011)

# Business Model, Channels and Stakeholders

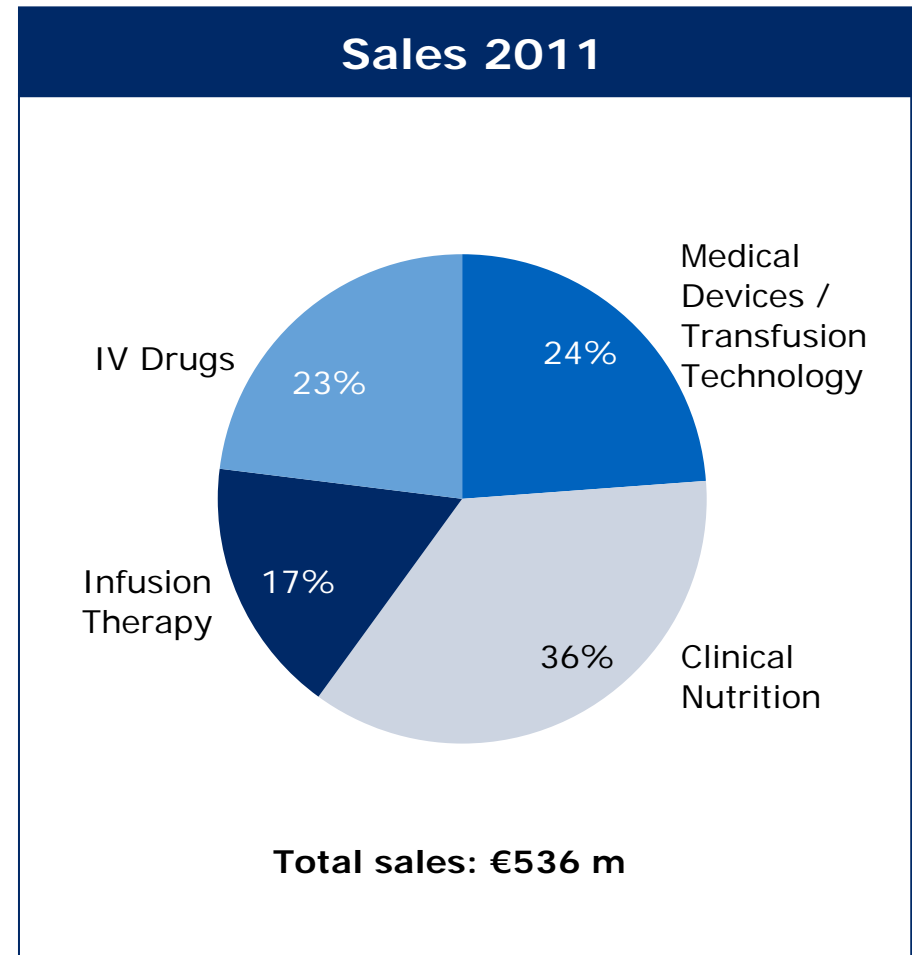
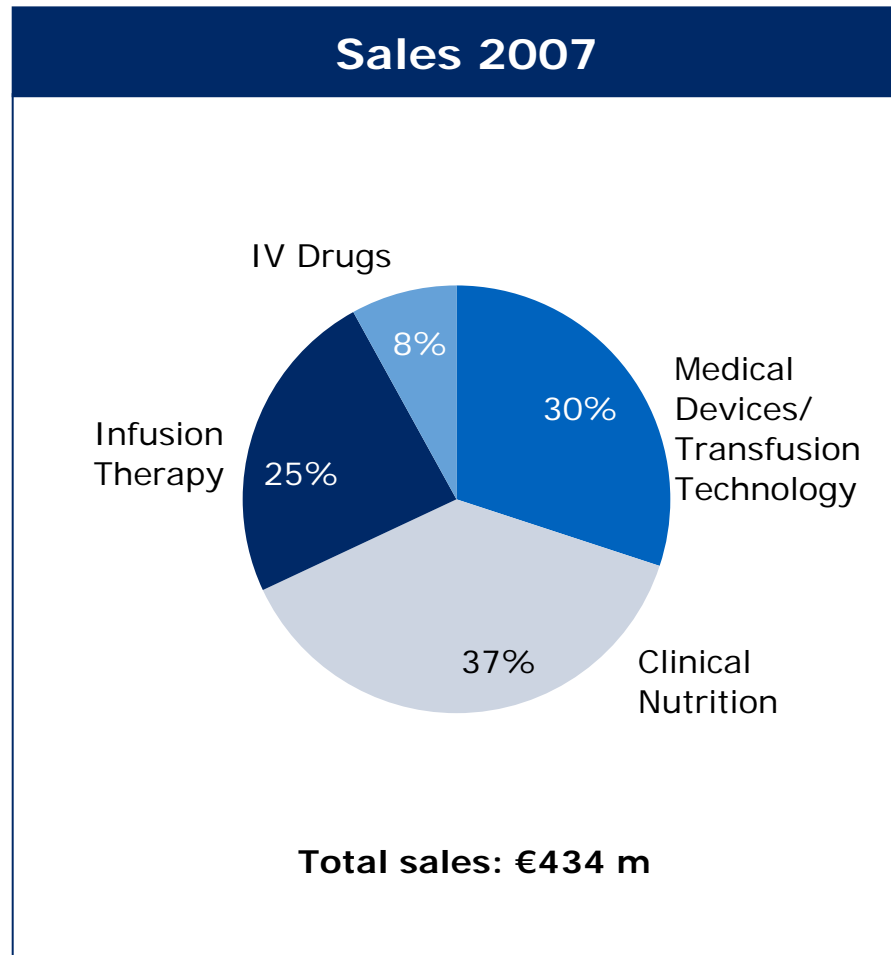
## Well Equipped, Well Positioned and Well Connected





# Portfolio Split

## Improved Product Mix



# Market Position

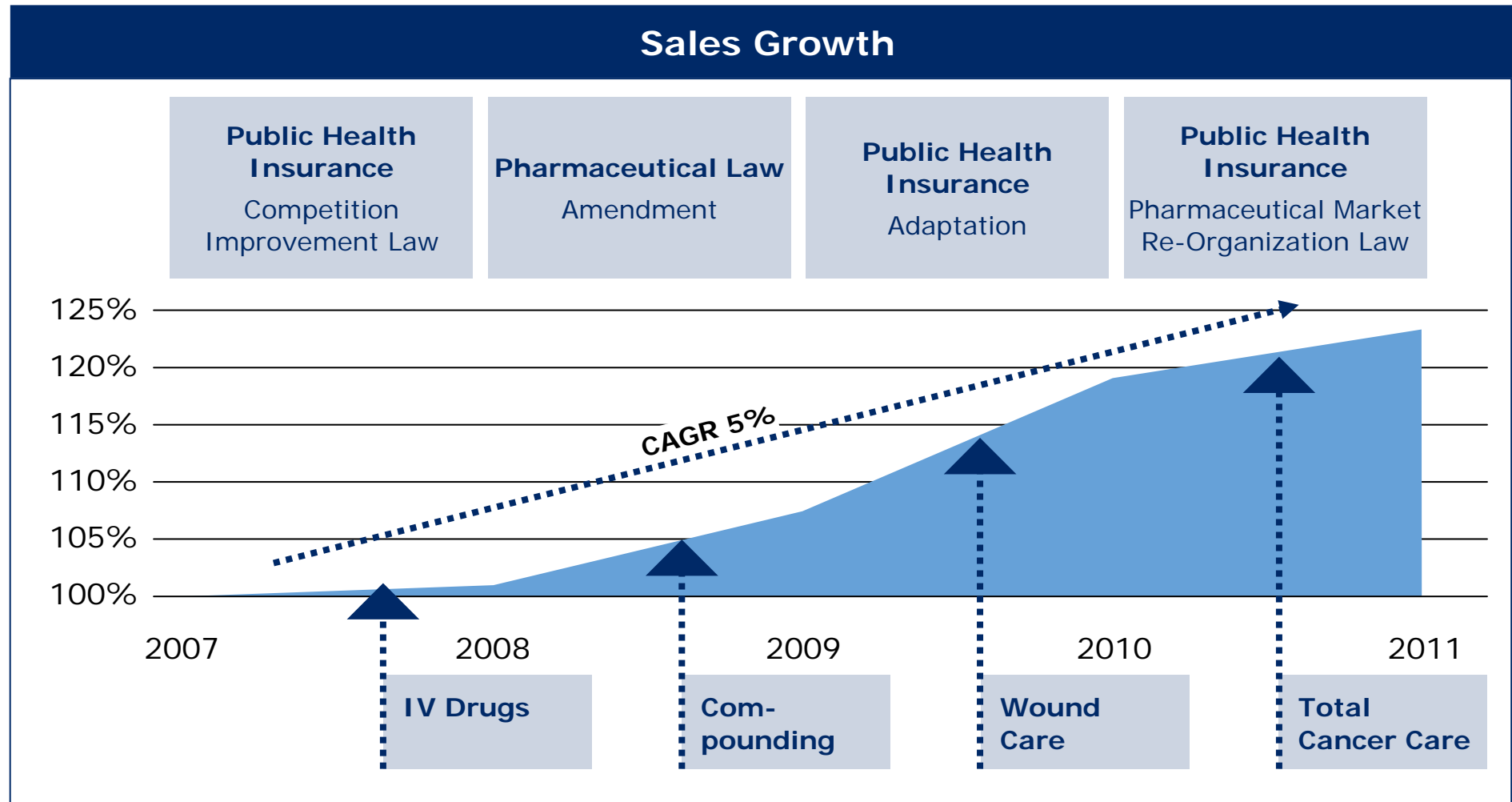
## Fresenius Kabi Holds Leading Positions



Product Segment		Market Position
Parenteral Nutrition		1
Enteral Nutrition		1
IV Drugs	Anti-Infectives	1
	Anesthetics & Analgesics	1
	Oncology	2
Standard Solutions		1
Medical Devices		2

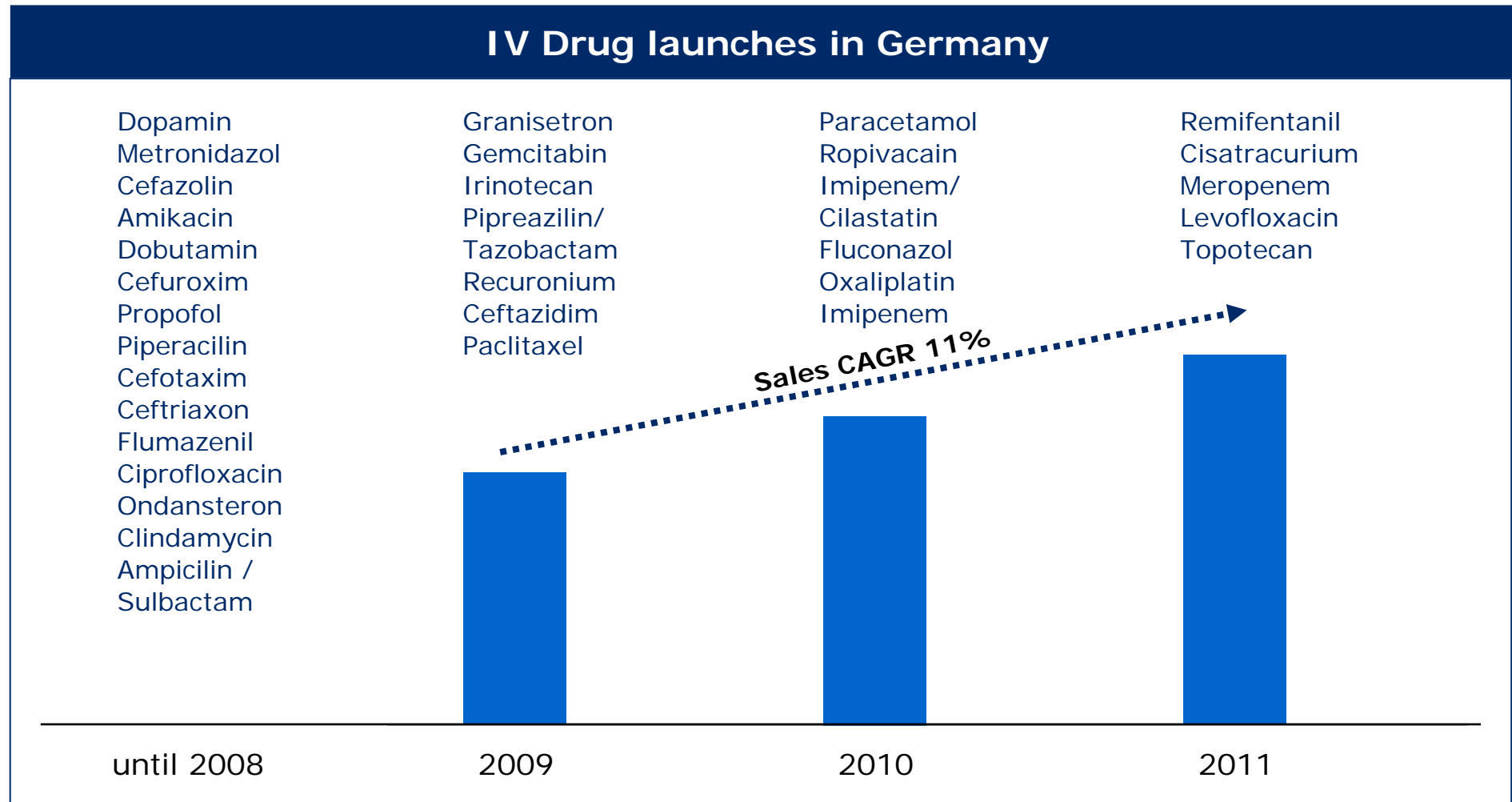
# Proven Track Record

## New Business Activities Support Sustainable Growth



# Market Growth Drivers

## Within Short Time a Full Range of IV Drugs



# Market Growth Drivers

## Compounding – Successful Entry Into New Market



### Compounding is

- Patient-individual preparation
- Under supervision of skilled pharmacists
- Based on doctors prescription

### Market size and potential

- >2.3 million compounded bags/year
- >€1.2 bn reimbursed by health care insurance
- >80% of compounded bags are for oncology patients

### Our key strength

- Long lasting proven competence in technology, production & logistics
- Broad range of products
- Close relationship with insurance companies for reimbursement

### Today's presence



# Market Growth Drivers

## Covering The Medical Needs of Cancer Patients

### Comprehensive integrated oncological therapy portfolio



# Market Growth Drivers

## Special Treatment Dedicated to HomeCare



### Demographics increase patient numbers, e.g.

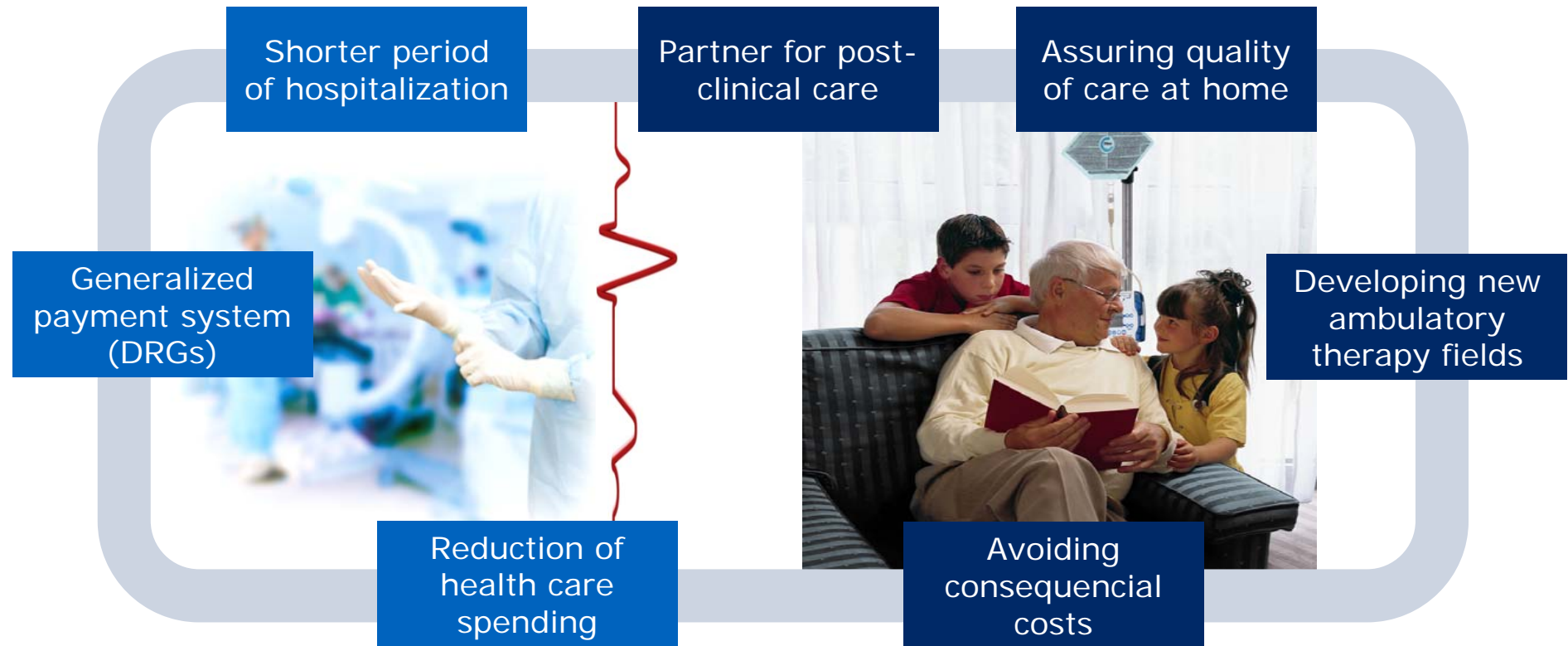
- Malnutrition, dementia, stroke, oncology or chronic wounds



Quelle: BVMed e.V., Homecare Ambulante Perspektiven, Berlin, November 2011

# Market Growth Drivers

## Well Positioned in a Growing HomeCare Market

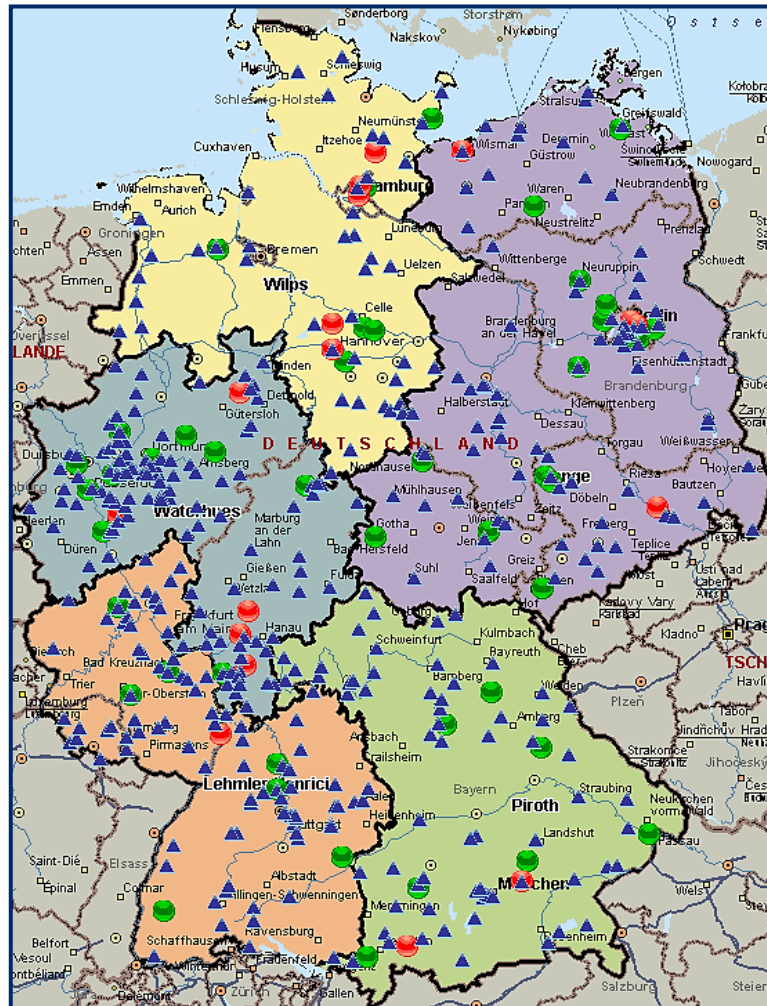


**Fresenius Kabi's service portfolio meets patient needs**



# Market Growth Drivers

## One of Germany's Biggest HomeCare Organization



- Established in 1987
- Full coverage of Germany
- Highly qualified and trained nurses
- 540 nurses providing homecare service for more than 15,000 patients p.a.

- ▲ Freelancer
- Application Advisor
- HomeCare-Manager

# Outlook

## IV Drugs & Compounding

### IV Drugs

- Continued future growth

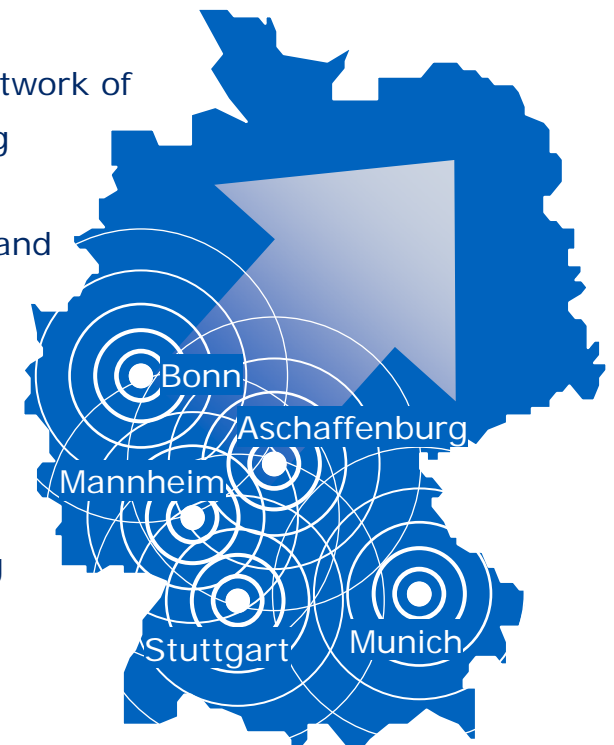
#### Launch of new molecules until 2017

Oncology	<b>17</b>
Anti-Infectives	<b>9</b>
Anesthesia & Analgesia	<b>3</b>
Critical Care	<b>10</b>

### Compounding

- Market consolidation and geographical rollout drives further growth

Extending network of Compounding Centers in the North and North East of Germany to cover >90% of German compounding market



# Established Markets Focus USA

## **John Ducker**

Member of the Management Board

President Region North America

Capital Market Day Fresenius Kabi, June 12, 2012

# Agenda

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**1** Established Markets Overview

**2** Focus Germany

**3** Focus USA

**3.1** IV Generics

**3.1.1** Growth Strategies

**3.1.2** Market Characteristics

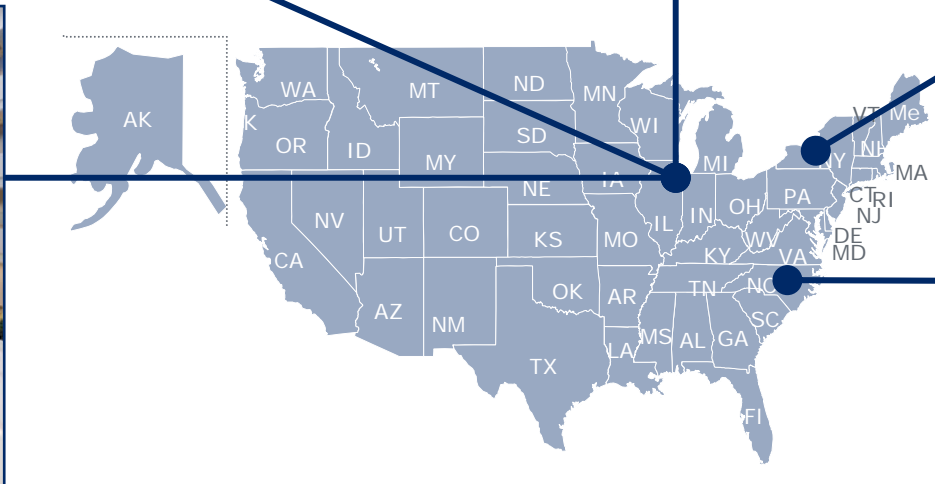
**3.1.3** US Drug Shortages

**3.2** Parenteral Nutrition

**3.3** Infusion Technology

# IV Generics

## Fresenius Kabi USA Operations



**1,571 employees**

# IV Generics

## FK USA IV Generics Sales 2007-2011



- 5-year CAGR of 17%, well ahead of initial expectations
- +60% since APP acquisition
- Successful product launches and capitalizing on special situations (Gemcitabine, Propofol, etc.)
- Drug shortage benefit in 2010, 2011 and 2012 to date

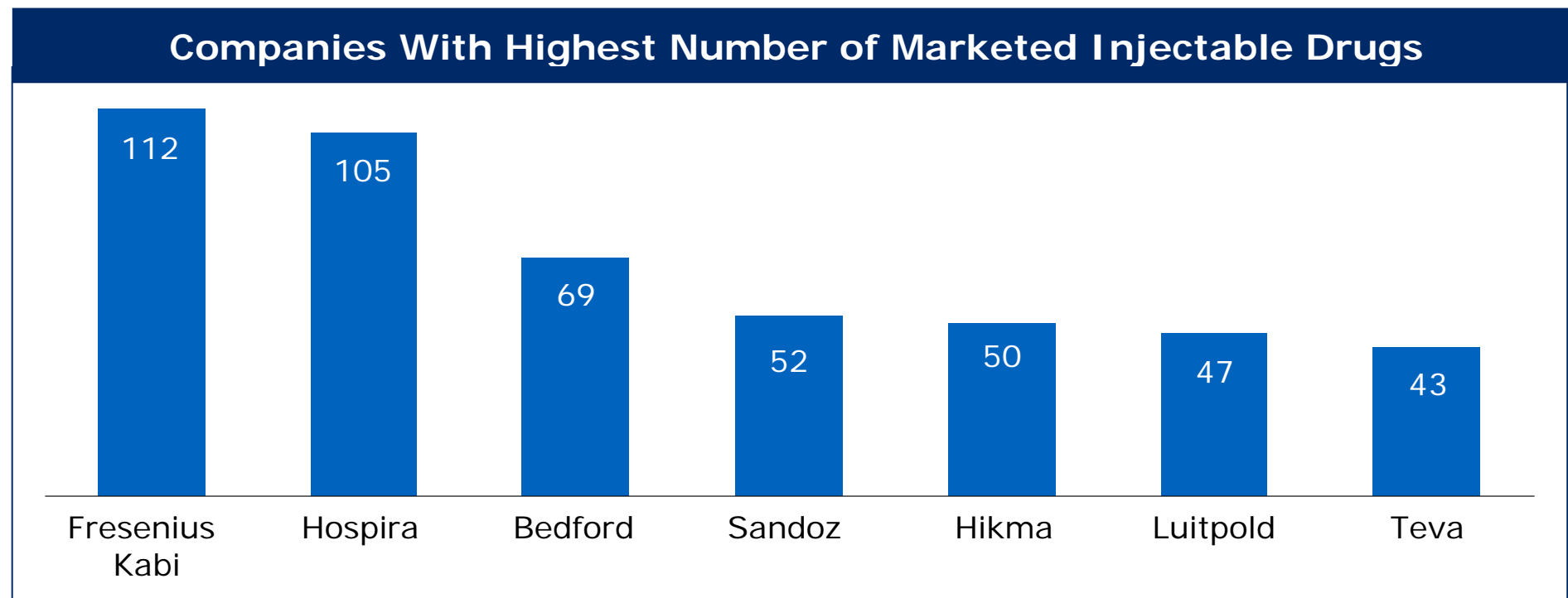
\*before APP Pharmaceuticals acquisition by Fresenius Kabi

# IV Generics

## Market Analysis USA Injectable Generics



- Fresenius Kabi is the leading generic injectable company by number of marketed molecules
- Broad product offering across all therapeutic classes



Source: IMS 2011 December (National Sales Perspective), molecules with non-zero sales / Fresenius Kabi Internal Analysis (2011)

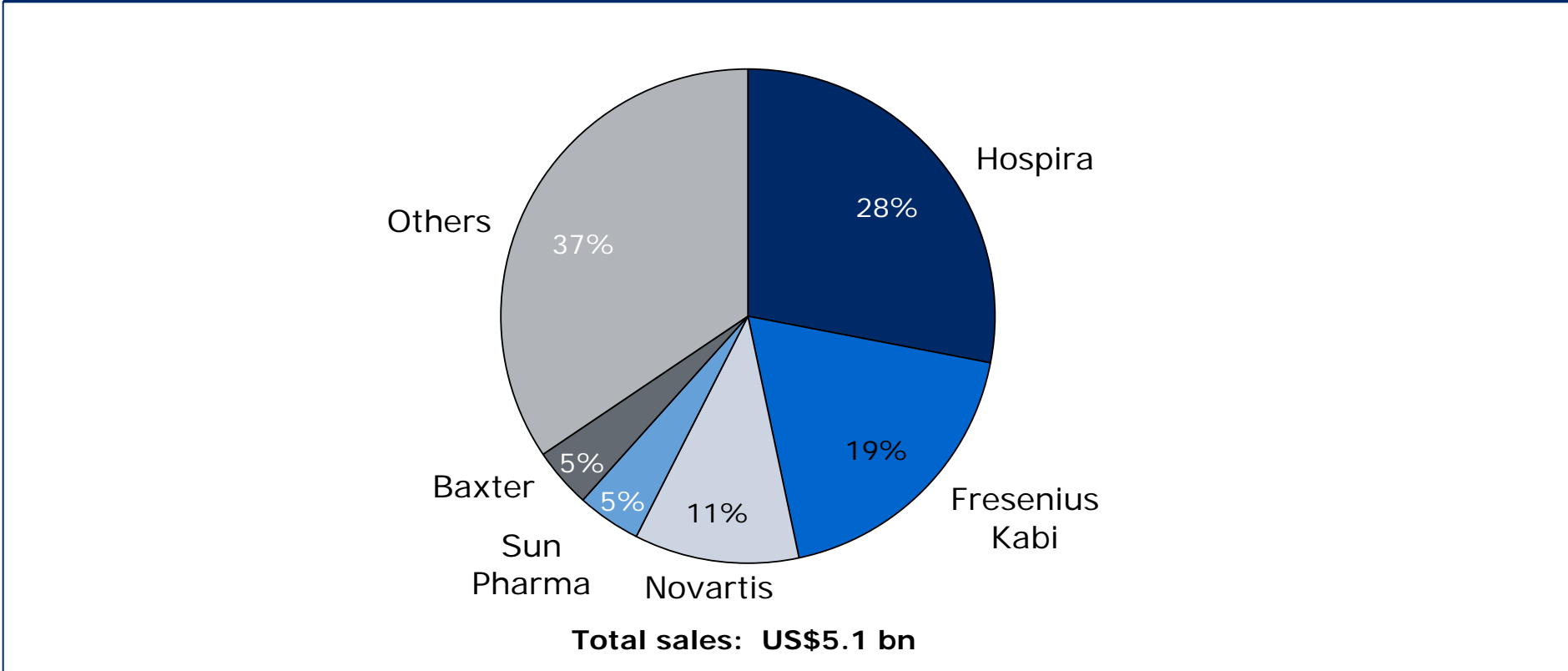


# IV Generics

## Market Analysis USA Injectable Generics



### US Off-Patent Injectable Sales (Dec 2011)



Source: IMS MAT Dec 2011, IV Generics, excluding Enoxaparin



# Market Characteristics USA

## Injectable Generics

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- Large and attractive market
- Market growth is fed by the expiry of originator patents
- High barriers to entry
- Tender business with consolidated customer base
- Hatch-Waxman creates high margin opportunities for first to file patent challengers of originator patents
- FDA Office of Generic Drugs is highly resource constrained

# Market Characteristics

## Outlook USA Injectable Generics

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- The 'patent cliff' is predominantly an oral drug phenomenon
  - There is a steady stream of patent expiries in the injectable segment which will continue to drive market growth over the next ten years
  - In the US alone, 172 small molecule injectable products with over US\$20 bn in branded sales face patent expiration over the next decade\*
  
- Unlikely to see significant impact of biosimilars in the US market before 2016/17 and monoclonal antibodies not before 2020
  - FDA guidance still under review three years after Biologics Price Competition and Innovation Act of 2009 created biosimilar pathway
  - Extent of clinical data required still subject to debate

\*Source: IMS MAT Dec 2011, based on Orange Booklast listed patent expiry year and internal IP intelligence

# Growth Strategies

## Injectable Generics

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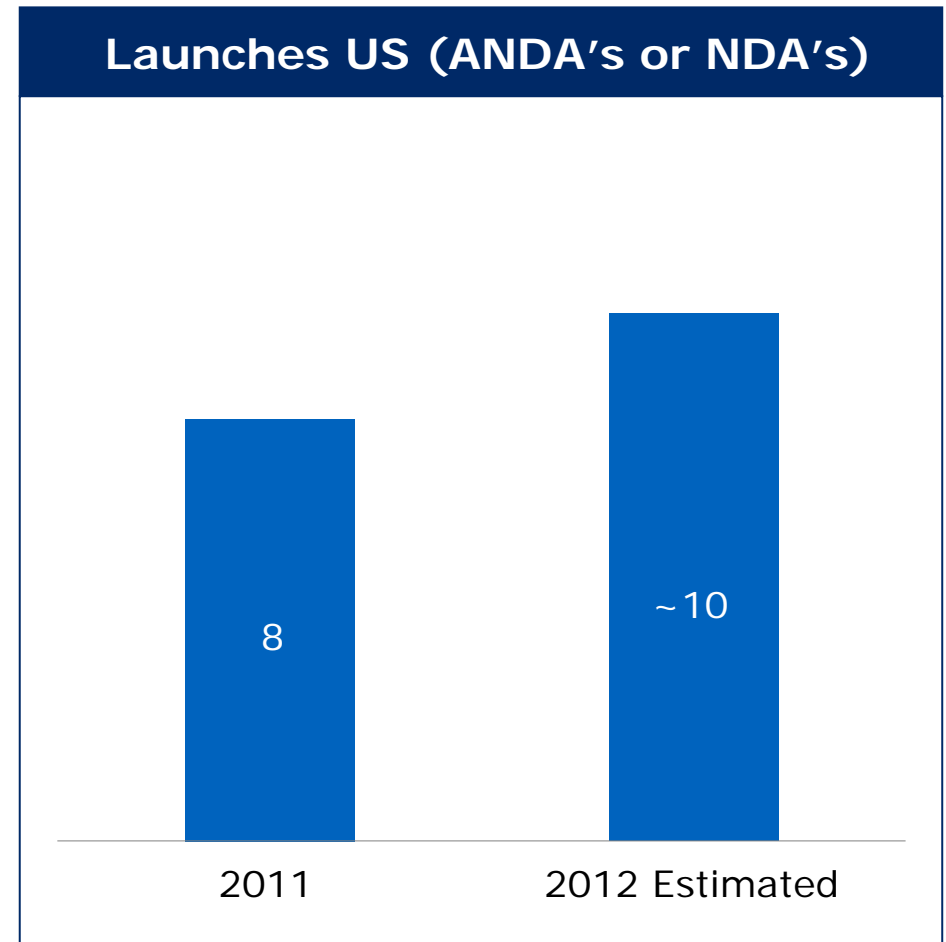
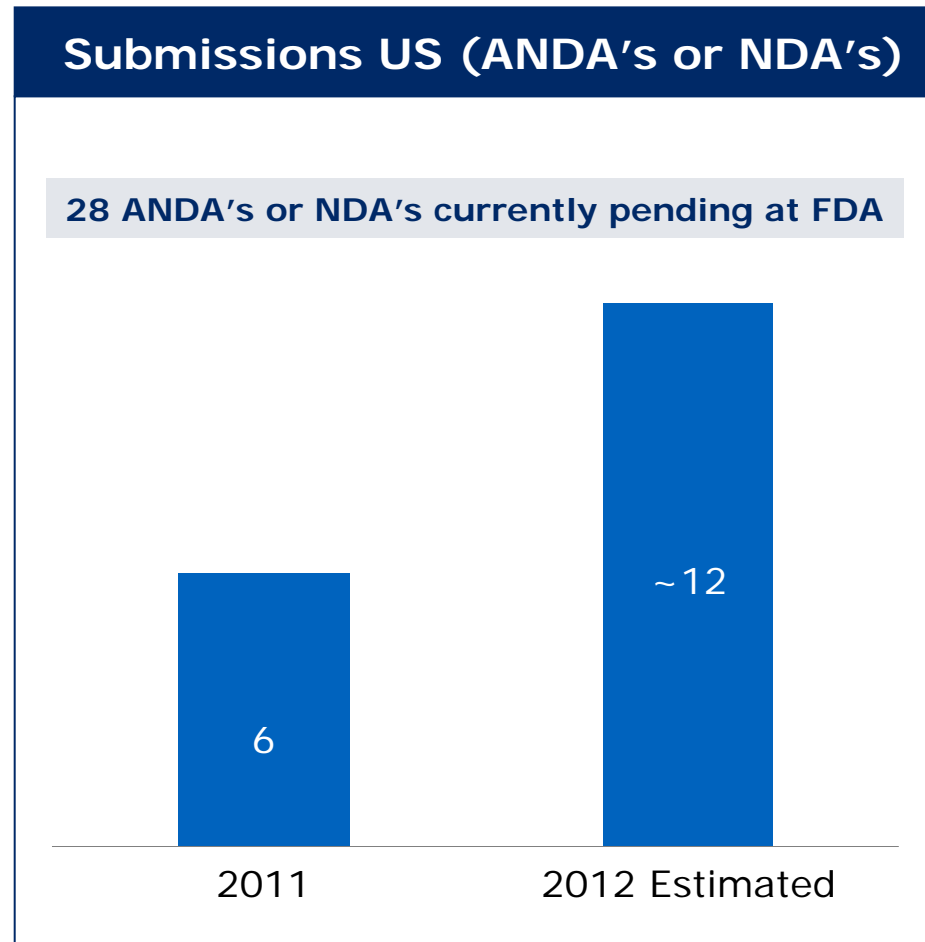


### **Key Success Factors...**

- Fast to market
- Breadth of portfolio
- Cost leadership
- Supply reliability
- Safety leadership
- Flexible approach to business environment
- Focus on 'generic plus' for better margins

# Growth Strategies

## Injectable Generics Product Pipeline



Fresenius Kabi Internal Analysis 2012

# US Drug Shortage

## A Short Term Opportunity



### ■ 87 Injectable generic drugs remain on shortage\*

### ■ Fresenius Kabi markets 29 of these molecules

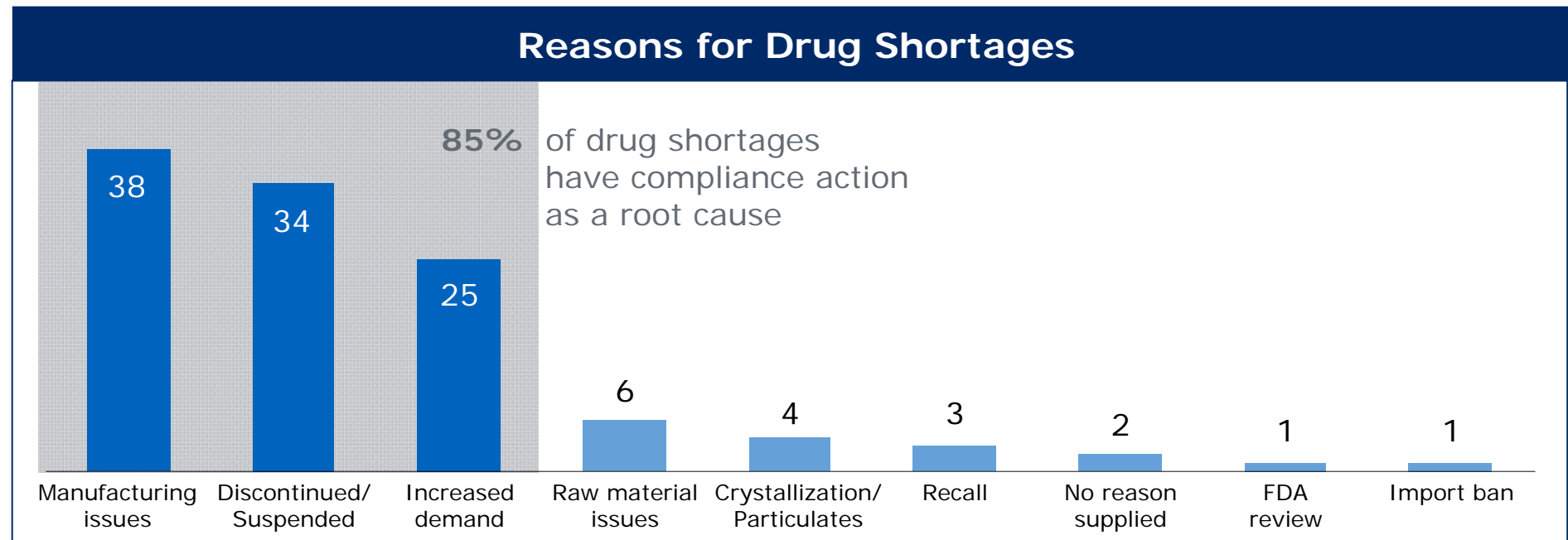
Alfentanil Injection	Fosphenytoin Sodium Injection	Ontak injection
Amikacin Injection	Ganite (gallium nitrate injection)	Orphenadrine Citrate Injection
Amino Acid Products	Hydromorphone Hydrochloride Injection	Oxytocin Injection, USP (synthetic)
Ammonium Chloride Injection	Intravenous Fat Emulsion	Paclitaxel Injection
Atropine Sulfate Injection	Ketorolac Injection	Pancuronium Bromide Injection
Bupivacaine Hydrochloride Injection	Leucovorin Calcium Lyophilized Powder for Injection	Pentostatin for Injection (Nipent)
Buprenorphine Injection	Leuprolide Acetate Injection	Phentolamine Mesylate for Injection
Butorphanol Injection	Levofloxacin Injection	Phytonadione Injectable Emulsion (Vitamin K)
Calcitriol 1 mcg/mL Injection	Levoleucovorin (Fusilev) 50 mg single use vials	Potassium Chloride Injection 2 mEq/mL
Calcium Chloride Injection	Lidocaine Hydrochloride Injection	Potassium Phosphate Injection
Chloroprocaine (Nesacaine) Injection	Lorazepam Injection	Procainamide HCL Injection
Chromic Chloride Injection	Magnesium Sulfate Injection	Prochlorperazine Injection
Cisplatin injection 1 mg/mL solution	Mannitol Injection	Promethazine Injection
Daunorubicin Hydrochloride Solution for Injection	Mesna 100 mg/mL Injection	Propofol Injection
Desmopressin Injection	Methotrexate Injection	Protonix (pantoprazole)
Dexrazoxane Injection	Methyldopate Injection	Selenium injection
Diazepam Injection	Metoclopramide Injection	Sodium Acetate Injection
Digoxin Injection	Midazolam Injection	Sodium Bicarbonate Injection
Diltiazem Injection	Mitomycin Powder for Injection	Sodium Chloride 0.9% (5.8mL and 20mL)
Diphenhydramine Hydrochloride Injection	Morphine Sulfate Injection	Sodium Chloride 23.4%
Doxorubicin (adriamycin) lyophilized powder	Morphine Sulfate Injection (Preservative Free)	Sodium Lactate Injection
Doxorubicin Liposomal (Doxil) Injection	Multi-Vitamin Infusion (Adult and pediatric)	Telavancin (Vibativ) Injection
Doxorubicin Solution for Injection	Mustargen (mechlorethamine HCl)	Thiotepa for Injection
Epinephrine Injection	Nalbuphine HCl Injection	Tobramycin Solution for Injection
Etomidate Injection	Naloxone Injection	Tromethamine Injection
Etoposide solution for injection	NeoProfen (ibuprofen lysine)	Vasopressin Injection
Fentanyl Citrate Injection	Ondansetron Injection 2 mg/mL	Vecuronium Injection
Fluorouracil Injection	Ondansetron Injection 32 mg/50 mL premixed bags	Vinblastine Sulfate Injection

\*Source: FDA Office of Drug Shortage, June 01, 2012

# US Drug Shortage Primary Causes and Outlook



- Fresenius Kabi has benefitted from a short-term boost in sales
  - Expected to normalize during 2012
- Fresenius Kabi is investing significantly in the long-term future of the business
  - Significant capacity expansion at our US production units
  - Grand Island Warning Letter (Feb 2012) is not expected to impact supply



Source: IMS report – “Drug Shortages: A closer look at products, suppliers and volume volatility.”

# Parenteral Nutrition

## Market Characteristics USA

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- High barriers to entry
- Starved of innovation
- Dominated by two established players
- Hospital business is consolidated and tender driven with complex bundles
  
- Significant opportunity to enter US\$240 m market for macro nutrients
- Standardization of macro substrates will require change in clinical practice and prescribing patterns – but market ripe for new entrant
- Approval timing unpredictable – new product category
- Kabiven will be the first 'All-in-One' macro nutrient solution in the US

# Parenteral Nutrition

## Update on Revenue Synergy Guidance



### Expected Timelines



- Kabiven approval and launch now only expected in 2013
- FDA approval delayed due to requirement of an additional handling study (as of March/April 2012) as Kabiven packaging is new to the US
- Previous guidance of €50 - 70m\* revenue synergies in 2013 can only be achieved with a time delay of one to two years
- Omegaven is a life-saving drug for children with Parenteral Nutrition Associated Livers Disease (PNALD)
- IIT\*\* data from leading US hospitals will be used to support fast track approval as an orphan drug

\*Synergy sales from the launch of Fresenius Kabi products in the Parenteral Nutrition and Medical Devices segments

\*\* IIT = Investigator Initiated Trial



# Parenteral Nutrition

## Parenteral Nutrition Product Pipeline



### THE COMPLEXITY OF Parenteral Nutrition



# Parenteral Nutrition

## Parenteral Nutrition Product Pipeline



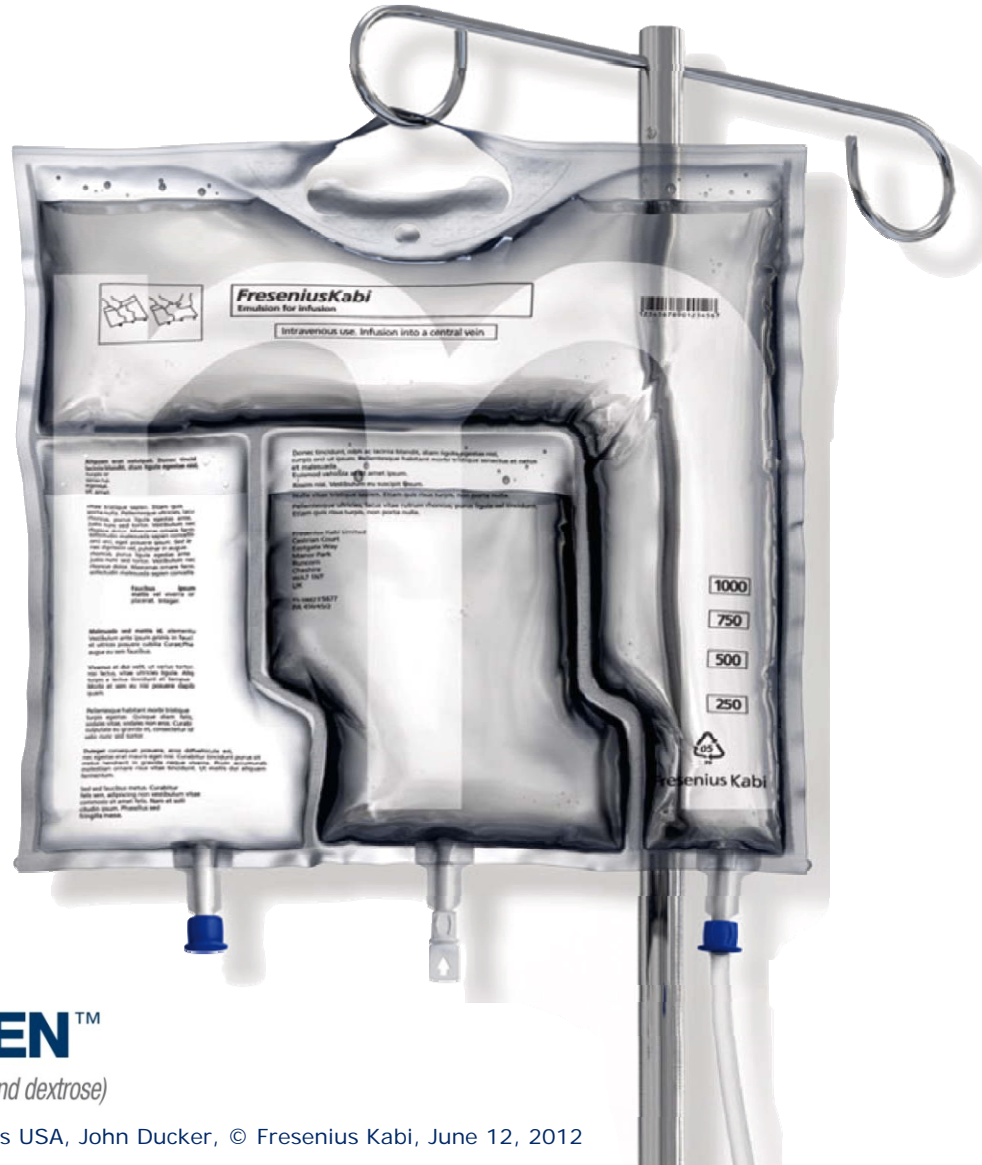
### THE FRESENIUS KABI SOLUTION



**KABIVEN™** | **PERI  
KABIVEN™**

*(lipid injectable emulsion with amino acids and electrolytes and dextrose)*

# Parenteral Nutrition Innovation Should Not be Complicated ...



**KABIVEN™** | **PERI KABI™**

*(lipid injectable emulsion with amino acids and electrolytes and dextrose)*

# Parenteral Nutrition Innovation Should Not be Complicated ...

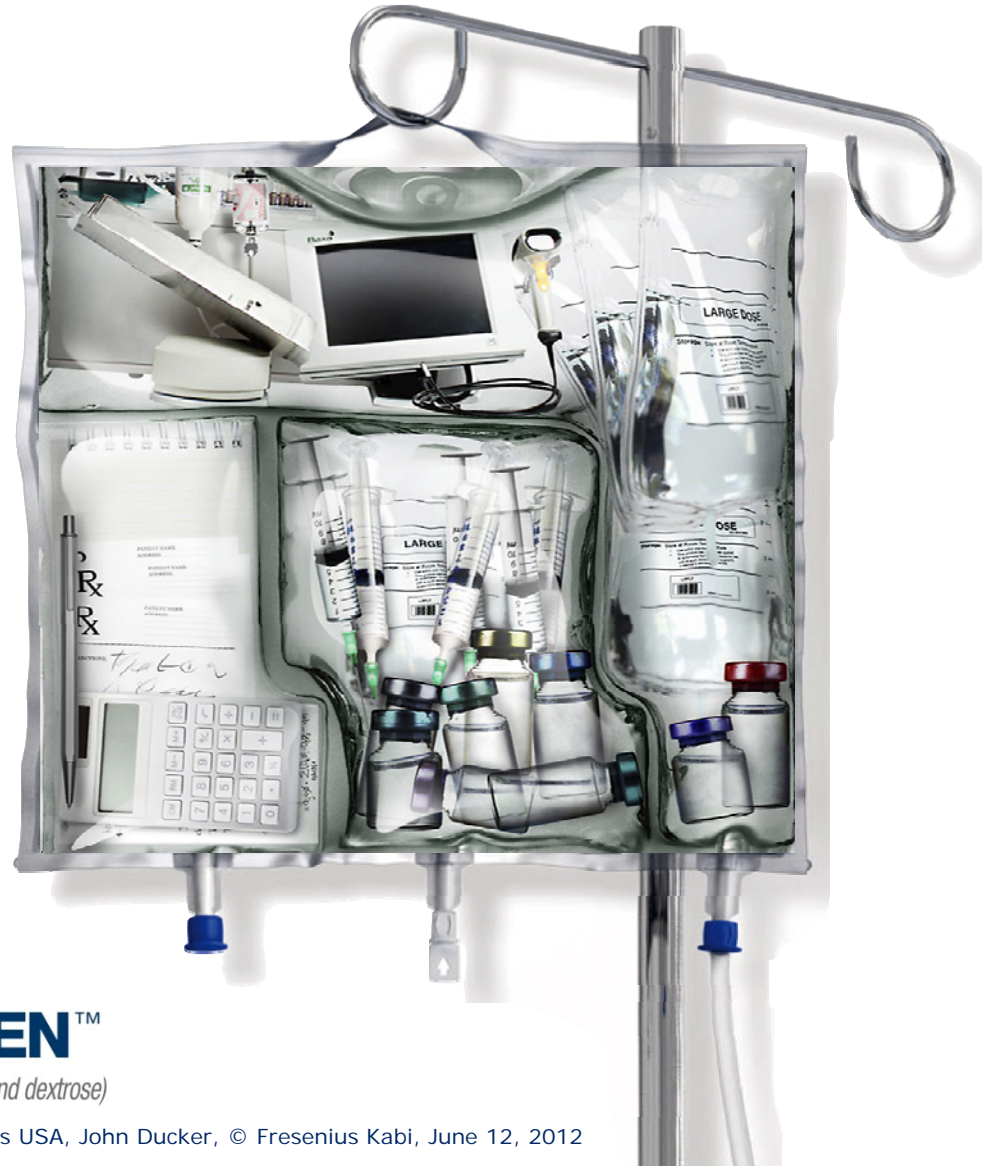


**KABIVEN™** | **PERI  
KABIVEN™**

*(lipid injectable emulsion with amino acids and electrolytes and dextrose)*



# Parenteral Nutrition Innovation Should Not be Complicated ...



**KABIVEN™** | **PERI  
KABIVEN™**

*(lipid injectable emulsion with amino acids and electrolytes and dextrose)*

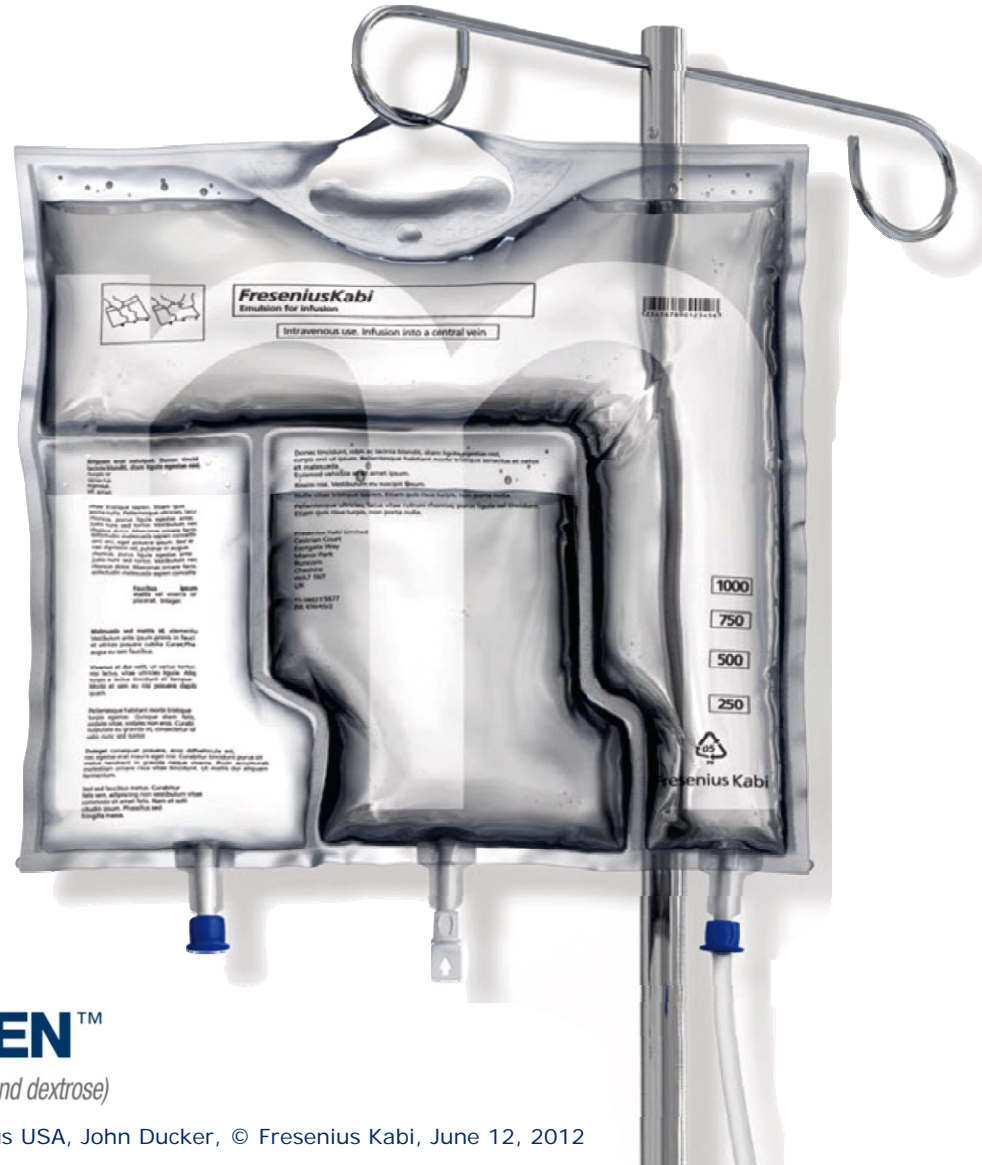
# Parenteral Nutrition Innovation Should Not be Complicated ...



**KABIVEN™** | **PERI  
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*(lipid injectable emulsion with amino acids and electrolytes and dextrose)*

# Parenteral Nutrition Innovation Should Not be Complicated ...



**KABIVEN™ PERI KABIVEN™**

*(lipid injectable emulsion with amino acids and electrolytes and dextrose)*

# Infusion Technology

## Market Characteristics USA

- Infusion pump and sets market of >US\$800 m is led by CareFusion
  - Significant quality and compliance issues for major competitors
- Installed base of >1 million pumps – the consumables business generates more than half of the market value
- Opportunity for a new market entrant with a strong international legacy in the segment
- Long sales cycle and complicated contracting models create barriers to entry
- Infusion pump recalls and adverse events have prompted a full review of the medical device regulatory processes in the US
  - FDA has released new guidance and significantly increased the clinical requirements for all new submissions, delaying approvals





# Infusion Therapy Medical Devices Product Pipeline



## AGILIA

- Intuitive
- Robust
- Reliable
- Stackable
- Versatile

May 28, 2012  
**510k Submission**  
**Agilia Volumat MC**

2013/2014  
Launch  
**Agilia Volumat**

Followed by  
**Agilia Injectomat**

Timelines contingent on FDA

# Fresenius Kabi USA

## Key Success Factors

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### **Continued success with 'First to Market' injectable generics**

- More 'first to files' with a focus on 'hard to do' formulations
- Continued business development success
- Expanded portfolio to offer novel presentations (convenience, safety)

### **Successful rollout of Fresenius Kabi core PN portfolio**

- Build a high performance team
- Achieve FDA NDA approvals
- Convert compounding practice to 'Ready to Use' – SIMPLIFY

### **Successful rollout of Fresenius Kabi Infusion Technology portfolio**

- Build an expert team
- Achieve FDA 510k approvals
- Successful marketing strategy: Capitalize on proven reliability of Agilia pump

## Safe Harbor Statement

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This presentation contains forward-looking statements that are subject to various risks and uncertainties. Future results could differ materially from those described in these forward-looking statements due to certain factors, e.g. changes in business, economic and competitive conditions, regulatory reforms, results of clinical trials, foreign exchange rate fluctuations, uncertainties in litigation or investigative proceedings, and the availability of financing. Fresenius does not undertake any responsibility to update the forward-looking statements contained in this presentation.

# Capital Market Day 2012

June 12, 2012



# Fresenius Kabi Strategy and Outlook

**Mats Henriksson**

Deputy Chairman of the Management Board

Capital Market Day Fresenius Kabi, June 12, 2012

# Fresenius Kabi

Strong Track Record Meets Strong Growth Prospects



## Fresenius Kabi in 2015

Sales: ~€5,500 m

EBIT: >€1,000 m



# Strategy for Growth

## Emerging Markets



### Dynamic Emerging Market Growth

Increase share of business in Asia-Pacific, Latin America and Africa from **29% in 2011 to 35 - 40% in 2015**

- ▶ Rollout of product portfolio
- ▶ Expand geographic footprint through selective acquisitions
- ▶ Continue to build the market for safety and convenience systems/concepts
- ▶ Focus on education and scientific training in order to build markets and improve medical practices

# Strategy for Growth

## Global Product Portfolio



### Geographic product rollout

#### Globalization of product portfolio

<b>Asia-Pacific:</b>	Enteral Nutrition, IV Drugs, Infusion Solutions and Medical Devices
<b>North America:</b>	Parenteral Nutrition and Medical Devices
<b>Latin America:</b>	IV Drugs, Clinical Nutrition, Infusion Therapy and Medical Devices
<b>Europe:</b>	Compounding, Enteral Nutrition and Medical Devices



# Strategy for Growth

## Strong Product Pipeline



### Robust pipeline in all product segments

Example patient Chris has been successfully treated with Fresenius Kabi products worth more than **€3,700**.

- ▶ Focus on first-to-market launch on patent expiry
- ▶ Combine our expertise in IV formulations, Clinical Nutrition and Medical Devices
- ▶ Active product life cycle management of the various product lines

# Strategy for Growth

## Increasing Demand for Generics



### Continuing Growth of Generics

Launch of **7 - 10 generic molecules per year** in addition to global rollout

- ▶ Provision of affordable products
- ▶ Products for safe and convenient use in the medical routine
- ▶ Sustainable business based on supply reliability, quality and cost leadership

# Strategy for Growth

## Consolidation in the Marketplace



### Market Consolidation

Excellent track record in concluding and integrating acquisitions. Over the last **5 years 23 acquisitions** have been executed and contributed sales of **€904 m.**

- ▶ Selective acquisitions in areas where the market is still fragmented
- ▶ Leading role in the consolidation process
- ▶ Global economies of scale and vertical integration

# 2012 and Mid-term Outlook

## Mid-term Outlook Fully Confirmed



	2012	Mid term
Organic Sales Growth	7 - 9%	7 - 10%
EBIT Margin	20 - 20.5%	18 - 21%

### Mid-term outlook fully confirmed

- Supported by strong business in all regions
- US EBIT margin to normalize to low 30ies
- Leverage cost structure
- Production efficiencies / volume effects to maintain gross margin

It is in the execution of a strategy  
where you see the difference



## Safe Harbor Statement

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# Capital Market Day 2012

June 12, 2012



## GLOSSARY

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### A

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**Additives**

Nutrient additions to parenteral nutrition solutions, e.g. electrolytes and water- and fat-soluble vitamins, and trace elements, e.g. iron, zinc, copper.

**Adjuvant**

Adjuvant therapy, also called adjuvant care, is a treatment that is given in addition to the primary, main or initial treatment.

**Alkaloid**

Alkaloids are a group of naturally occurring chemical compounds that contain mostly basic nitrogen atoms. Examples are the analgesic morphine and the anticancer compound vincristine.

**Ambix activ**

The Ambix activ system is designed for parenteral nutrition and antibiotic therapy. The Ambix activ electronic ambulatory pump, its dedicated infusion sets (for stationary application and for ambulatory application) and the backpacks offer a safe, user-friendly and comfortable application, specially adapted for mobile patients.

**Amino Acid**

Smallest element of a protein.

**Analgesic**

Medication used for pain relieve.

**Anesthetic**

Anesthesia drug which causes reversible loss of, e.g. sensory sensation. They contrast with analgesics, which relieve pain without eliminating sensation.

**Antibiotic**

Antimicrobial drug for treating bacterial infections.

**Antifungal**

Antimicrobial drug for treating fungal infections.

**Antimycotic**

Antimicrobial drug for treating of fungal infections.

**Antispasmodic Agent**

Drug against abnormal contractions, e.g. of intestinal organs.

**Antiviral Drug**

Antimicrobial drug for treating of viral infections.

**Apheresis**

A medical technology in which the blood of a donor or patient is passed through an apparatus that separates out one particular constituent and returns the remainder to the circulation.

**API (Active Pharmaceutical Ingredient)**

The substance in a medicinal product that is biologically active.

**Artificial Colloid**

A colloid is a substance which is dispersed in another medium (e.g. liquid).

Colloids not produced from blood, e.g. hydroxyethyl starch, gelatine or dextran, are called artificial colloids.

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### B

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**Benzodiazepine**

Drug with sedative, hypnotic and anxiolytic properties. Benzodiazepine antagonists are drugs used to completely or partially reverse the central sedative effects of benzodiazepines.



**Blood Processing System**

Disposables and equipment for the collection, processing and separation of human whole blood into its various components.

**Blood Volume Substitute**

Blood volume substitute for the therapy and prophylaxis of volume deficiency.

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**C**

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**Carbohydrate**

Organic compound consisting of carbon, hydrogen and oxygen. Examples are glucose and starch.

**CCU (Critical Care Unit)**

Ward for intensive diagnostics and treatment, e.g. in life-threatening conditions.

**Central Venous**

Infusion or pressure measurement via a catheter close to the right atrium of the heart.

**Cephalosporin**

Cephalosporins belong to the class of  $\beta$ -lactam antibiotics.

**CHMP**

The Committee for Medicinal Products for Human Use (CHMP) is the European Medicines Agency's committee responsible for preparing the agency's opinions on all issues regarding medicinal products for human use.

**Clinical Nutrition**

Parenteral and enteral nutrition.

**Colloid**

Blood and plasma substitutes.

**Colorectal Carcinoma**

Cancer of the distal intestine.

**Compounding**

Mixing of different components for intravenous administration (parenteral nutrition mixtures or IV drug preparations).

**Convulsion**

Medical condition in which the body's muscles contract and relax repeatedly in quick succession, resulting in an uncontrolled shaking of the body.

**Crystalloid**

Fluids containing electrolytes like sodium or chloride. Crystalloids are used for fluid therapy to replace lost fluids in patients. Moreover, crystalloids can be used as carrier solutions for intravenously administered drugs.

**Cystic Fibrosis**

Cystic fibrosis (also known as CF or mucoviscidosis) is a recessive genetic disease affecting most critically the lungs and also the pancreas, liver, and intestine. It is characterized by abnormal transport of chloride and sodium across the epithelium, leading to thick, viscous secretions.

**Cytostatic**

A cytostatic drug is a naturally occurring or synthetic compound with the ability to prevent the growth and proliferation of cells. Cytostatic agents can be used to treat cancer and autoimmune diseases.

**Cytotoxic**

Cytotoxic drugs act by directly killing cells.

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**D**

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**DEHP**

Diethylhexylphthalate, commonly abbreviated to DEHP, is the most important phthalate with plasticizing properties.

**Diarrhea**

An abnormal increase in the frequency and liquidity of stool.

**Dipeptide**

Peptide consisting of two amino acids.

**Disease Management**

Holistic concept of patient treatment taking into account all medical aspects associated with the disease.

**Dressing Set**

Set for wound care, e.g. plaster for fixation.

**Duodenal**

Relating to the duodenum (upper part of the intestine/small bowel).

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**E**

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**Electrolytes**

Essential minerals (e.g. sodium, potassium, chloride, magnesium, phosphate).

**Enteral Nutrition**

Administration of liquid nutrition as sip or tube feed via the gastrointestinal tract.

**Ethylene Glycol**

Additive for synthesizing hydroxyethyl starch (HES).

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**F**

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**FDA (U.S. Food and Drug Administration)**

Official authority for food observation and drug registration in the U.S.

**Feeding Pump**

Medical pump to administer enteral nutrition.

**Fistula**

Abnormal tubelike passageway within body tissue, usually between two internal organs/tissues or leading from an internal organ/tissue to the body surface.

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**G**

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**Gastric Button**

Special feeding tube for direct access to the stomach.

**Gastrointestinal Tract**

The gastrointestinal tract comprises all structures and organs between the mouth and the anus, the major parts being the stomach and intestines.

**Giving Set**

Mostly tubing sets to transfer solutions from one container to another or from a container to the patient.

**Glucose**

A monosaccharide sugar that is one of the most important carbohydrates.

**Glutamine**

A conditionally essential amino acid that plays an important role for critically ill patients. Glutamine strengthens the immune and other cellular defense systems, thus helping to improve clinical outcome.

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**H**

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**Hemolysis (or Haemolysis)**

Rupturing of erythrocytes (red blood cells).

**Hemostasis (or Haemostasis)**

Process to stop bleeding from damaged blood vessels in case of injury.

**HES** (hydroxyethyl starch)

Our HES products are derived from waxy maize starch. HES solutions are primarily used for the prevention and treatment of hypovolemia (to substitute a blood volume deficiency).

**Hydrolysis**

A chemical process in which a molecule is cleaved into two parts adding a water molecule.

**Hypovolemia** (or Hypovolaemia)

Blood volume deficiency.

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**I**

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**ICU**

Intensive Care Unit.

**Infusion Disposables**

Single-use medical devices for administering infusion solutions or IV drugs to a patient.

**Infusion Management System**

A modular infusion system consisting of infusion and syringe pumps to allow simultaneous administration of different intravenous drugs/infusion solutions and at the same time record the infused volume.

**Infusion Solution**

Intravenously administered solutions to compensate a loss of fluids and regulate the electrolyte and acid-base status.

**Infusion Therapy**

Administration of drugs directly into the blood stream (intravenous administration).

**INN** (International non-proprietary name)

Official non-proprietary or generic name given to a pharmaceutical substance, as designated by the World Health Organization (WHO).

**Intestinal**

Relating to the bowel.

**IV**

Intravenous.

**IV Drug**

Intravenously administered drug, e.g. anesthetics, antibiotics, anti-infectives, etc.

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**J**

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**Jejunal**

Relating to the jejunum (middle part of the intestine/small bowel).

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**L**

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**LCT** (Long-Chain Triglyceride)

Triglyceride containing fatty acids with 16 or more carbon atoms. LCTs in parenteral lipid emulsions and enteral feeds provide energy and essential fatty acids.

**Lipid Emulsion**

Lipid emulsions are elements of parenteral nutrition and primarily provide energy and essential fatty acids.

**Lyophilization**

A dehydration process typically used to preserve a perishable.

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**M**

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**Malnutrition**

Imbalance between nutritional needs and nutritional intake that covers both under- and over-nutrition. Undernutrition is a poor nutritional condition due to either an energy expenditure exceeding energy uptake or a deficiency of certain nutrients. Overnutrition is caused by a food

uptake exceeding energy expenditure and may result in obesity.

#### **MCT (Medium-Chain Triglycerides)**

Triglycerides containing fatty acids with 8 to 14 carbon atoms. Parenteral lipid emulsions and enteral feeds contain MCTs to rapidly provide energy.

#### **Morbus Crohn**

Chronic inflammation of the gastrointestinal tract, most commonly the bowel.

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## N

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#### **Neoadjuvant**

In oncology, neoadjuvant therapy is the use of therapeutic agents before a main treatment. This treatment aims to reduce the size or extent of the cancer before using radical treatment intervention, thus making the procedure more likely to be successful.

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## O

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#### **Omega-3-Fatty-Acids**

Long-chain polyunsaturated fatty acids, in particular  $\alpha$ -linolenic acid (LA) derived from plants and eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) that are found especially in fish oil.

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## P

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#### **Parenteral Nutrition**

Administration of nutrients directly into the patient's blood stream (intravenously).

#### **PEG-Tube (Percutaneous Endoscopic Gastrostomy)**

Percutaneously placed feeding tube for the administration of enteral nutrition.

#### **Percutaneous**

Effected or performed through the skin.

#### **Peripheral Venous**

Concerning a venous vessel not close to the heart.

#### **Phospholipids**

Lipids consisting of a hydrosoluble and a liposoluble part, which can therefore be used as emulsifiers, e.g. for manufacturing lipid emulsions.

#### **Polyunsaturated Fatty Acids**

Fatty acids with more than one double bond in the carbon chain.

#### **Port**

A fully implantable subcutaneous small port housing with membrane and catheter for chemotherapy, infusion therapy, parenteral nutrition, etc.

#### **Pseudo-obstructive Gut Disease**

Digestive disorder. The intestinal walls are unable to contract normally to generate wave-like motion. This condition resembles a true obstruction, although there is no blockade.

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## S

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#### **Sedation**

Drug induced calming effect in patients by reversible and temporary suppression of the central nervous system activity.

#### **Sepsis**

Medical condition characterized by an inflammatory reaction of the whole body to a known or suspected infection through bacteria, their toxins, viruses, parasites or fungi. A lay term for sepsis is blood poisoning.

### **Syringe Pumps**

Electronic pumps for dosing solutions precisely with a syringe as a source container.

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## **T**

### **Taxanes**

Diterpenes originally derived from the bark of yews. Substitutes for this family of substances, such as paclitaxel and docetaxel, are used in cancer therapy.

### **TCI**

Target-controlled infusion, e.g. of propofol.

### **Three-chamber Bag**

A product for parenteral nutrition, containing the macro-nutrients, amino acids, glucose, and lipids in three separate chambers, with or without electrolytes. Immediately before infusion the peel seals separating the individual chambers are opened and all nutrients are mixed thoroughly within the bag.

### **TIVA**

Total intravenous anesthesia.

### **Transfer Set**

Connects a container with a body access system. It is used, for example, to administer enteral and parenteral nutrition as well as for volume therapy.

### **Transfusion Technology**

Technology used to donate, prepare and administer blood components.

### **Transnasal Tube**

Nutrient tube (ending in the stomach or intestine) introduced via the nose.

### **Triglyceride**

Neutral fat; consisting of three fatty acids linked to glycerol.

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## **V**

### **Virostatic Agent**

Chemical substances for treating virus-related infections.

### **Volume Therapy**

Infusion therapy to maintain or restore the circulating blood volume.

### **Volumetric Pump**

Electronic pumps for highly accurate intravenous infusion of fluids, drugs or parenteral nutrition (volumetric-based).

### **Vomitus**

Term derived from Latin, medically known as emesis (throwing-up).

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