Sandoz – A Leader in Generics

London, October 9, 2003

The following information contains certain "Forward-looking Statements" relating to the Company's business, which can be identified by the use of forward-looking terminology such as "will" or "expect", or by discussions of strategy, plans, intentions or potential outcomes. Such statements include descriptions of the Company's investment and research and development programs and anticipated expenditures in connection therewith; descriptions of new products or new indications for existing products expected to be introduced by the Company and anticipated customer demand for such products and for products in the Company's existing portfolio; and discussions of potential future sales revenues, profits or other financial results. Such statements reflect the current views of the Company with respect to future events and are subject to certain risks, uncertainties and assumptions. There can be no guarantee that any product or potential new indication will be commercialized in any market. Nor can there be any guarantee that Novartis will achieve any particular level of financial results in the future. Many factors could cause the actual results, performance or achievements of the Company to be materially different from any future results, performances or achievements that may be expressed or implied by such forward-looking statements. These factors can be found in the Company's Form 20-F filed with the Securities and Exchange Commission and include, among other things, unexpected regulatory delays, uncertainties relating to clinical trials and product development, the introduction of competing products, increased government pricing pressures, and the Company's ability to obtain or maintain patent and other proprietary intellectual property protection. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. The information presented in this handout represents management's expectations and intentions as of October 9, 2003. Novartis expressly disavows any obligation to update the information presented in this program.

Agenda

• Novartis – focused on medicine	R. Breu
• Sandoz – a leader in the Generics marketplace	C. Seiwald
• Sandoz US – building leadership	J. Sedor
• Sandoz – conclusions	C. Seiwald
• Q&A	Panel

Novartis – Focused on Medicine

Raymund Breu
CFO Novartis

London, October 9, 2003

Focus on Medicines with Pharmaceuticals at Its Core

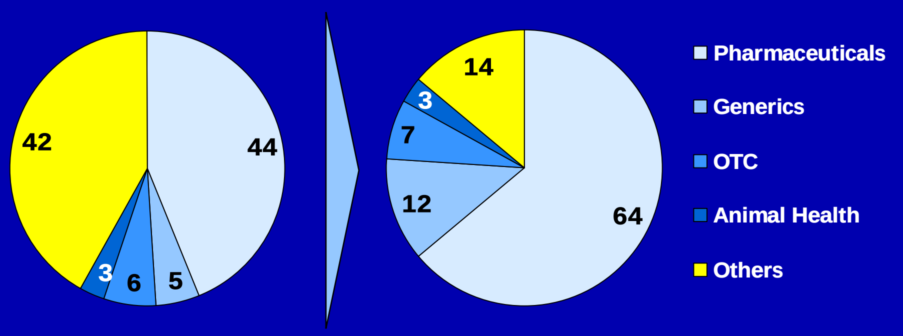
- Medicines includes Pharmaceuticals, Generics, OTC and Animal Health, accounting for
  - 86% of sales and
  - 91% of operating income in the first half of 2003
- Healthcare[1] market segment position up one rank from #6 to now #5 with 4.41%
- Top-tier Generics player with #2 position

[1] 1H/03 vs. 1H/02 incl. Generics and some OTC (source: IMS-MIDAS, 45 countries at constant exchange rates)

Novartis Portfolio Shift Towards Medicines

1996: 58% of sales in Medicines

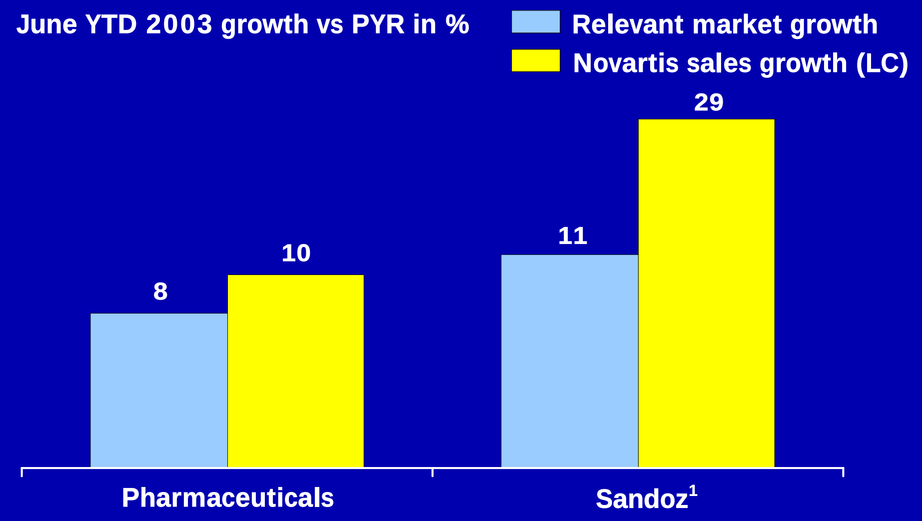
1H 2003: 86% of sales in Medicines



Outgrowing the Healthcare Market, Increasing Market Segment Share, Up One Rank

Source: IMS-MIDAS, 45 countries at constant exchange rates

Highest Growth Rates in Pharma and Generics, Outperforming Their Markets



[1] Excl. Lek acquisition; reported growth is +71%

Source: IMS 16 countries, YTD June 2003/2002 and internal market research

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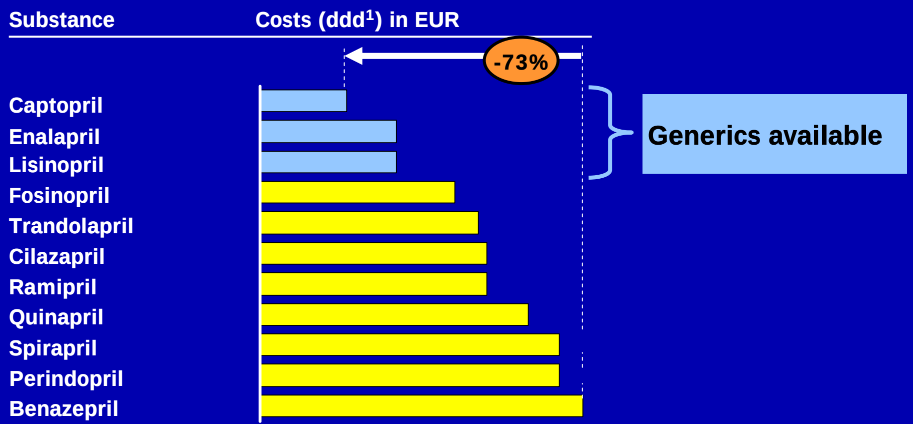
Generics Provide Cost-Effective Treatment Alternatives – Example ACE-Inhibitors Germany

Comparison of treatment costs (ACE-Inhibitors Germany)



[1] ddd=daily drug dosing

Source: Lauertaxe, McKinsey

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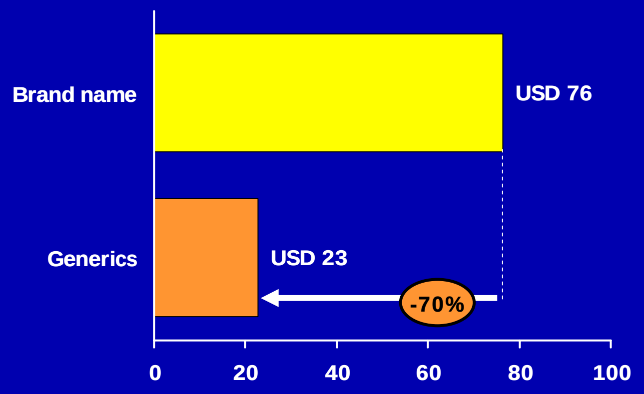
The Average Price of Generic Prescription Drugs Is about 70% Below Branded Drugs

Average price of prescription drugs in the US in USD



Source: Generic Pharmaceutical Association

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Generics Is an Attractive Business

- **Strong fundamentals**
  - Pro-generic sentiment from healthcare authorities
  - Patent expiries
  - Increasing penetration of generics
- **Attractive business model**
  - Highest growth rates in Healthcare market expected: CAGR +8.9% from 2003-2008
  - Solid profitability

Source: IMS and internal estimates, excluding biopharmaceuticals

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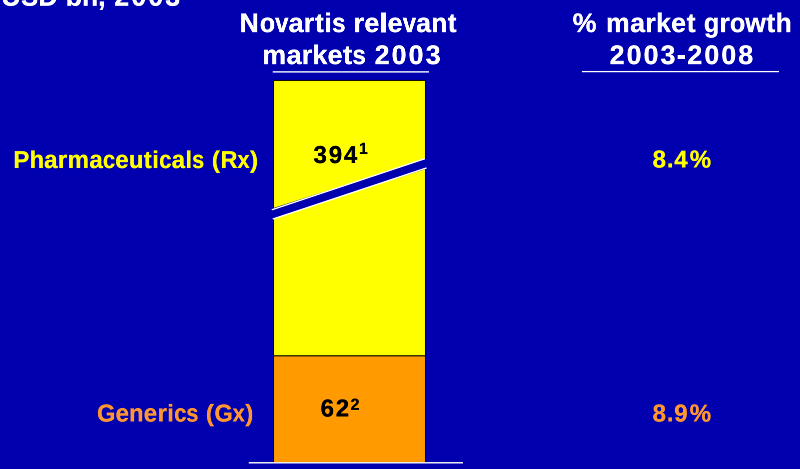
Pharmaceuticals and Generics Are Expected to Continue Fast Growth

USD bn, 2003[1]



[1] IMS and internal estimates
[2] IMS and internal estimates; before rebates, at ex-manufacturer price level, excl. Biopharmaceuticals

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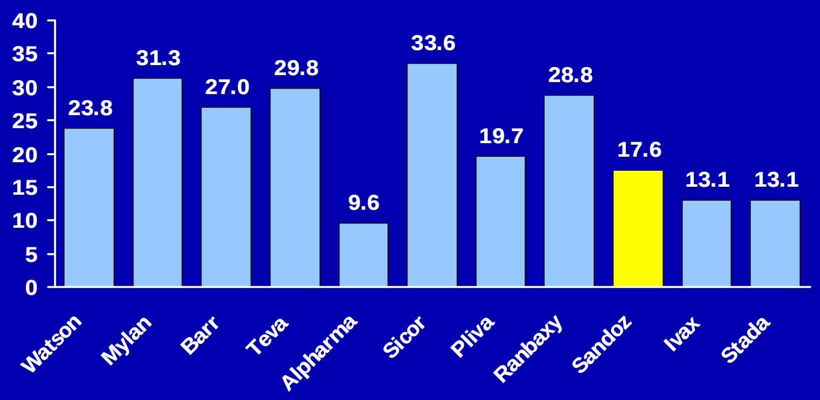
Overall Attractive Operating Profitability

Return on sales, first half 2003
in %



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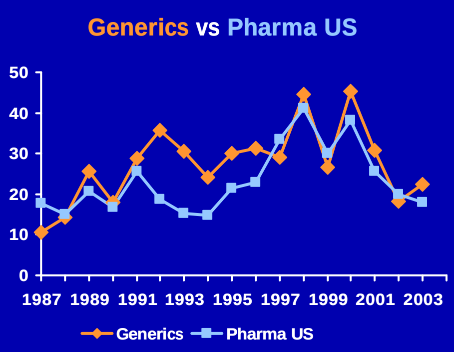
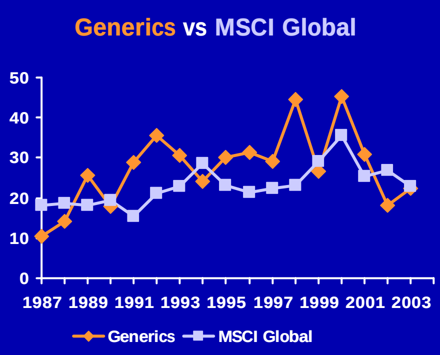
Attractive Growth and Profitability Are Reflected in High Valuation Multiples

P/E comparison





Source: Reuters Plus, UBS Warburg and JP Morgan estimates

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Generics Offer Significant Synergy Potential With Branded Pharmaceuticals

- Knowledge pooling
  - Disease and product know-how
  - Development expertise
  - Regulatory credibility
  - Customers
- Supply chain synergies
  - Cost leadership
  - Production / fermentation capabilities
  - Quality and supply security
- Product transfers

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Novartis Is Uniquely Positioned

- Top-tier global player in Pharmaceuticals and Generics
- Growing faster than the market in both segments
- Leveraging core competencies in medicines
- Credible partner in healthcare regulatory discussions

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Sandoz – Conclusions

Christian Seiwald
CEO Sandoz

London, October 9, 2003

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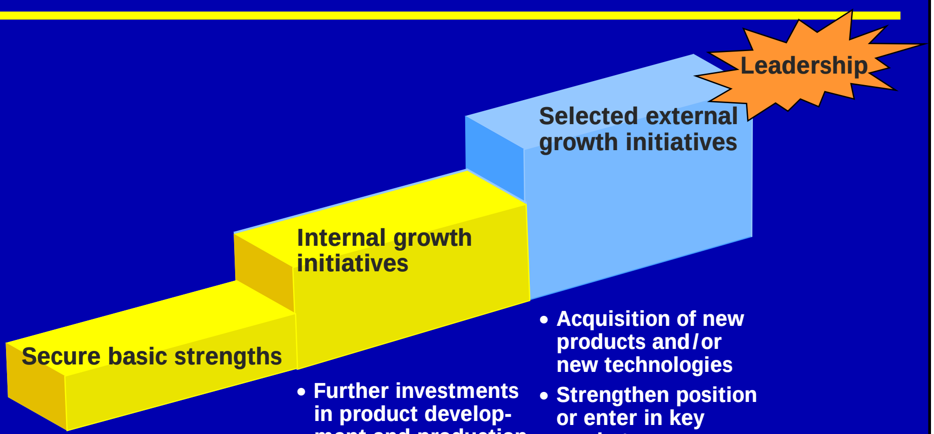
Leadership Will Be Achieved by Internal and Selected External Growth Initiatives



- Global presence
- Strong brand
- Wide product range
- Sales and distribution
- Cost competitiveness

- Further investments in product development and production
- Timely product launches
- Biopharmaceuticals launch

- Acquisition of new products and/or new technologies
- Strengthen position or enter in key markets

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Promising Outlook for Sandoz

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- Fast growing generics market: CAGR 03-08 of about 9%E
- Sandoz expected to continue outgrowing the market, leveraging global tier 1 position
  - Promising pipeline for retail generics
  - Further expansion of market leadership in anti-infectives
  - Well positioned as first mover to become a leading bio-generic player
- Targeted margin: 15% plus, depending on new product launches

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Sandoz – A Leader in Generics

Sandoz US – Building Leadership

John Sedor
Head Sandoz US

London, October 9, 2003

Agenda

- US Generics market situation
- Sandoz US position and business results
- Sandoz strategic initiatives in US

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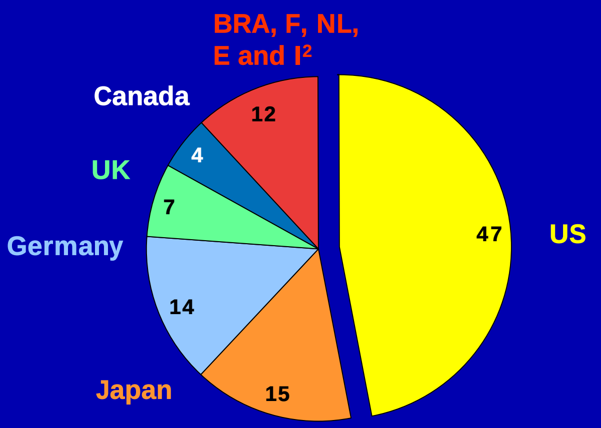
US Is Biggest Generics Market with USD 11.7 billion Sales in 2002

Size of top 10 retail generic markets, 2002, excl. China and India[1]
in %



[1] Retail according to IMS at ex-manufacturer prices; before rebates; excluding China and India
[2] Brazil USD 1.2 bn, Netherlands USD 0.7 bn, France USD 0.5 bn, Spain USD 0.3 bn and Italy USD 0.2 bn
Source: IMS Health, internal estimates

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Regulations and Fast Generics Penetration Favour US Market

Drivers	Comment
Key Rx-products come off patent	• Blockbusters with sales value of ~USD 22 bn expire by 2006 (based on 2002 US sales)
Public healthcare policy	• Healthcare reform encourages wider use of drugs • Growing healthcare cost is increasingly borne by public financing[1]
Fast generics substitution	• US patients benefit from fast generic penetration when branded drugs come off-patent
Ongoing market consolidation	• Top four generic manufacturers‘ market shares increased over past years; further consolidation likely • Further consolidation on customer side expected

[1] Public HC expenditure in % of GDP: 4.9% in 1990, 5.8% in 2000
Source: Sandoz internal data, Deutsche Bank (European Generics), April 2002, World market research database

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Numerous Blockbusters to Come Off-Patent by 2006

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Worldwide leading brands US[2] expiring by end 2006, sales US for 2002 in USD m

Source: IMS World Review, [1]IMS PADDS, [2] leading in 2000, IMS Life Cycle Patent Focus

* Hemihydrate ** Method patent ®/TM Are registered trade marks from third parties

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US Healthcare Regulations Have Changed Over Time

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1984 Hatch-Waxman Act

- Generic companies allowed to file an ANDA with bioequivalence studies only
- Paragraph I (no patent filed), P. II (patent expired), P. III (request for launch after patent expiry), P. IV (patent challenge)

2000

- Exclusivity triggering event moved from Court of Appeals decision to District Court decision (faster Gx entries)

2002

- Court decisions make it harder for innovator companies to list certain patents in the Orange Book (section viii statements strengthened)

2003

- FDA new rule (effective August 18, 2003) limits patent holder to one 30-month stay per product

2004

- Proposed Hatch-Waxman reform (still under debate in Congress):
  - Will reduce the legal risks on product launches for generic with exclusivity
  - Will expand concept of co-exclusivity for first filers

Source: Sandoz internal data, FDA

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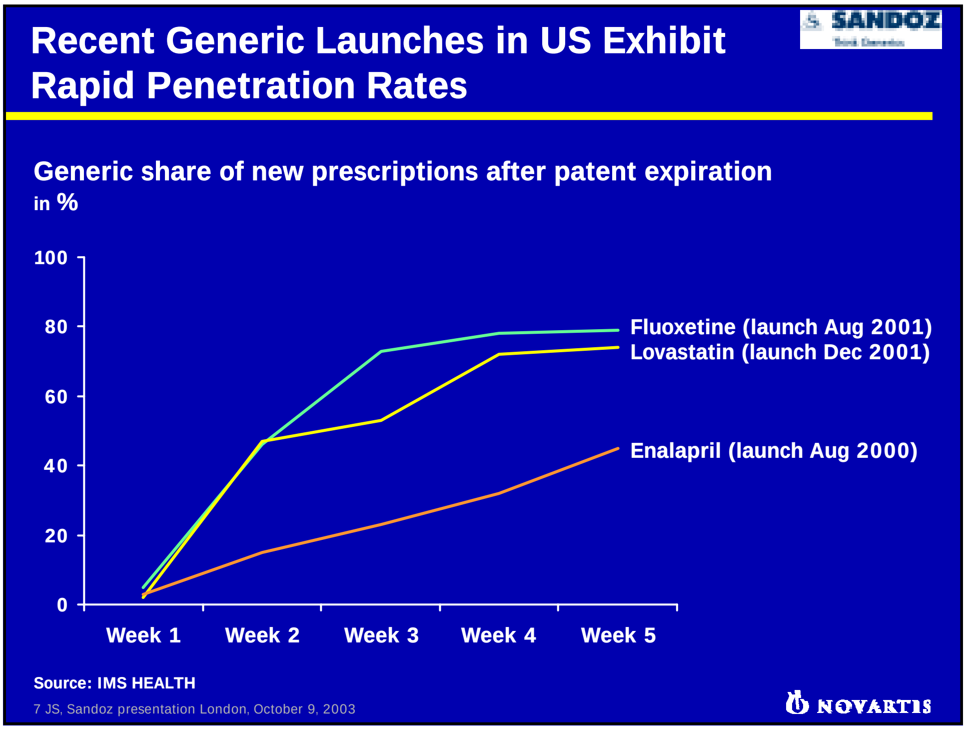

Recent Generic Launches in US Exhibit Rapid Penetration Rates
SANDOZ
Generic share of new prescriptions after patent expiration
in %
100
80
60
40
20
0
Week 1
Week 2
Week 3
Week 4
Week 5
Fluoxetine (launch Aug 2001)
Lovastatin (launch Dec 2001)
Enalapril (launch Aug 2000)
Source: IMS HEALTH
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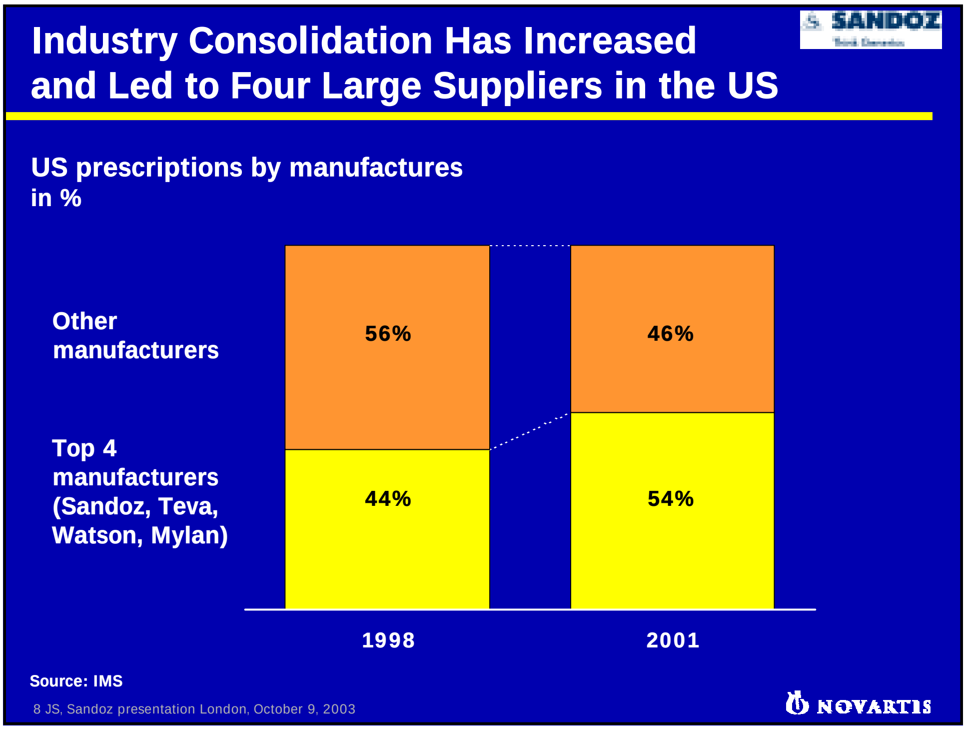

Industry Consolidation Has Increased and Led to Four Large Suppliers in the US
SANDOZ
US prescriptions by manufactures
in %
Other manufacturers
Top 4 manufacturers (Sandoz, Teva, Watson, Mylan)
56%
44%
46%
54%
1998
2001
Source: IMS
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Consolidation on Retail Side Significant

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Chain Drug[1]

	1990 # stores	1990 customers	2003 # stores	2003 customers
Traditional	16,970	> 120 customers	19,447	12 customers cover about 90% of channel
Food	1,336		8,171	
Mass	2,451		6,197	
	20,752		33,815	

Distributors/wholesalers

	1990 # wholesalers	2003 # wholesalers
	> 100	3 wholesalers control 95% of channel

[1] NACDS Association

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Agenda

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- US Generics market situation
- Sandoz US position and business results
- Sandoz strategic initiatives in US

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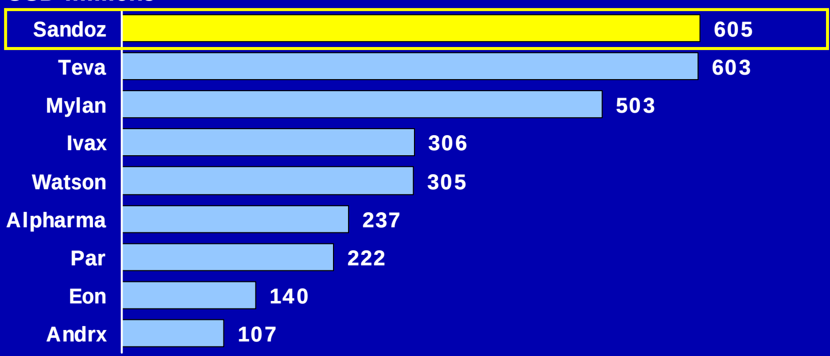
Sandoz Generated Strong Sales in the US...

Net sales, 1H 2003 actual
USD millions



Andrx – Total generic sales
Eon – Total sales
Par – Total sales
Alpharma – US Human pharma sales (includes some brands)
Ivax – Total North American pharma. sales
Watson – Total generic sales
Mylan – Total generic sales
Sandoz – Total US Sandoz/Lek sales
Teva – Total North American sales, less US Copaxone sales

Source: Sandoz internal data, company earnings press releases and SEC filings

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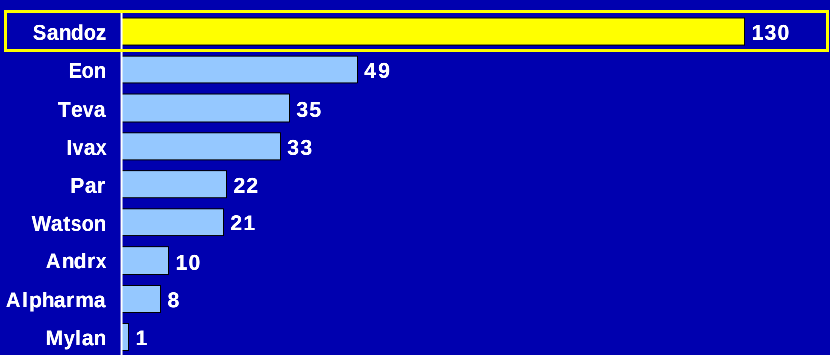
... and Grew Faster Than the Market in the First Half 2003

USD sales growth, first half 2003 vs. first half 2002
in % USD



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Teva – Total North American sales, less US Copaxone sales

Source: Sandoz internal data, company earnings press releases and SEC filings

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Good Results Due to Broad and Well Positioned Product Portfolio

- Sandoz US is broadly positioned
- Over 100 products on the market, covering multiple therapeutic areas
  - 33 products rank #1 in market segment share
  - 33 products rank #2 in market segment share

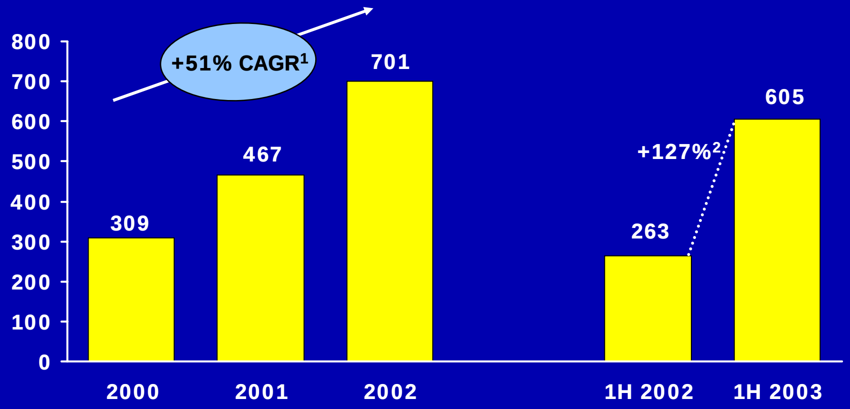
Source: IMS Health NPA Plus Q2-2003

Key Strengths of Sandoz US...

Sales and distribution	• Excellent position with strategic accounts: 16 key accounts represent 90% of Sandoz sales in 1H 2003 • High service levels (> 90%)
Wide product range	• Recent launches of e.g., AmoxC (first to market and highest market share) and omeprazole (non infringement) • Leading role in anti-infectives • Extended reach in non core areas via BD&L
Cost leadership	• One of the largest solid oral dosage facilities in the world (Broomfield, CO) • Integrated supply of active pharmaceutical ingredients
Innovation leadership	• Fermentation expertise • Extensive know-how in bio-generics • Worldwide R&D resources and capabilities

… Translate into Sustained Sales Expansion

Net Sales
USD millions



Note: Includes Lek US sales data for 2003
[1] 2000 to 2002
[2] LC Growth Rate

Case Study Generic AmoxC – Sandoz Launched First in July 2002

Situation US:

- Augmentin® patent expired in US in December '02 with additional patents extending past 2017
- Latest full year of US originator sales (in 2001) of 1.6 bn USD

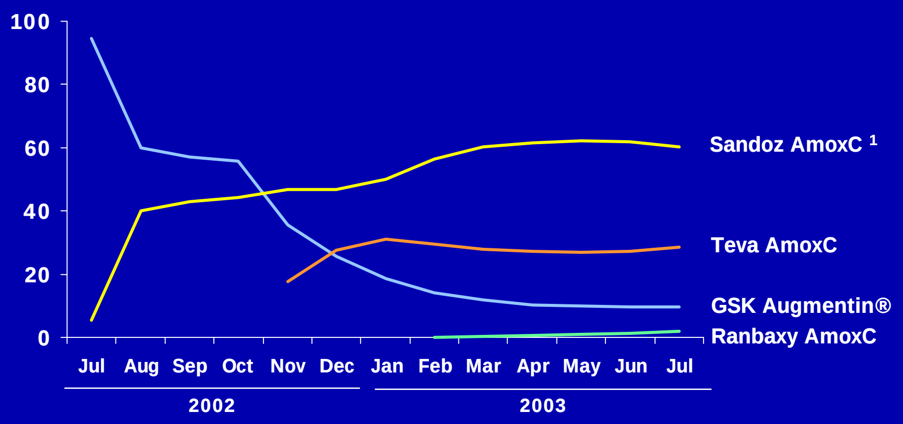
Sandoz approach:

- Launch of first generic version by Sandoz July 2002, after District Court decision supporting Sandoz view of invalidity of respective patents.
- Sandoz with significant, steady share of total AmoxC US prescriptions: ~60% (including Lek launch) as of July 2003
- ITC lawsuit with GSK settled in July 2003
- Business outlook 2H 2003 in US:
  - New entrance of Ranbaxy in 1H 2003
  - Further competitors possible in 2004

Source: IMS Health National Sales Perspective

Sandoz AmoxC Reached Over 60% Prescription Share Despite Increasing Competition

Share of total US AmoxC prescription in %



[1] Geneva and Lek ® Registered trademark of GlaxoSmithKline
Source: IMS

Case Study Omeprazole

Situation:

- Total US omeprazole originator (Prilosec) sales of USD 3.4 bn in 2002
- Generic omperazole opportunity estimated about USD 2 bn p.a.[1]
- Original Prilosec key patents from Astra Zeneca (AZ) will expire in '07
- Sales of generic versions started in December '02 by Kudco:
  - Among first wave litigants Kudco was only company who has been granted non patent-infringing judgment by District Court
  - Mylan announced launch of generic omeprazole despite unresolved legal dispute with AZ on August 4, 2003
  - Other generic challenges are expected

Sandoz approach:

- Sandoz assessment of strong non-infringement position, also supported by District Court decision
- Received FDA final approval on Jan 28, 2003
- Launched mid August 2003 with Lek ANDA (manufactured in Slovenia for US market)

[1] For 10 and 20 mg capsule market at its current originator sales rate

Agenda

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- Sandoz strategic initiatives in US

Strategic Initiatives to Strengthen US Business

- Improve customer structure
- Increase number of ANDA filings in upcoming years; entire US branded off patent portfolio out to 2012+ reviewed for inclusion
- Continue successful launches of new products such as AmoxC and omeprazole
- Capitalize on efficient US R&D and manufacturing capacities and capabilities
- Continue and accelerate Business Development & Licensing partnerships

Retail Is the Largest Channel with 62% of US Prescription Sales

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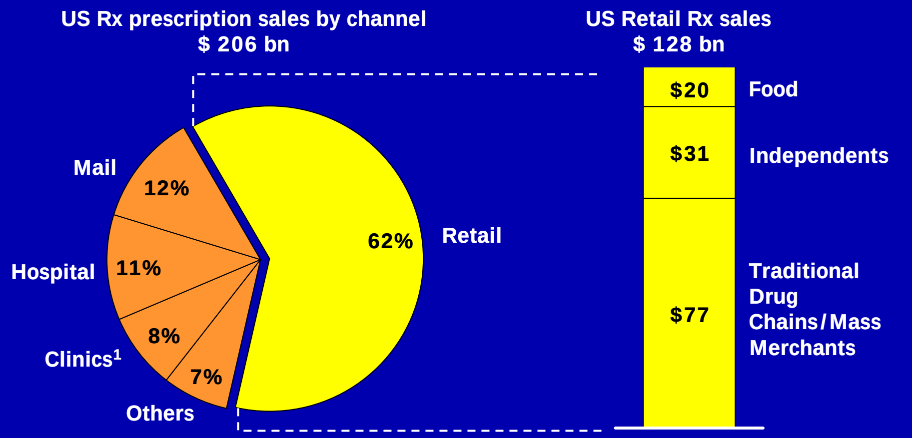
2002, market size
in bn USD



[1] outpatient facilities
Source: IMS Health, National Sales perspective

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Sandoz Goal Is to Increase Share of Retail Chains and Mail Order Customers Further

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Sandoz US customer strategy:

- Further increase sales to retail chains and mail order customers
  - Retail chain: large market
  - Mail orders: fast growing
  - Efficient and low cost distribution structure
  - Customers with significant market share[1]
- Strengthen relationship with key strategic accounts

[1] E.g, Walgreen = ~11% of US market
Source: Sandoz internal data

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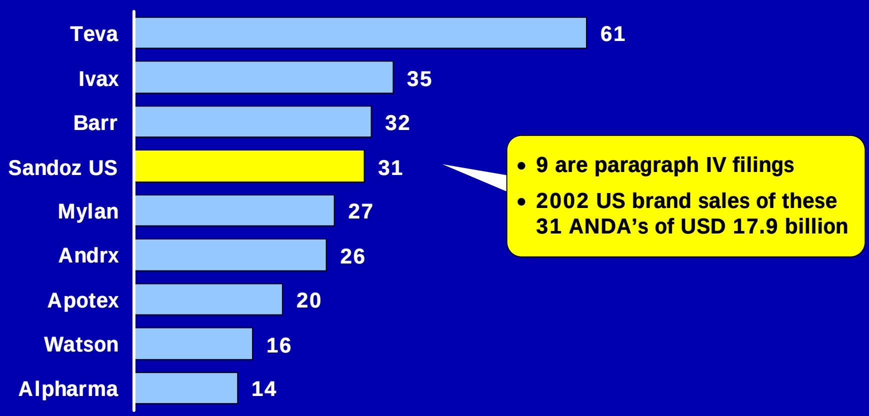
Key Product Launches 2003 Year to Date

Product	Launch Date	Originator Brand	Market size* (USD million)
Loratadine	Jan-03	Claritin	USD 1.8 bn
Omeprazole	Aug-03	Prilosec	USD 3.4 bn
Ribavirin	Pending	Rebetol	USD 800 m

Source: IMS, 2002 sales

Sandoz Pending ANDAs Year-End 2002

Number of ANDAs pending YE 2002



Note: Some competitors count different strengths separately
Source: Analyst reports, company web-sites, company press releases

Sandoz US Well Positioned

- Successful launches of new products such as AmoxC and omeprazole
- 16 strategic key accounts represent 90% of Sandoz US Sales in 1H 2003
- 31 ANDA filings in the pipeline
- 9 of these 31 ANDAs are paragraph IV filings
- Targeted total US brand sales 2002: USD 17.9 billion

Sandoz – a Leader in the Generics Marketplace

Christian Seiwald
CEO Sandoz

London, October 9, 2003

Agenda

- Generics market dynamics
- Sandoz strategy
- Sandoz market position and performance

Generics Market[1] Is Worth USD 57 bn and Accounts for 13% of Total Healthcare Market

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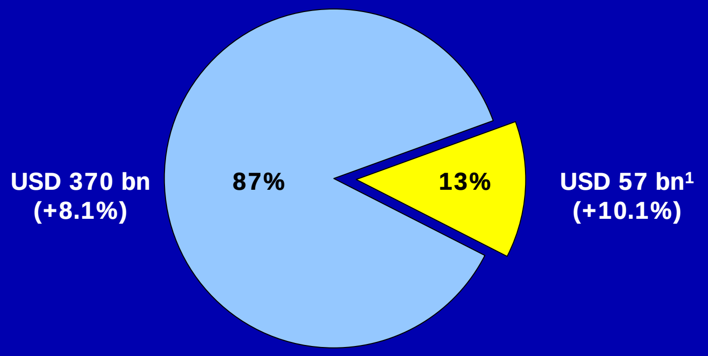
Retail Generics market as percentage of total healthcare market, 2002

Generics market
Rx+OTC market

World-wide healthcare market: USD 427 bn



[1] Retail Generics excl. biopharmaceuticals, according to IMS at ex-manufacturer price level, before rebates
Source: IMS Health (Rx and OTC), internal estimates (Gx)

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US Accounts for Over 20% of Retail Generics Market[1] ...

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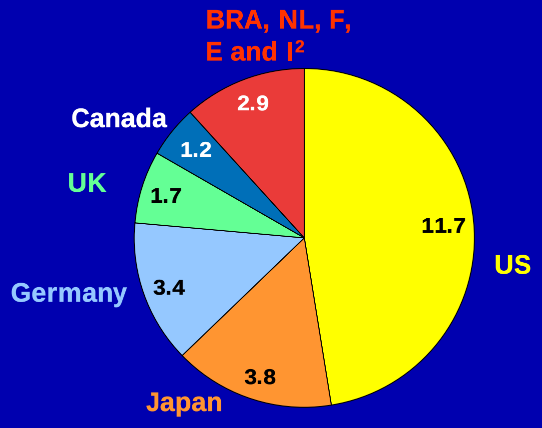
Size of top 10 retail generic markets, 2002, excl. China and India[1] in USD bn



[1] Retail according to IMS at ex-manufacturer prices; before rebates; excluding China and India
[2] Brazil USD 1.2 bn, Netherlands USD 0.7 bn, France USD 0.5 bn, Spain USD 0.3 bn and Italy USD 0.2 bn
Source: IMS Health, internal estimates

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… And Is Expected to Grow Fastest

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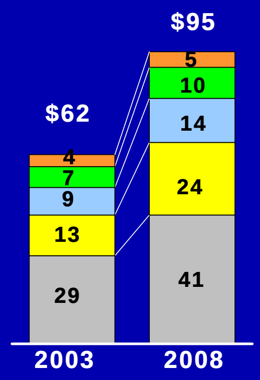
Generics retail market estimates in USD bn[1]



	CAGR in % 03 – 08E
Worldwide	8.9
Japan	5.6
RoAm	8.6
W. Europe	9.4
US	12.5
Other	7.3

- Global CAGR 03-08: 9%E
- US and Western Europe expected to grow fastest

[1] Biopharmaceuticals excluded, according to IMS at ex-manufacturer prices, before rebates
Source: IMS Health, internal estimates

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Low Generic Penetration in Key Markets Both by Value…

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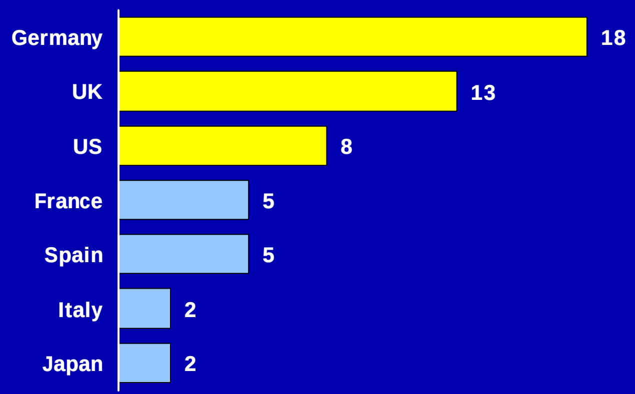
Penetration rate by value, 2002 in %



Source: IMS Health/ Midas

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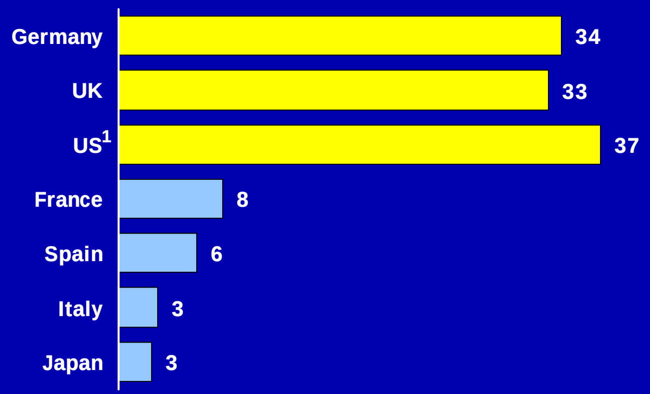
... and by Volume

Penetration rate by standard units, 2002
in %



[1] Penetration rate by standard units based on unbranded generics;
Penetration rate by number of prescriptions US (branded and unbranded Generics): 50%

Source: IMS Health/ Midas

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Future Growth Drivers of the Generics Market

Key Rx-products come off-patent

- **Blockbusters with global sales value of about USD 27 bn expire by 2006**

Industrial Generics business

- Rx-product patent expiries will fuel active pharmaceutical ingredients market
- Industrial market expected to grow annually by 6% to USD 23 bn by 2008

Emergence of follow-on biologics

- Originator sales for recombinant proteins 2002 of USD 30 bn; USD 53 bn expected by 2008
- Patent expiry of a number of key products in next 5-7 years

Source: McKinsey, Sandoz internal data, Datamonitor for biologics

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Retail Generics – Number of Blockbusters Coming Off-Patent Drive Future Growth

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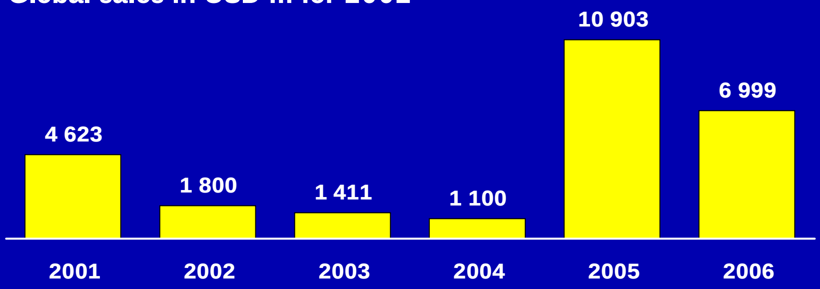
Worldwide leading brands expiring by end 2006[1],
Global sales in USD m for 2002



- 2001: Losec®
- 2002: Claritine™
- 2003: Ciprobay®
- 2004: Diflucan®2
- 2005: Clarcid/Biaxin®2, Zithromax®, Zocor®, Zoloft®
- 2006: Imitrex®, Paxil®, Pravachol®, Premarin® Family

Top 12 blockbusters total USD 27 bn of sales in 2002

[1] Time of patent expiry referring to US [2] IMS PADDS, IMS Life Cycle Patent Focus
®/TM are registered trade marks from third parties
Source: Annual reports, UBS Warburg, IMS World Review

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Future Growth Drivers of the Generics Market

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Key Rx-products come off-patent

- Blockbusters with global sales value of about USD 27 bn expire by 2006

Industrial Generics business

- **Rx-product patent expiries will fuel active pharmaceutical ingredients market**
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Source: McKinsey, Sandoz internal data, Datamonitor for biologics

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Industrial Products – Solid Market Growth Expected

- Global market of USD 17 bn in 2003[1]
- CAGR of ~ 6 % from 2003-2008 estimated
- Consolidated industry - examples anti-infectives first half 2003:
  - 6-APA[2]: Top 10 players account for ~75% of total market
  - 7-ACA[3]: Top 10 players account for ~85% of total market
- Ranking of key players[4]:

#1	Sandoz
#2	DSM
#3	Teva
#4	ACS Dobfar
#5	Aurobindo

[1] Source: Arthur d'Little
[2] 6-APA belongs to group of Penicillins-Amoxicillin
[3] 7-ACA belongs to group of Cefalosporines
[4] Source: Company reports, sales industrial 2002

Future Growth Drivers of the Generics Market

Key Rx-products come off-patent

- Blockbusters with global sales value of about USD 27 bn expire by 2006

Industrial Generics business

- Rx-product patent expiries will fuel active pharmaceutical ingredients market
- Industrial market expected to grow annually by 6% to USD 23 bn by 2008

Emergence of follow-on biologics

- **Originator sales for recombinant proteins 2002 of USD 30 bn; USD 53 bn expected by 2008**
- **Patent expiry of a number of key products in next 5-7 years**

Source: McKinsey, Sandoz internal data, Datamonitor for biologics

Key Biologics Losing Patent Protection

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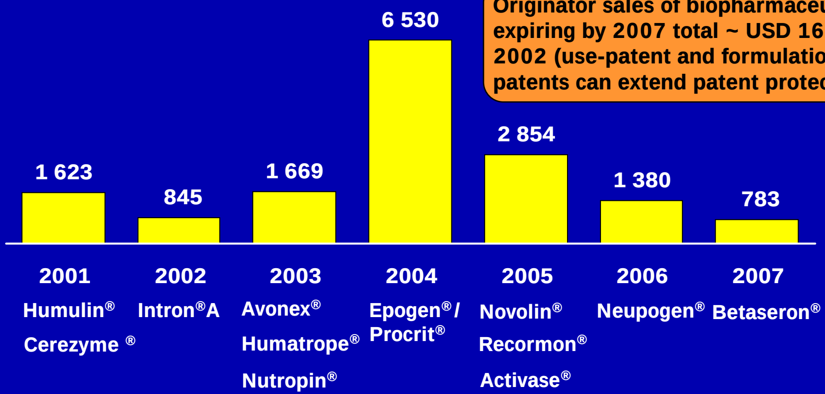
Biopharmaceuticals basic patents[1] expiring by 2007, global sales 2002 in USD m

Originator sales of biopharmaceuticals expiring by 2007 total ~ USD 16 bn in 2002 (use-patent and formulation patents can extend patent protection)



[1] Additional use-patents and formulation patents can extend actual effective patent protection and will determine launch date of follow-on products.
® Are registered trade marks from third parties
Source: Datamonitor/Bioseeker Group

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Agenda

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- Generics market dynamics
- Sandoz strategy
- Sandoz market position and performance

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Sandoz Vision Is to Be a Leading Generics Player

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- To be a **global leader** – expansion through internal and external initiatives
- To compete in the **high quality** generics market in three key areas: Retail generics, industrial generics and biopharmaceuticals
- To be **first to launch** through effective R&D
- To ensure cost competitiveness by applying **state-of-the-art technologies and processes** in development, production and business administration

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Sandoz – Building a Global Presence with a Strong Global Brand...

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Novartis Generics used to be a conglomerate of different brands

Rebranding into Sandoz brand in order to...

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Think Generics

- ... build on a strong **global** brand
- ... enhance **company visibility**
- ... leverage 90% unaided **awareness** in Europe
- ... emphasize selected **key attributes** (high quality, global presence, innovation)

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… And Key Acquisitions

- Countries covered before merger
- Countries entered or significantly strengthened by Sandoz
- No local presence but widely served via agents

Major acquisitions:
- 2002: Lek
- 2001: Lagap UK
- 2000: Apothecon Generics, BASF Generics, Labinca
- 1999: Wyeth Penicillins Latam, Invamed
- 1996: Azupharma

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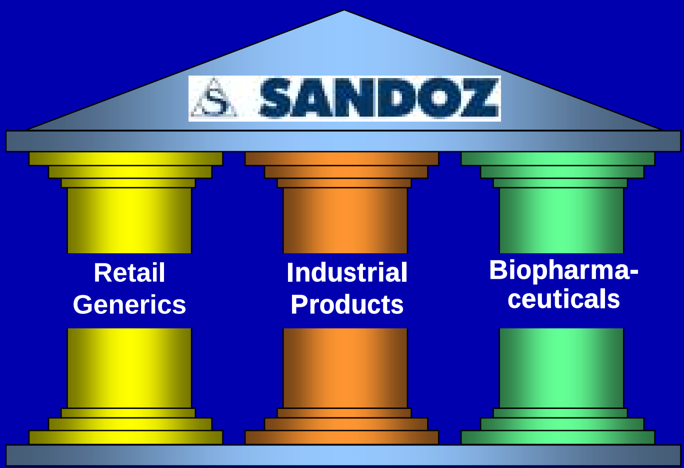
The Success of Sandoz Is Founded on Three Franchises



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First Franchise – Retail Generics

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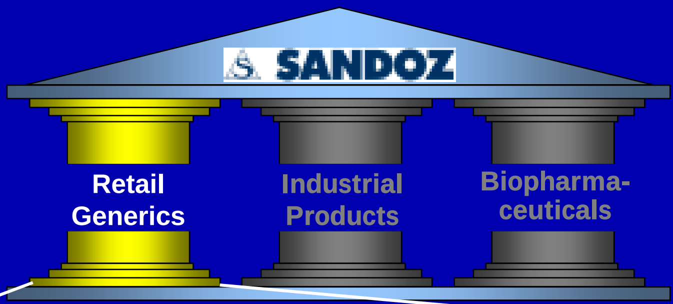

- High quality generics: 400 molecules
- Product group focus: Antibiotics, CNS, GI area and CVS
- Global development network
- Rebranding into Sandoz in 2003

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Product Launches and Market Exclusivity Affect Performance Level in Particular in US

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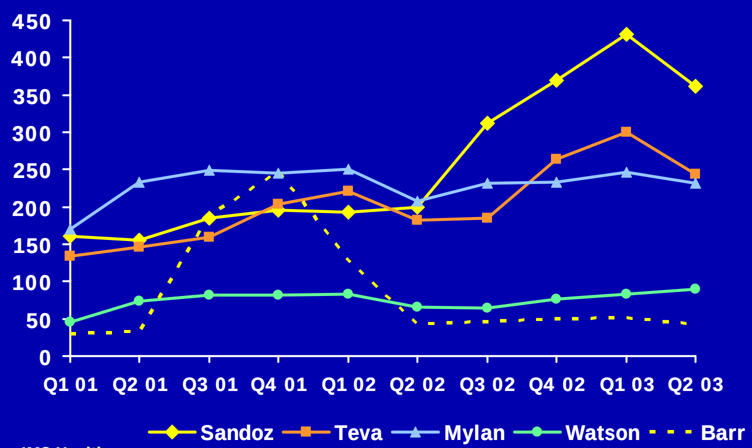
IMS Sales US
USD m



Source: IMS Health

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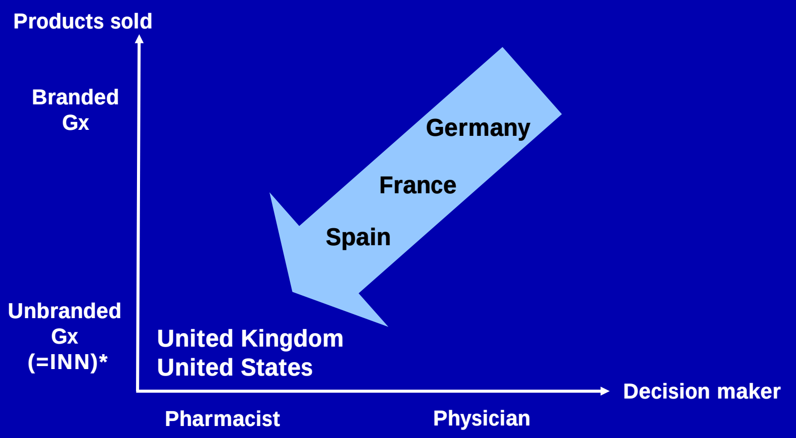
Markets Have Different Characteristics...



* INN= International non proprietary name

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... and Require Global Branding and Local Sales Strategy

Retail environment:

- Wide variation of health care regulation and decision-making competencies between countries/regions
- Tendency towards INN* prescription; hence need for brand differentiation will increase

Sandoz retail strategy:
- Local marketing/sales approach
- Global branding

* INN= International non proprietary name

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Global Presence in Retail Generics Requires Broad Product Range

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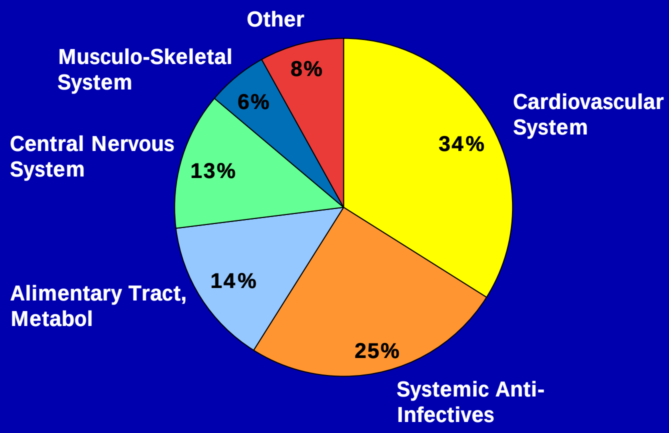
Global Sandoz sales[1] by therapeutic areas 1H 2003
in %



[1] Third party sales

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Targeted Strategies and Initiatives – Retail Generics

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- Expand strong R&D network
- Fast market entry
- New drug delivery forms (leverage in-house expertise, build additional technologies)

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Second Franchise – Industrial Products

- Leading producer of anti-infectives
- Enter new molecule areas
- Fully integrated production
- Attractive cost position through vertical integration
- Added value through IP[1] creation and efficient processes

[1] IP = intellectual property

Industrial Products – Vertical Integration Provides Strategic Advantages

- Secures time to market
- Enables cost competitiveness
- Helps secure the supply chain
- Creates non-infringing processes
- Differentiates through own intellectual property creation

Leading Position in Industrial Products

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API[1] market shares in % by production volume, 2002

Ranking	Penicillins – Amoxicillin		Cefalosporines – 7-ACA	
1	Sandoz	17.6	Sandoz	21.7
2	DSM	17.1	Hebei	16.7
3	GSK	14.7	Antibioticos	15.7
4	Aurobindo	6.2	Cheil F+C	7.3
5	Antibioticos	5.3	GSK	6.7

- Expand leading market position in anti-infectives
- Move into development and production of high added value APIs
- Secure and further improve strong cost position in industrial business

[1] API = Active Pharmaceutical Ingredients
Source: internal estimates

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Strong Portfolio Expansion in Industrial Products

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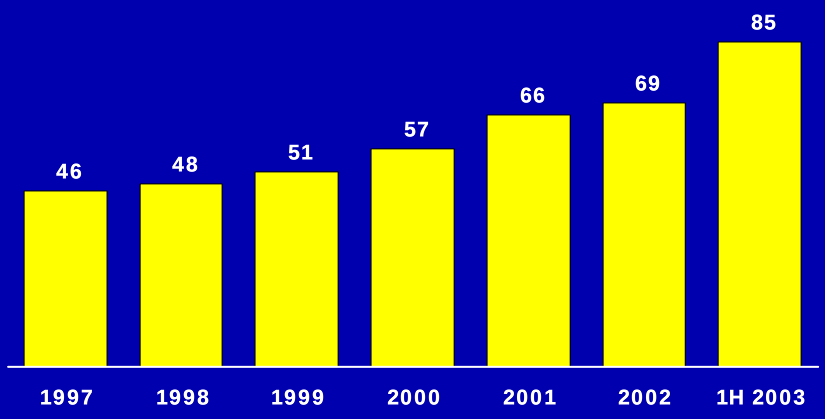
Number of API's[1]



[1] APIs (active pharmaceutical ingredients) from Lek included since 1H 2003; including APIs and intermediates
Source: Internal data

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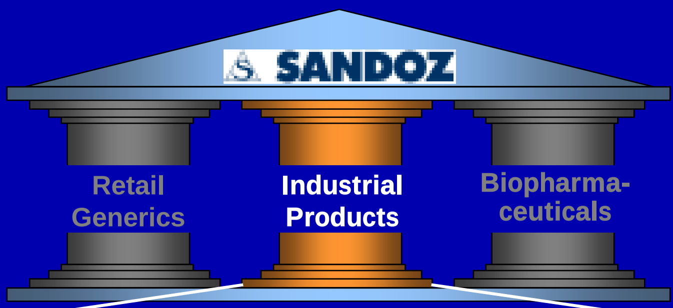
Targeted Strategies and Initiatives – Industrial Products



- Maintain cost leadership in anti-infectives
- Grow existing APIs
- Continue to expand product portfolio (new molecules)
- Further vertical integration of key molecules

Third Franchise – Biopharmaceuticals

- Build own Biopharmaceuticals business
- Serves as biotech production center for Novartis Group
- Leverages 20 years of biotech expertise

Biopharmaceuticals – Unique Challenges

Development

- Longer Development time - increased exposure to market dynamics
- Higher R&D spend needed
- Extensive know-how requirement in diverse indications
- Pre-launch regulatory hurdles

Production

- High investment in production facilities
- Consistent high quality standards required

Biopharmaceuticals - Sandoz Is Well Positioned ...

Development

- Strong, global Development function
- Significant investment in R&D in past years
- Development expertise within the Novartis group

Production

- State-of-the-art production technology
- 20 years of experience in development and manufacturing of recombinant proteins
- Full vertical integration

... To Capture Higher Returns

- High margin market
- Higher growth rates compared to overall Generics market
- Increasing number of biopharmaceutical blockbuster products

Sandoz has a dedicated sales force for Biopharmaceuticals

Sandoz has in-house capacities along the whole value chain

Biopharmaceuticals – Regulatory Processes Not Clearly Defined

No definite regulatory guidelines for abbreviated filing process

- EU
  - Case-by-case negotiation of requirements for 'similar biological medicinal products'
  - Pan-European regulatory frame under discussion by European Parliament
- US
  - Draft guidance for 505(b)(2) applications for relatively simple molecules (insulin, growth hormone) exists
  - Abbreviated 'biological applications' not yet foreseen, however FDA is interested in discussion on regulatory pathway

Sandoz Positioned to Be the First Generics Player in Biopharmaceuticals

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Omnitrop® - first generic growth hormone

Market

- USD 1.3 bn market for re-combinant human growth hormone in '02, of which:
  - 36% in the US
  - 34% in Europe
  - 30% in Japan
- Leading originators 2002[1]:
  - Pfizer 37%
  - Lilly 21%
  - Novo Nordisk 16%
  - Serono 13%

Status

- Positive CPMP opinion received for Omnitrop® (somatropin) on June 26, 2003 for growth hormone deficiency in children and adults, Turner's syndrome and chronic renal insufficiency
- EU approval anticipated by the end of 2003
- Launch in Europe planned for 2004
- Filing in US in process

[1] Others 13% (Genentech 4%, Sumitomo 3%, Ferring 2%, others 4%)
Source: IMS

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Targeted Strategies and Initiatives – Biopharmaceuticals

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- Launch hGH
- Develop portfolio
- Increase production capacities

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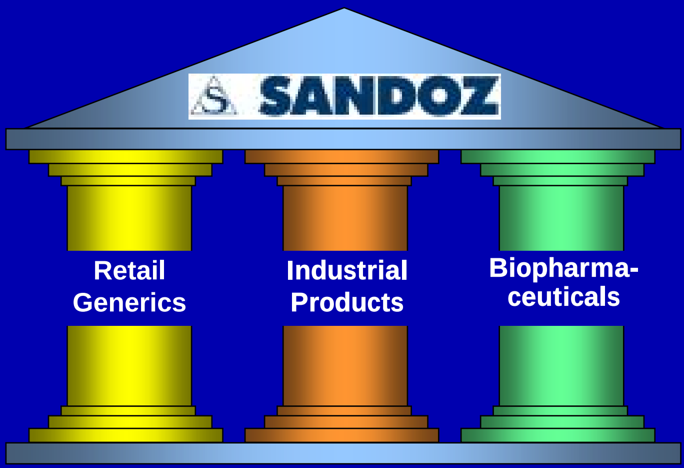
Focus on Innovation and Efficiency Improvement



Focus on Productivity

- Development: Increase number of ANDAs
  - Reduce volatility
  - Grow the business
- Production: Increase number of products and volume
  - Maximize utilization rate
  - Offer competitive package to customers
- Manage growth: Stringent cost containment

R&D Centers on Five Continents to Ensure Timely Launch of New Products

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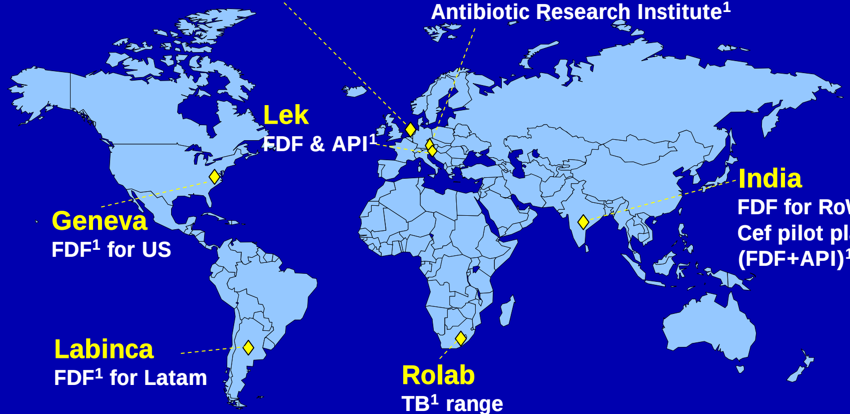

[1] FDF= Finished dosage forms, API= Active pharmaceutical ingredient, TB= tuberculosis, MRP= mutual recognition procedure

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Further Investments in Technology Centers to Drive Future Growth

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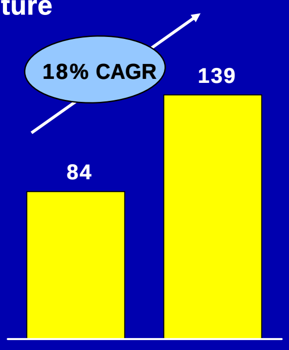
R&D expenditure
USD m



	1999	2002
% of total sales[2]	6.9	7.6

- Significant increase of R&D investments in past years[1]
- Investments in R&D as one major driver for future internal growth
- More than 140 new product launches (worldwide) planned for 2003

[1] Expenditure is in line with industry practice: R&D in % of sales for key competitors for Teva 7%, Dr. Reddy's 5%, Ivax 6%, Ranbaxy 6%, Mylan 7%, Watson 7%
[2] Third party sales
Source: Company reports, Sandoz

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Continuous Increase of Productivity in Production

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People	• Highly experienced development team
Hardware	• State of the art plants • Comprehensive upscaling equipment, e.g. pilot plants for fermentation
Tools	• High yield technologies

Constant improvement of COGS

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Agenda

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- Generics market dynamics
- Sandoz strategy
- **Sandoz market position and performance**

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Leading Position Achieved in the Generics Market Segment in the First Half 2003

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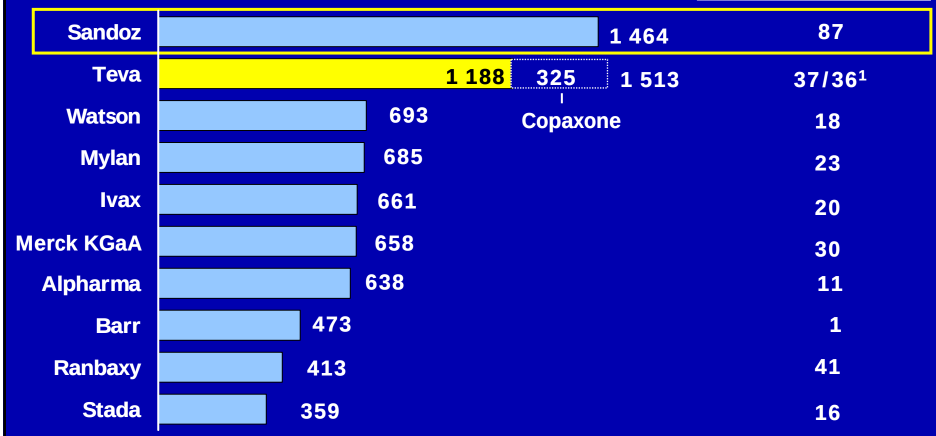
Total sales in USD m, 1H 2003

Growth rate in % (USD) vs. 1H 2002



[1] Teva total/Teva excl. Copaxone

Source: Company quarterly information, press releases, SEC filings

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Leading Position in the US and Major Player in Europe

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Country	Market size 2002, gross (USD)[1]	Market position 1st half 2003
US	11.7 bn	1 / 2
Japan	3.8 bn	>10
Germany	3.4 bn	4
UK	1.7 bn	6
Netherlands	0.7 bn	2 / 3
France	0.5 bn	3
Spain	0.3 bn	5
Italy	0.2 bn	5

[1] Excl. Biopharmaceuticals, according to IMS at ex-manufacturer prices; before rebates

Source: Internal estimates

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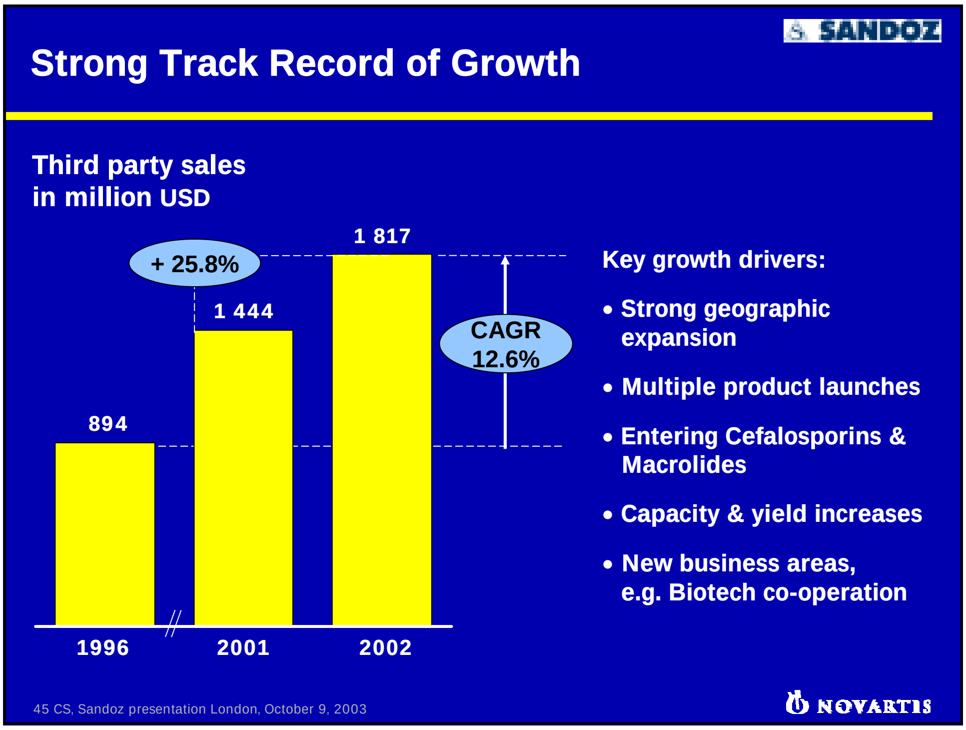
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Strong Track Record of Growth
Third party sales
in million USD
+ 25.8%
1 817
1 444
CAGR
12.6%
894
1996
2001
2002
Key growth drivers:
• Strong geographic expansion
• Multiple product launches
• Entering Cefalosporins & Macrolides
• Capacity & yield increases
• New business areas, e.g. Biotech co-operation
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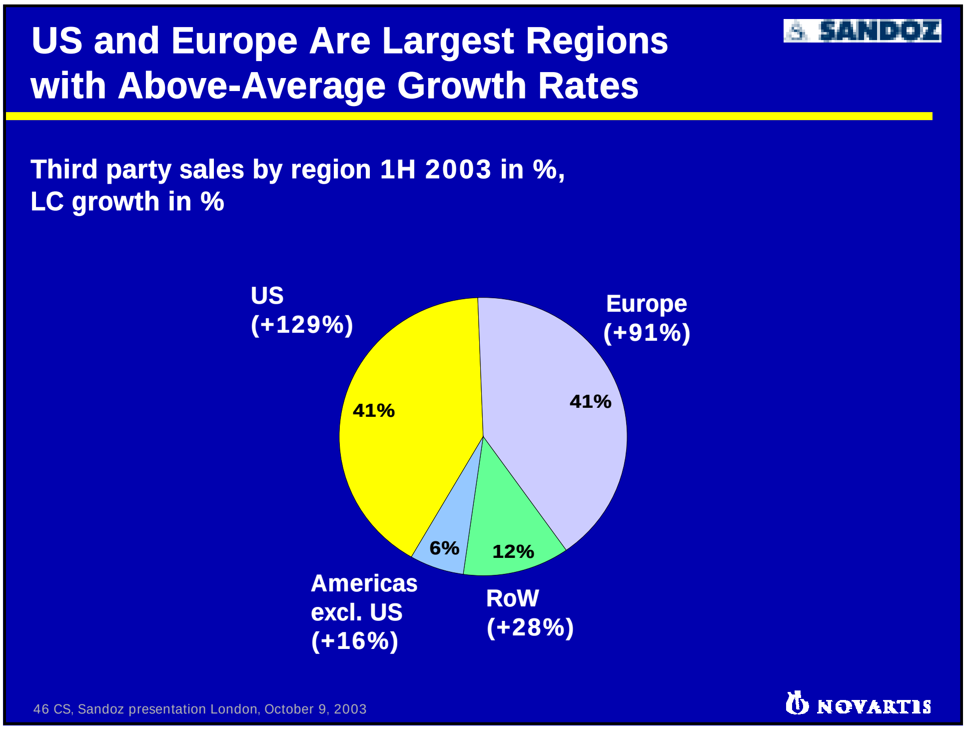
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US and Europe Are Largest Regions
with Above-Average Growth Rates
Third party sales by region 1H 2003 in %,
LC growth in %
US
(+129%)
Europe
(+91%)
41%
41%
6%
12%
Americas
excl. US
(+16%)
RoW
(+28%)
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Retail Generics Accounts for 80%

Third party sales by business franchise 1H 2003
in million USD

	Sales	Growth (% LC)
Retail Generics	1 166	+99
Industrial Products	270	+1
Biopharmaceuticals	27	+44
Total	1 463	+71

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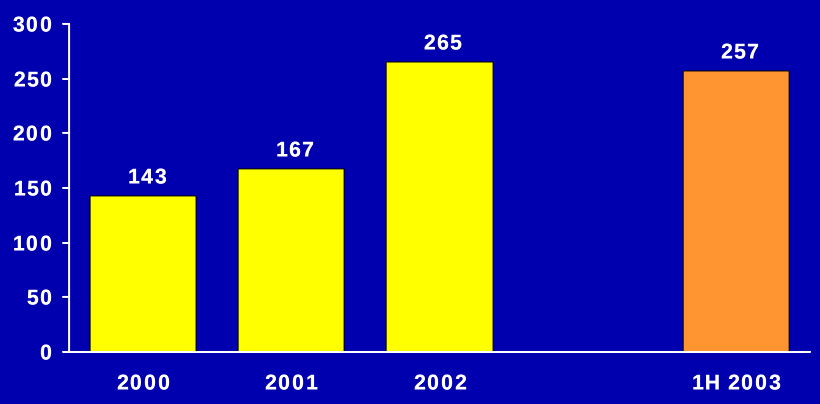
New Product Launches Drive Operating Income Expansion

Operating income development
in million USD



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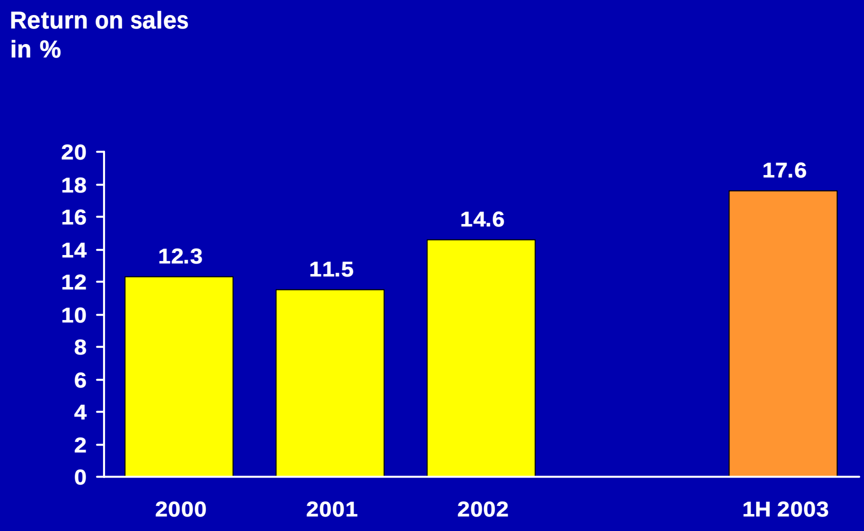
Improving Operating Margin



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Strategic Initiatives to Strengthen Global Business

- Expand strong R&D network
- Secure continuous stream of new product filings and fast market entry
- Leverage cost leadership in anti-infectives and expand portfolio
- Launch Omnitrop® and develop portfolio in Biopharmaceuticals

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Summary – Sandoz Well Positioned for the Future

- Sandoz well positioned in all key Generics areas: Retail, industrial and in biopharmaceuticals
- Continued geographic expansion through organic growth and acquisitions to build global presence and a true global brand
- Conscious investment in R&D – First Gx player in biopharmaceuticals
- Capture strong position in largest retail Generics market - US