

中化合成生物技术股份有限公司
Chunghwa Chemical Synthesis & Biotech Co., Ltd.



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First Securities Biotech Industrial Forum

Disclaimer



- **CCSB's presentation contains forward-looking statements subject to significant risks and uncertainties. Actual results may differ materially from those contained in the forward-looking statements.**
- **The forward-looking statements in this release reflect the current belief of CCSB's as of the date of this release, we undertake no obligation to update these forward-looking statements for new information, future events or otherwise.**

Agenda



Business Overview



Major Products



Global Market Outline



Strength & Opportunity



Financial Highlights

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Brief History of CCSB



Profile

➤ Founded in 1964

- ✓ One of the largest bulk pharmaceutical chemical manufacturers in Taiwan
- ✓ First Taiwan FDA approved plant (1984)

➤ Turning Points in 1997

- ✓ Formed the New Management Team in 1997
- ✓ Invested US\$ 20 million to construct
 - 4 cGMP Plants for Synthetic Products
 - 2 cGMP Plants for Fermentation Products
- ✓ Established US Sales Office-Pharmaports in 2000

➤ Current Products

- ✓ Both synthetic & biotech-derived semi-synthetic products
- ✓ Immunosuppressant, antifungal, oncology, pain management & cardiovascular

➤ Global Market with Emphasis on North America, Europe & Japan

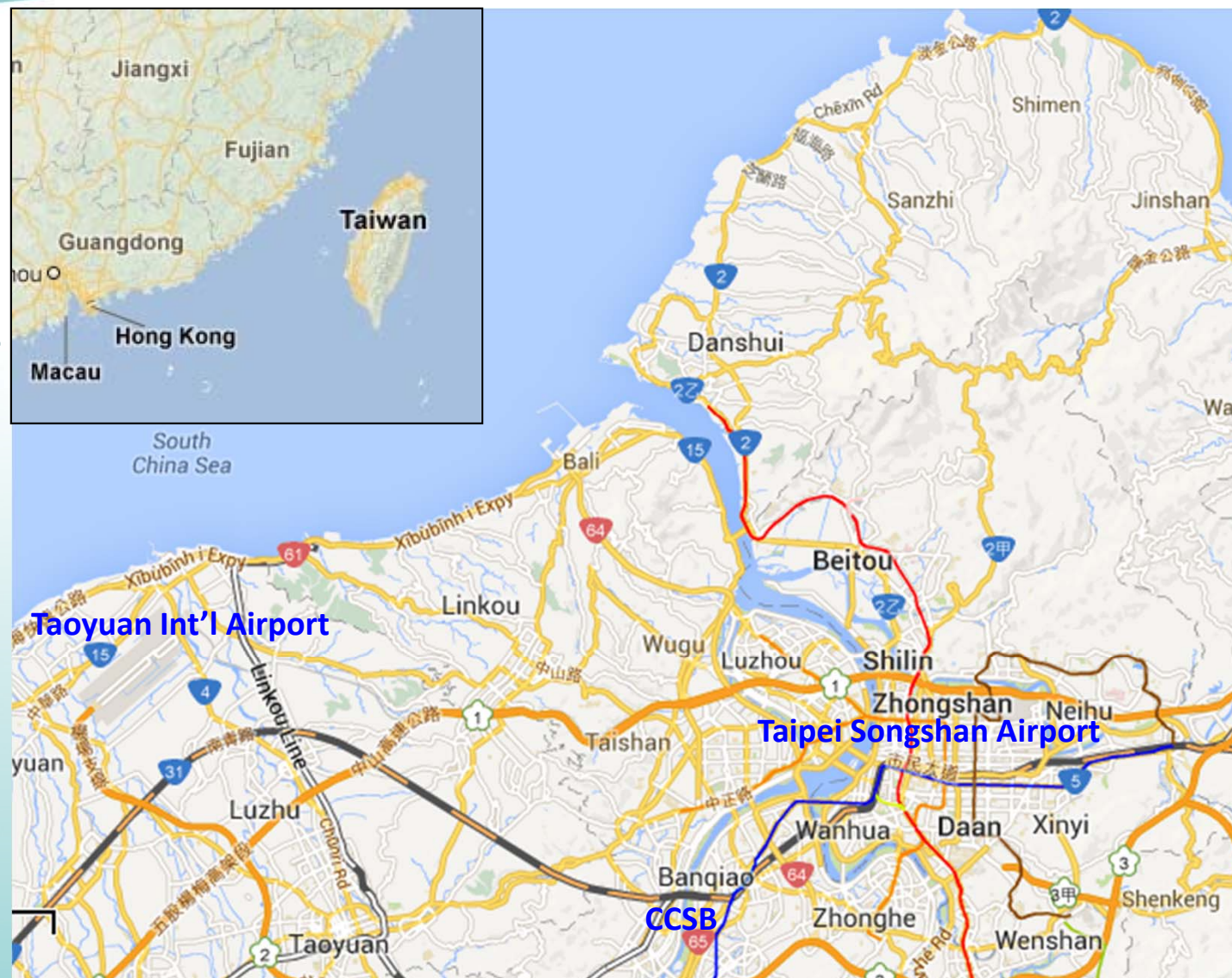
➤ Initial public offering on December 20, 2010

➤ Obtained land for plant expansion in 2012

Location



- Located in Shu-Lin, New Taipei City
- 20 km South West of Taipei
- 1,124,000 m²
- 244 Employees



Business Development Strategic



➤ Product Portfolio

- Equally Develop Synthetic & Biotech Products.
- Focus on Microbial Fermentation Products.
- Partake in New Drug Development and Contract Manufacturing.

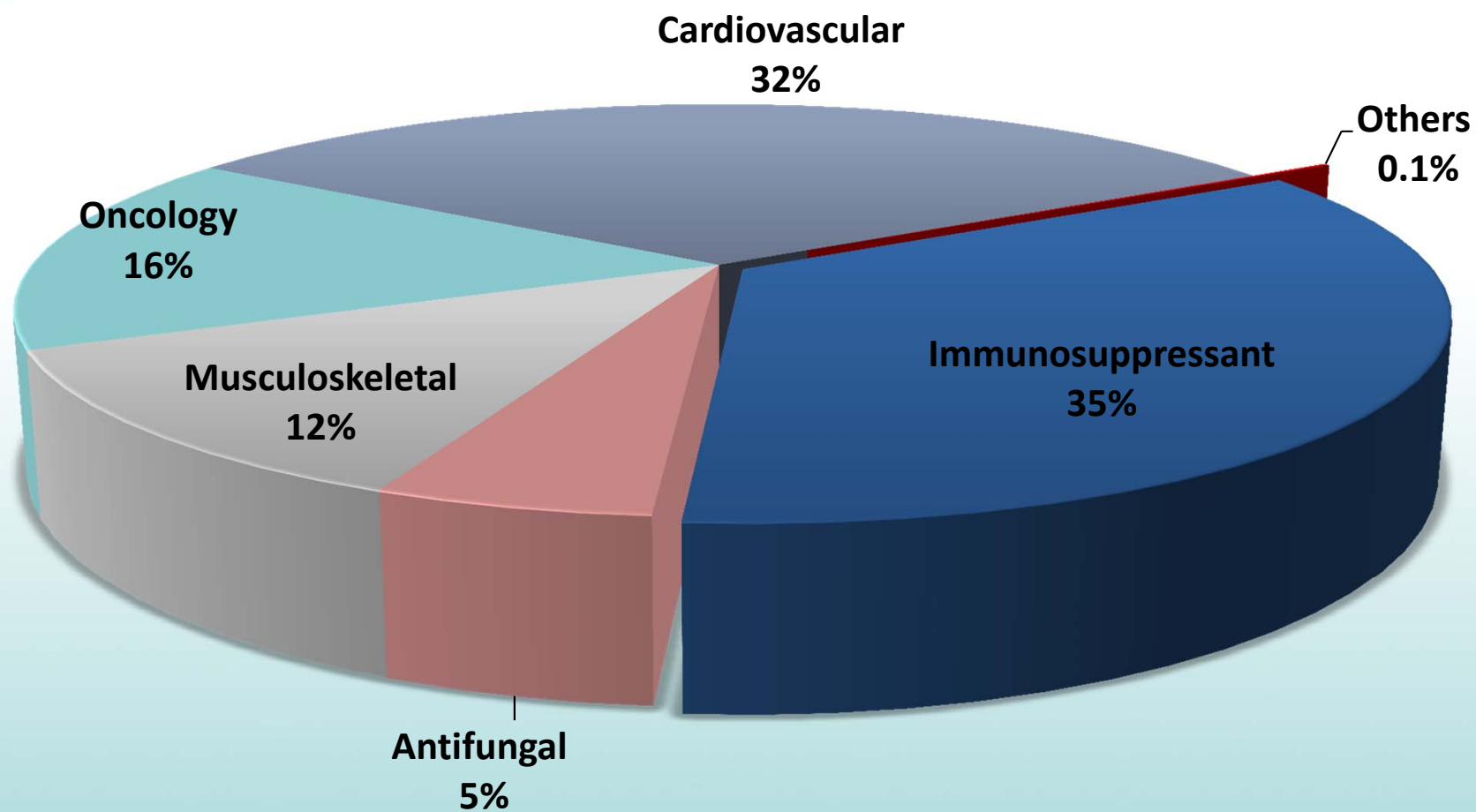
➤ Market Layout

- Key Point Markets: NAFTA, Europe and Japan.
- Export > 96%.

Sales Area in 2013



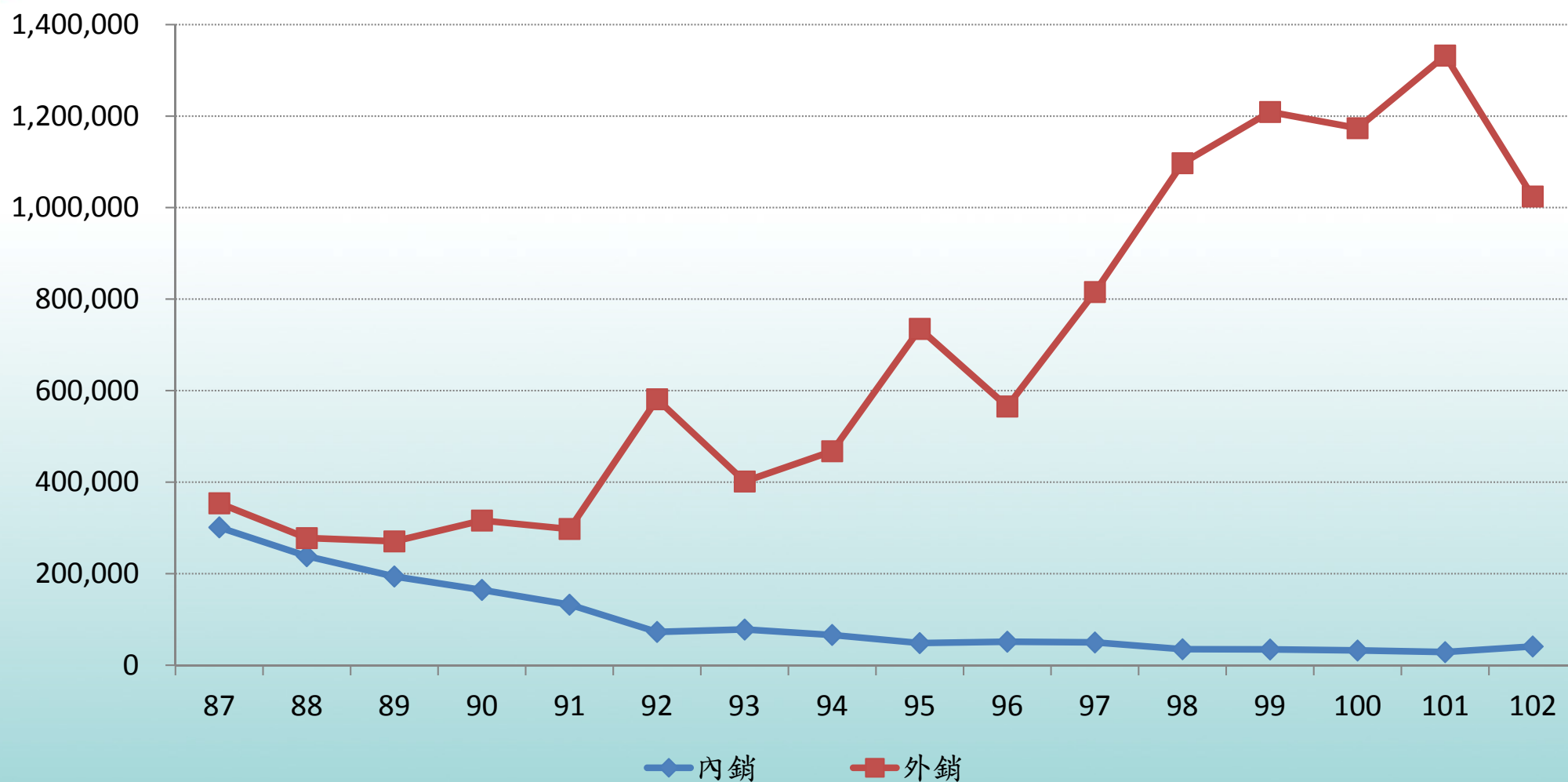
2013 Sales By Categories



Domestic Sales VS Export Sales



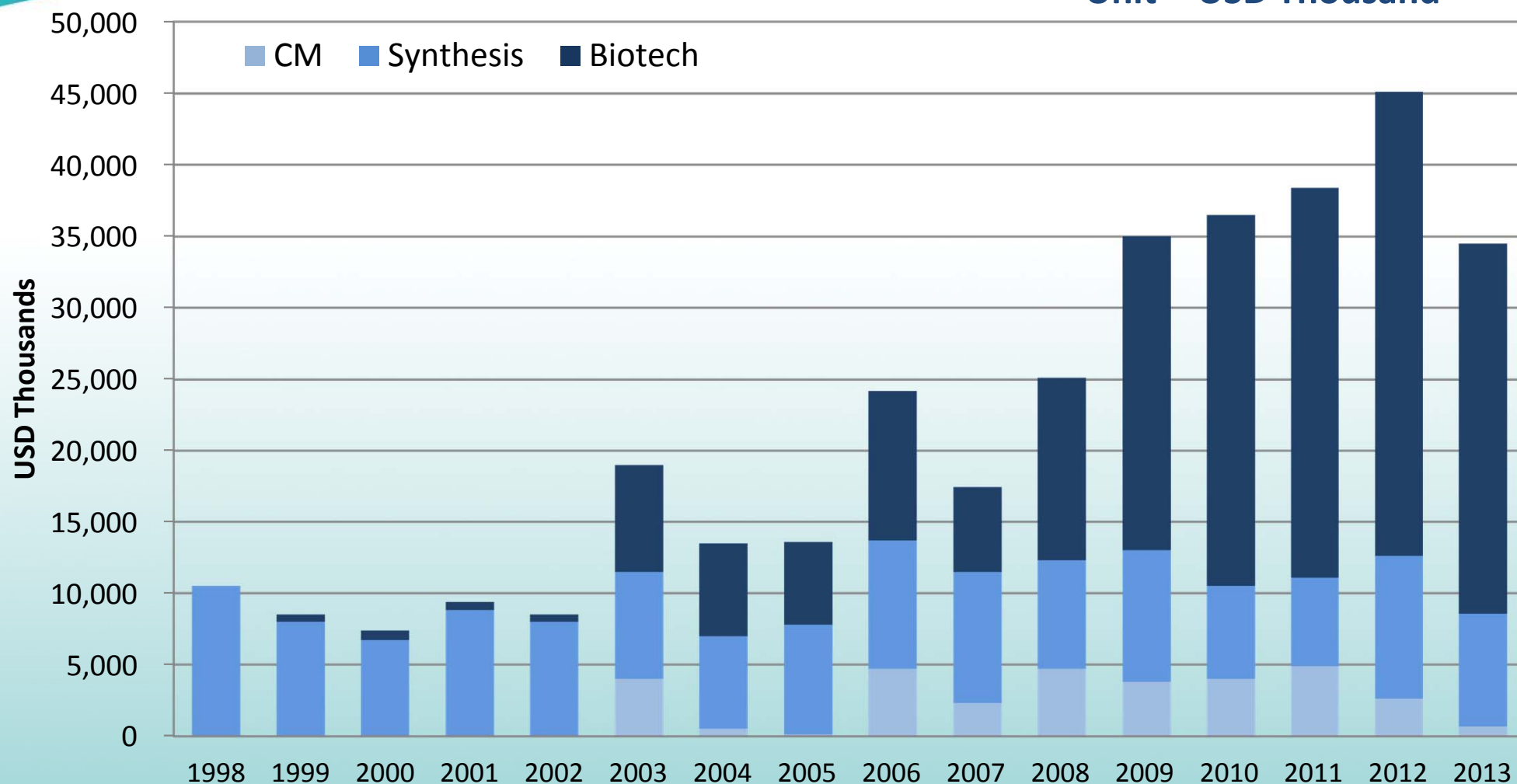
Unit : NTD Thousands



Revenue Tendency



Unit : USD Thousand



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Major Products and Indication



➤ Biotech Products

– Immunosuppressant

- Mycophenolate Mofetil (MMF)
- MMF HCl
- Mycophenolate Sodium
- Tacrolimus
- Rapamycin
- Everolimus

– Anti-cancer

- Everolimus
- Ingenol Mebutate

– Antifungal

- Caspofungin
- Micafungin

– Antihyperlipidaemics

- Pravastatin

Major Products and Indication (cont.)



➤ Synthetic Products

– Musculoskeletal Relaxant

- Methocarbamol
- Metaxalone

– Antihypertension

- Trandolapril

– Antihypertension Intermediate

- ZP7

– Anti-cancer

- Carfilzomib

– Anti-triglycerides

- EPA
- Epanova

– Antihistamine

- Dexbrompheniramine Maleate

New Products Launch



Name	Complete data	Patent Expiry	Indication
Metaxalone	2013	Expired	Musculoskeletal
Everolimus	2013	2019/09	Anticancer/ Immunosuppressant
Caspofungin	2013	2013/05	Antifungal
Epanova	2014	Unknown	Antihypertriglyceridemia
Ingenol Mebutate	2015	2018/08	Anticancer
Micafungin	2015	2019/03	Antifungal
Carfilzomib	2015	2025/04	Anticancer
Teduglutide	2015	2019/12	Show Bowl Syndrome

CCSB Products Market Size



Unit : USD Millions

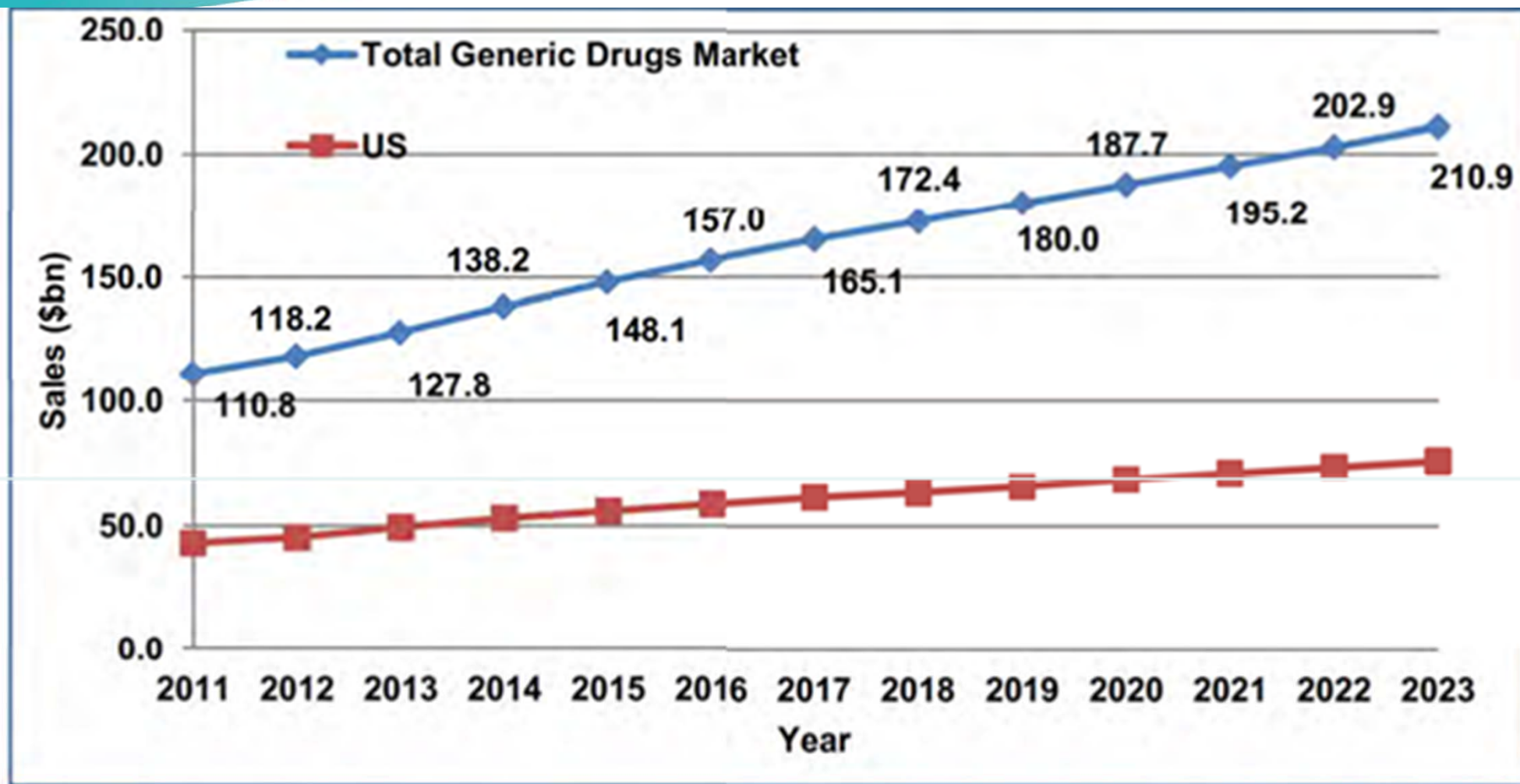
Product	US Market	Global Market
MMF	312	1,110
Pravastatin	205	954
Rapamycin	205	307
Tacrolimus	808	2,605
Micafungin	114	329
Caspofungin	39	568
Metaxalone	352	356
Everolimus	687	1,285
Carfilzomib	278	278
Ingenol Mebutate	54	60

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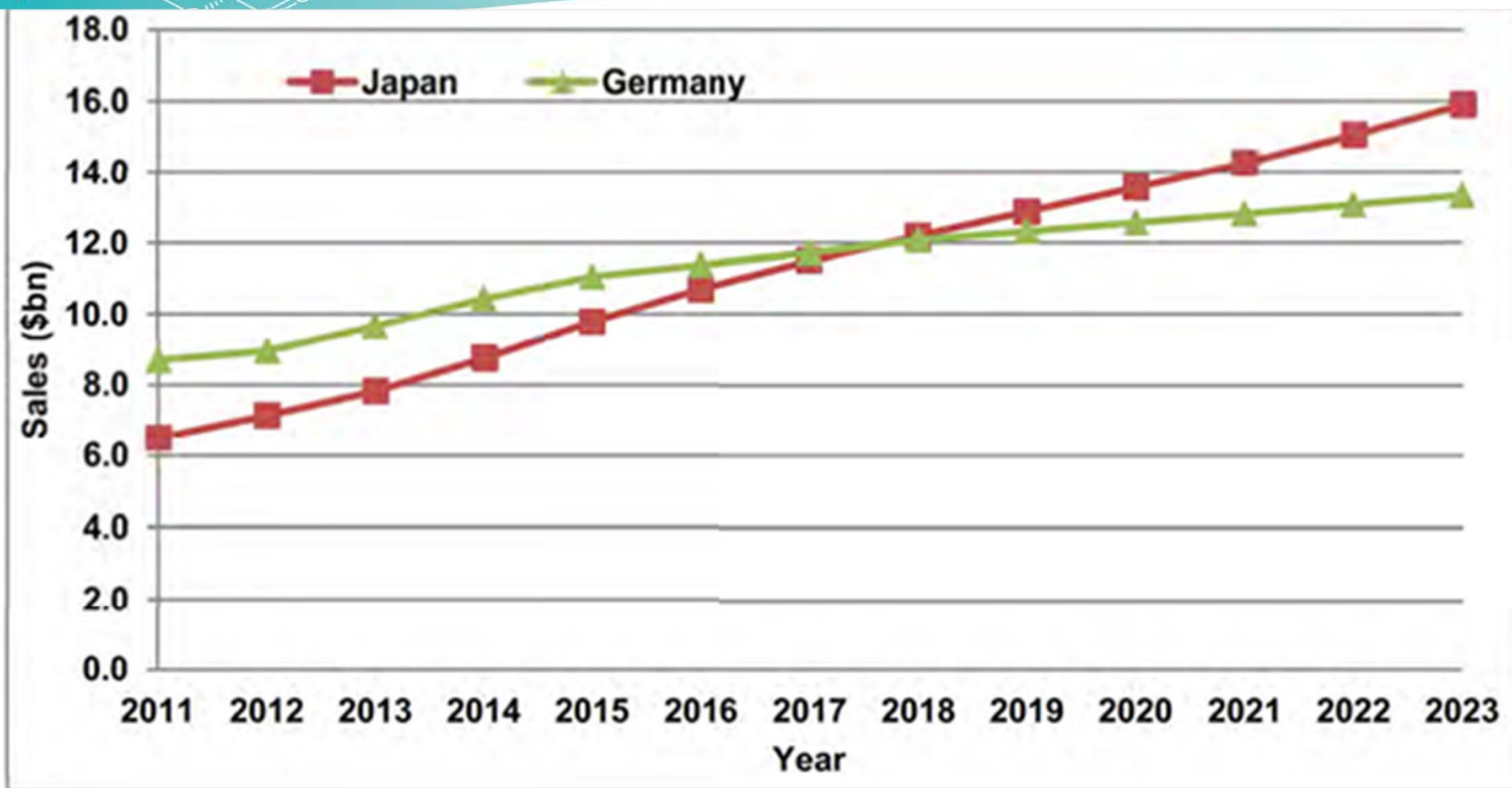
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Generic Drugs Market: US and World Sales Forecasts, 2011-2023



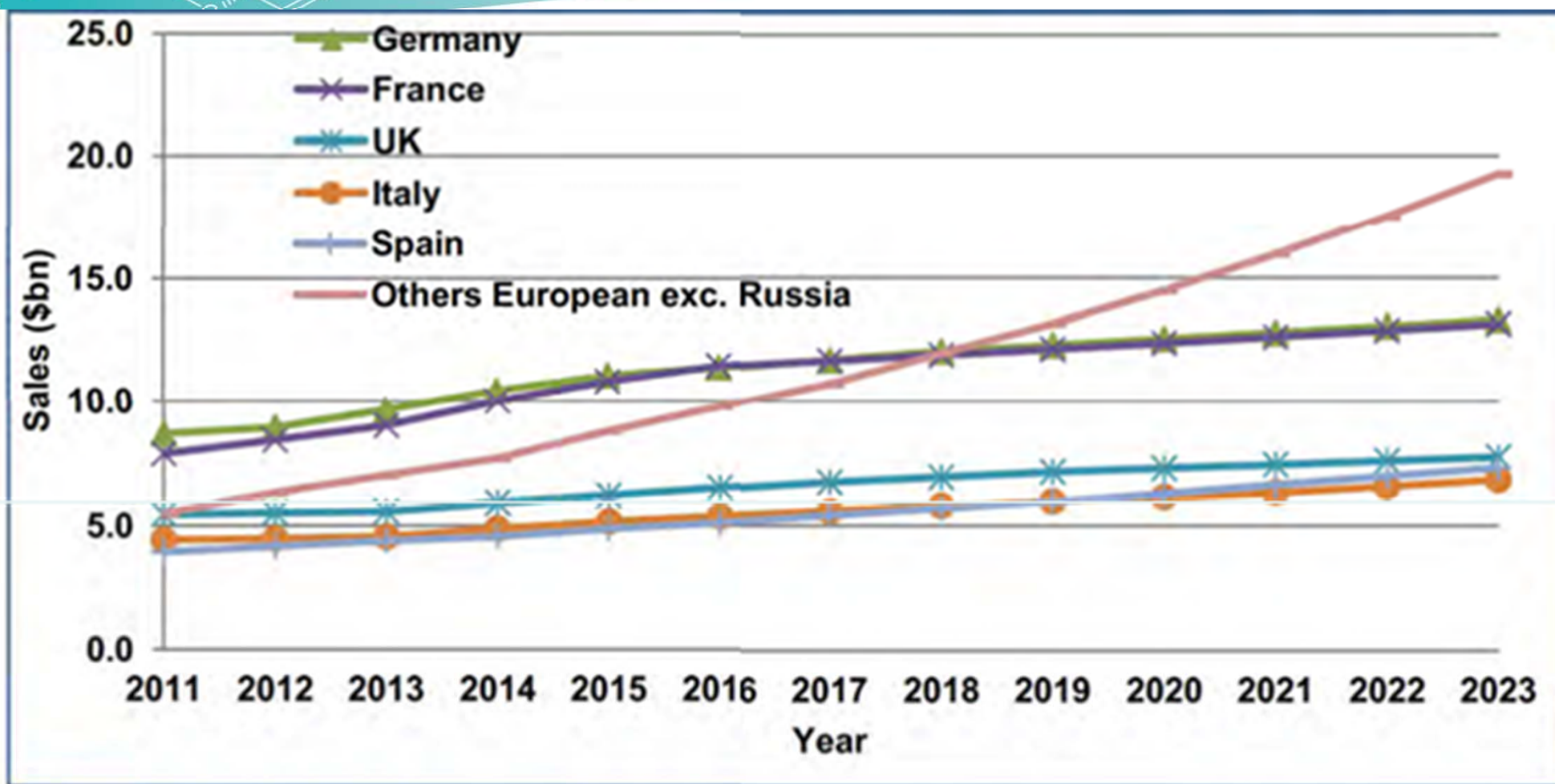
Source: *visiongain 2012*

Generic Drugs Market: Japan and Germany Sales Forecasts, 2011-2023



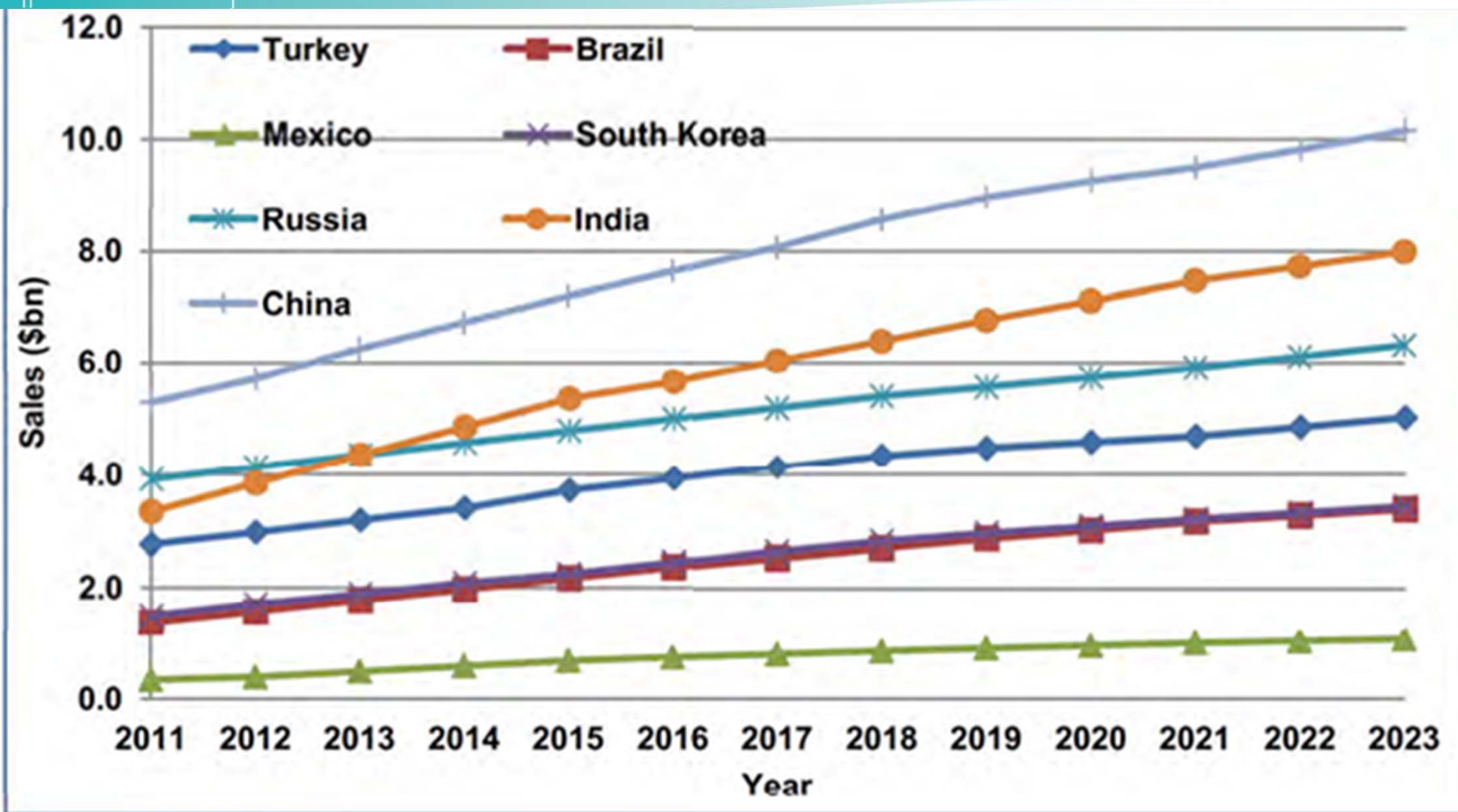
Source: *visiongain 2012*

Generic Drugs Market: Top 5 EU Countries Sales Forecasts, 2011-2023



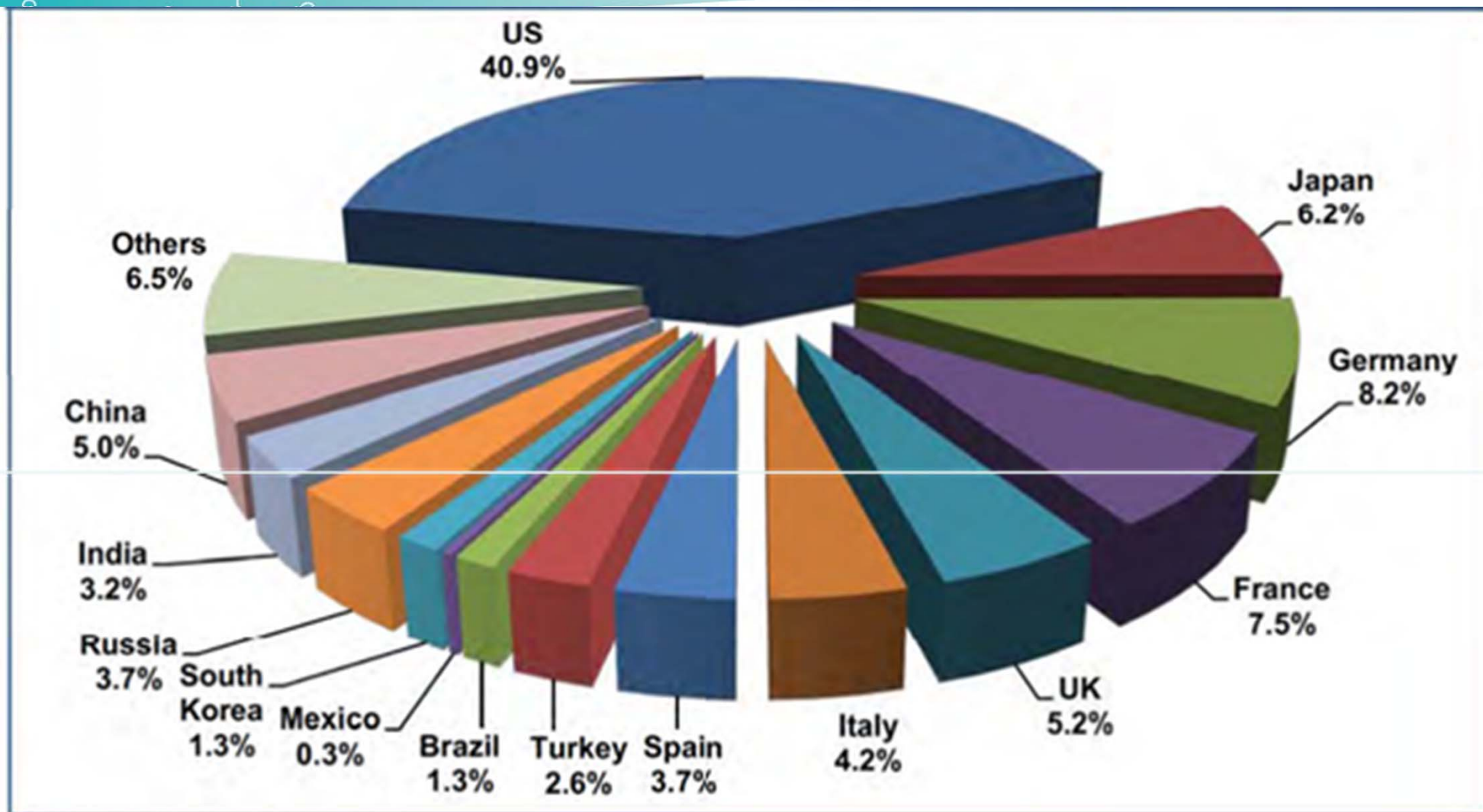
Source: *visiongain* 2012

Generic Drugs Market: Emerging Countries Sales Forecasts, 2011-2023



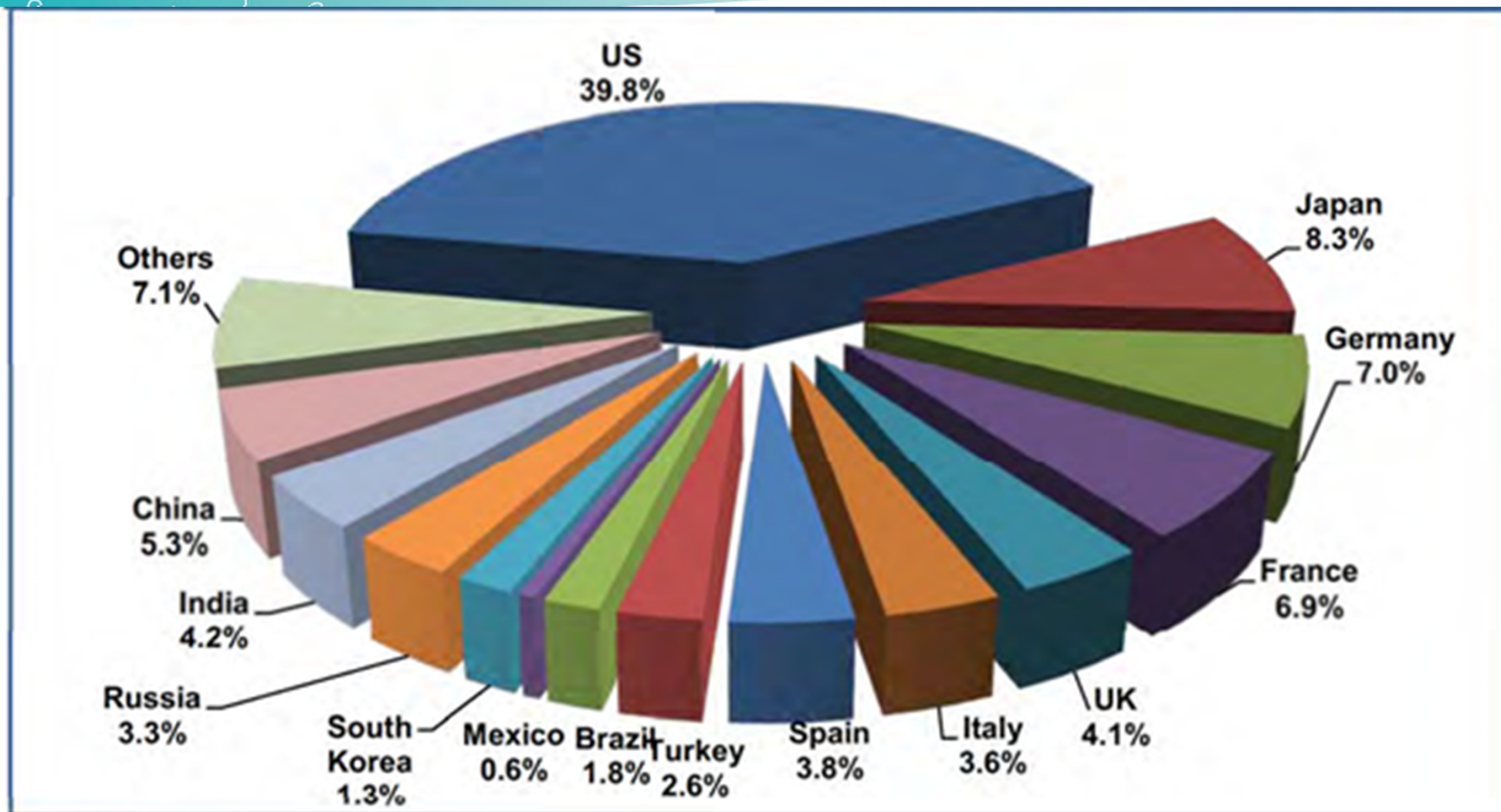
Source: *visiongain 2012*

Generic Drugs Market: Sales Shares in Leading National Markets, 2011



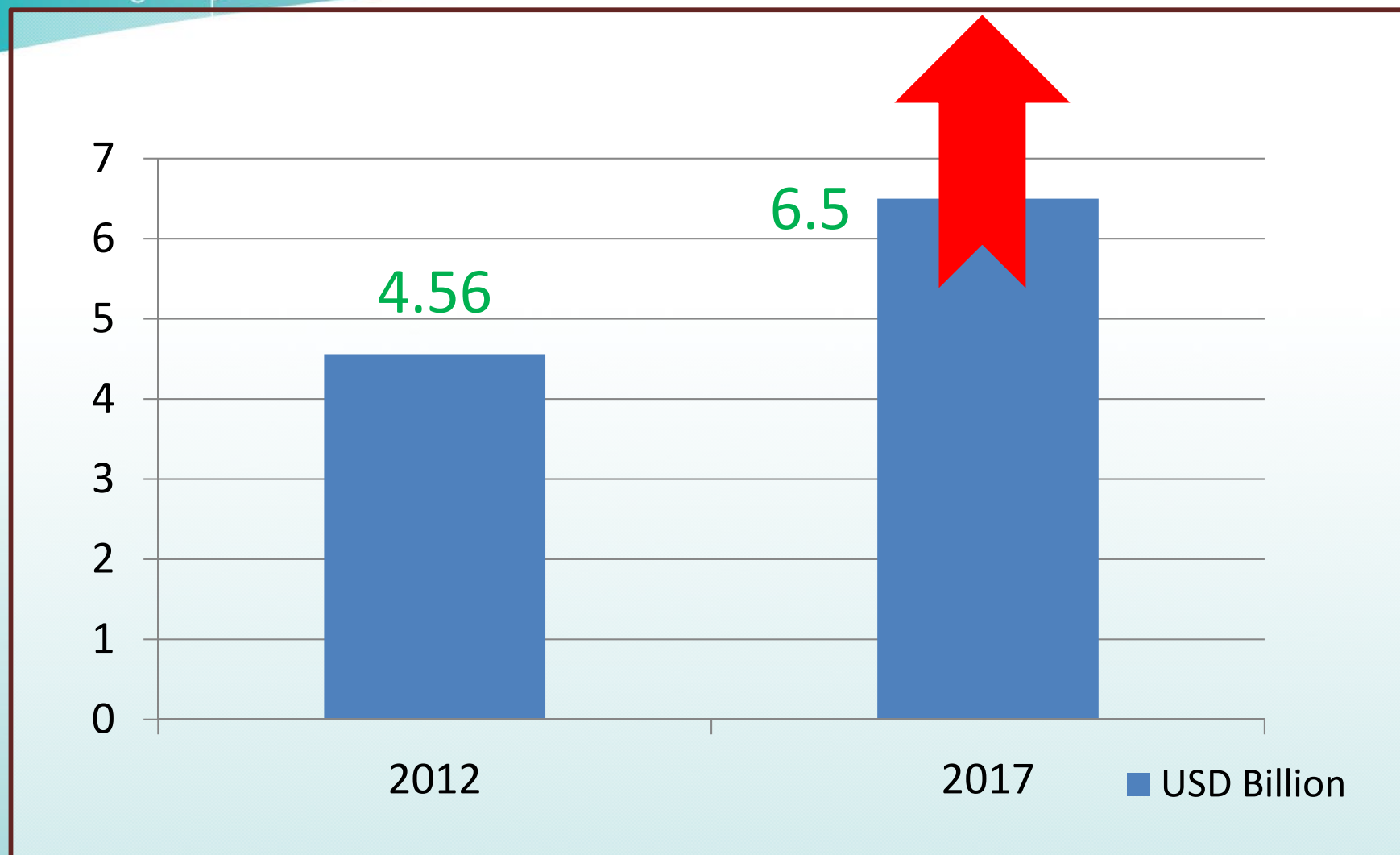
Source: *visiongain* 2012

Generic Drugs Market: Sales Shares in Leading National Markets, 2023



Source: *visiongain* 2012

U.S. Generic API Market Forecast



Source: <http://www.prnewswire.com/news-releases/global-api-market-forecast-to-2017-218993511.html>

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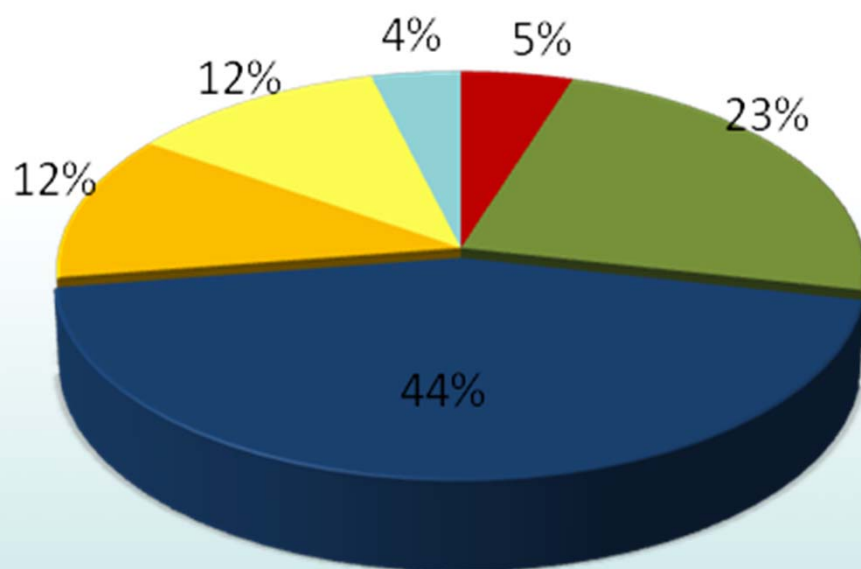
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Competitions & Advantages

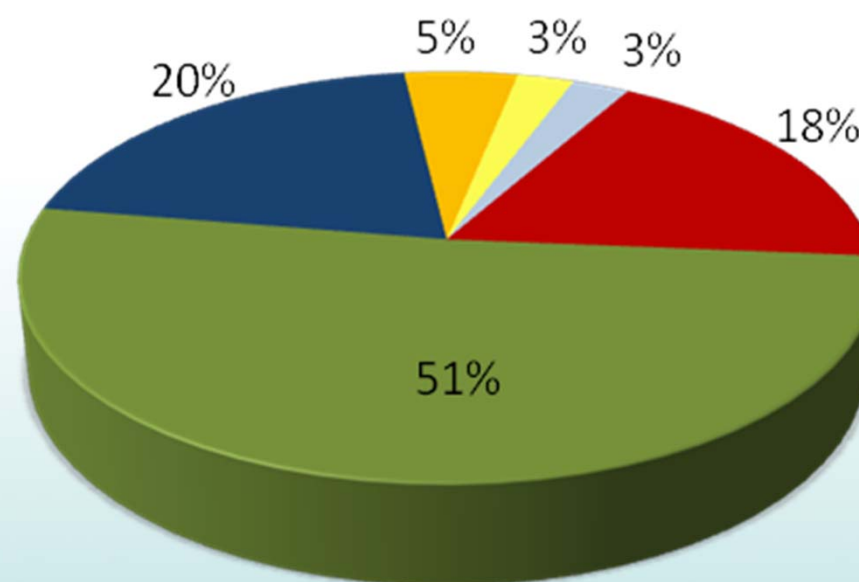


Manpower



Overall Manpower

■ 博士 ■ 碩士 ■ 學士 ■ 專科 ■ 高中 ■ 高中以下



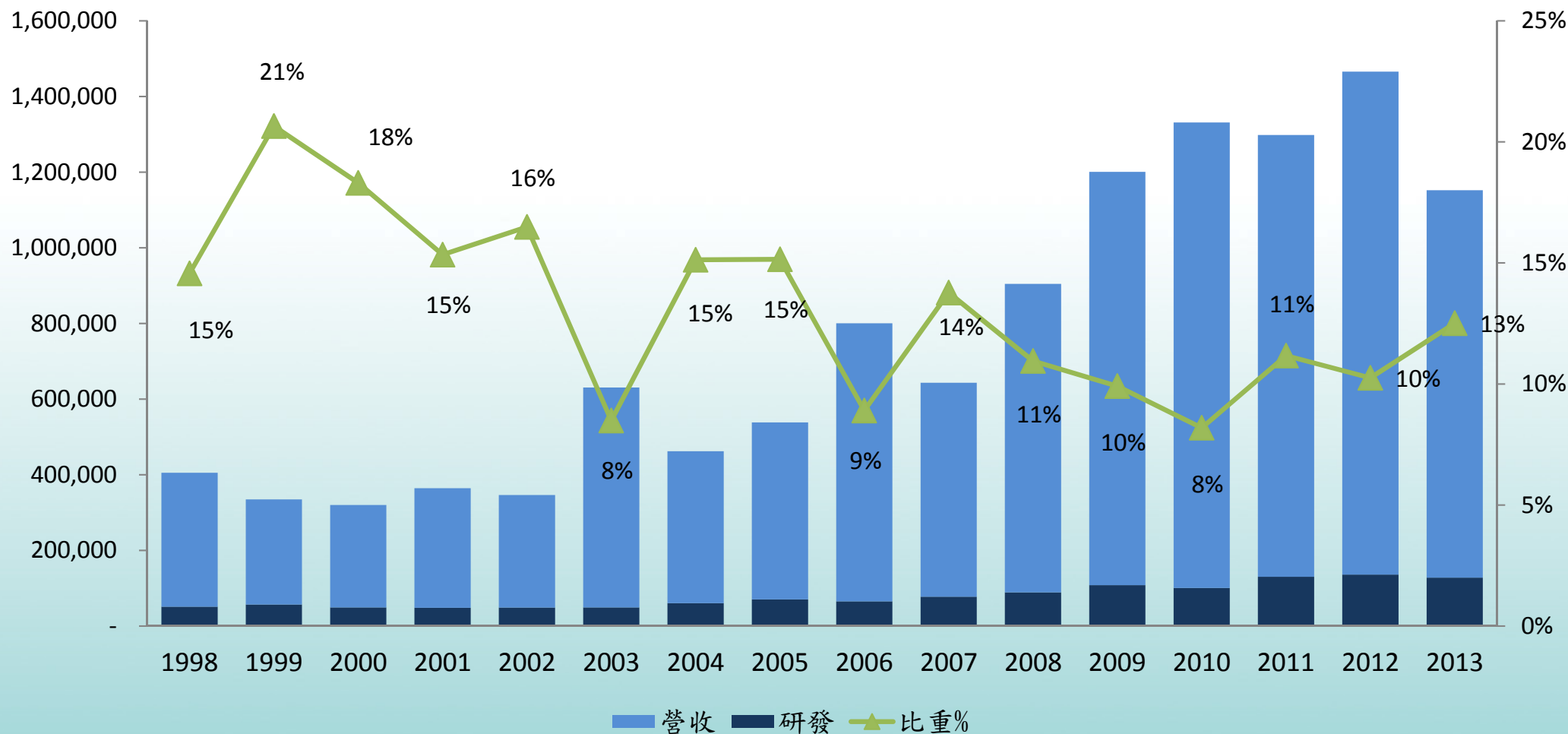
R&D Manpower

■ 博士 ■ 碩士 ■ 學士 ■ 專科 ■ 高中 ■ 高中以下

R/D Cost & Investment



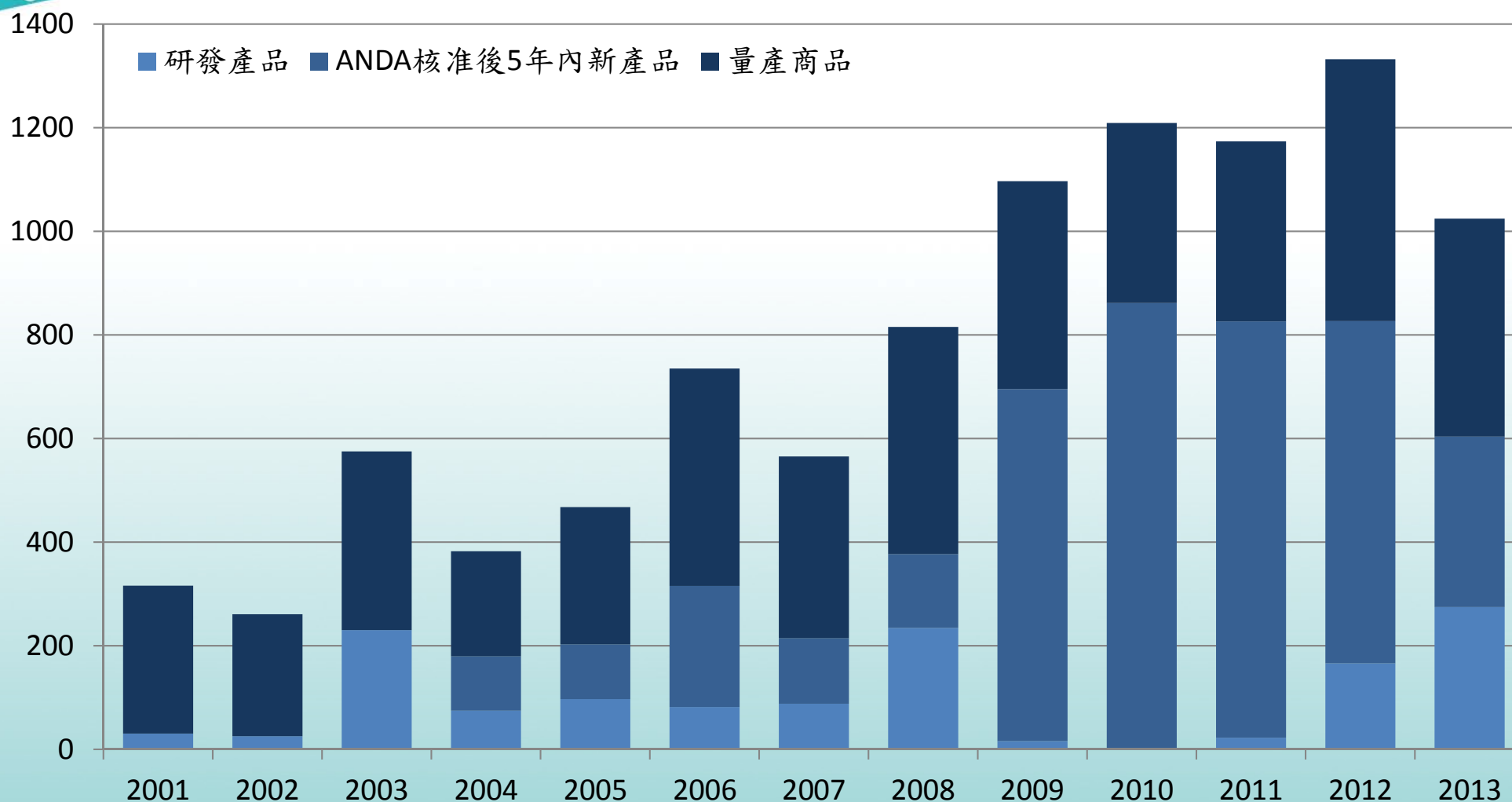
Unit : NTD Thousands



Different Development Stages Revenue



Unit : NTD Millions



High Level of Quality



➤ Authority inspected GMP Products List

Year	Authorities	Products
2006	TFDA	PDE
2007	KFDA	MCB
2008	NIP TFDA	TDP RAPA
2009	German Authority TFDA	PVTS MCB, PVTS
2010	TFDA	FK506, MMF
2011	USFDA	MMF, FK506/SD20, DEXB
2012	German Authority TFDA	PVTS FCZ, MATX, RAPA
2013	TFDA PMDA KFDA	OLO, RAPA, EVE, CAS FK506 FK506

High Level of Quality (cont.)



➤ Customers Inspected Products List

Year	North America	Europe	Asia
2008	MMF, RAPA, PVTS, MCB	PDE	MCTP
2009	MCB, DEXB, FK506-SD20, RAPA		BSF, GGE, PVTS
2010	Rapa, FK506, MCB, PVTS, TDP,	TDP, MCB	MCB, MMF, PVTS
2011	RAPA, PVTS, FCZ, DEXB, MMF, FK506, MCB, FK506-SD20, MTAX, CAS	PVTS, OLO	GGE, FK506
2012	Rapa, DEXB, MCB, MTAX	EPAE, PVTS, MCB, CAS	FCZ, PVTS
2013	TDP, EPAE, PVTS	MCB, MMF, PVTS, EPAE, EVE, FK506	FK506, EPAE, FCZ,

Short Term Development Plan



- To promote Pravastatin and expand market share in USA, Europe and Japan markets.
- To enhance new products marketing and increase direct customers in Europe.
- To devote to Tech & Process Improvement, Cost Reduction, Competitiveness and Market Share.
- To strive for More contract manufacturing Contracts (30% of Revenue)
- To seek vendors with qualified raw materials and competitive prices, decrease manufacturing costs and improve competitiveness.
- To establish strategic alliance with pharmaceutical companies to develop other new qualified products to explore the world-wide market.

Medium Term Development Plan



- To cooperate with pharmaceutical companies and supply APIs for clinical trials
- To devote to generic drugs development (equally on PIV & PIII products)
- To develop specialty chemical and intermediate
- To strive for biotech contract manufacturing as basis of large molecule API production in the long run
- To leverage the fusion of synthesis and fermentation to develop niche product

Long Term Development plan



- **Cooperation with Academic and Authority to develop Small Molecular New Entity.**
- **Upgrade Current Fermentation Process to Cell Culture Technology.**
- **Cooperation with Academic and Authority to develop New Biological Product.**

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2013 Annual Sales



Unit: NTD Thousands

	Biotech Products	Synthetic Products	Total	%
Domestic	12,278	34,110	46,388	4.4%
Export	803,065	194,027	997,092	95.6%
Total	815,343	228,137	1,043,480	100%
%	78.1%	21.9%	100%	—

2012/2013 Annual Sales Comparison



Unit: NTD Thousands

	Y2011	Y2012	Growth	%
Domestic	44,787	46,388	1,601	3.6%
Export	1,275,634	997,092	-278,542	-21.8%
Total	1,320,421	1,043,480	-276,941	-21.0%

2013 Income Statement



Unit: Thousand NTD

	Amount	%
Net Sales	1,043,480	100%
COGS	668,486	64%
Net Gross Profit	374,994	36%
Operating Expenses	276,260	26%
Operating Income	98,734	10%
Non-operating Income	14,948	1%
Non-operating Expenses	113,682	11%
Income before tax	16,764	
Income Tax Benefit/(Expense)	96,918	
Net Income	9.28%	
Net Margin	1.25	

Note: (1) EPS Unit per NTD, shares Outstanding 77.56 Millions

Thank you!

