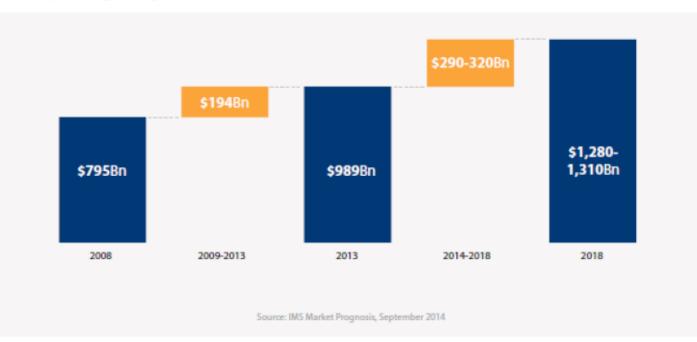
Taiwan and Korea

Complimentar or competitor?

IN GLOBAL Pharma market

Siegfried Gschliesser

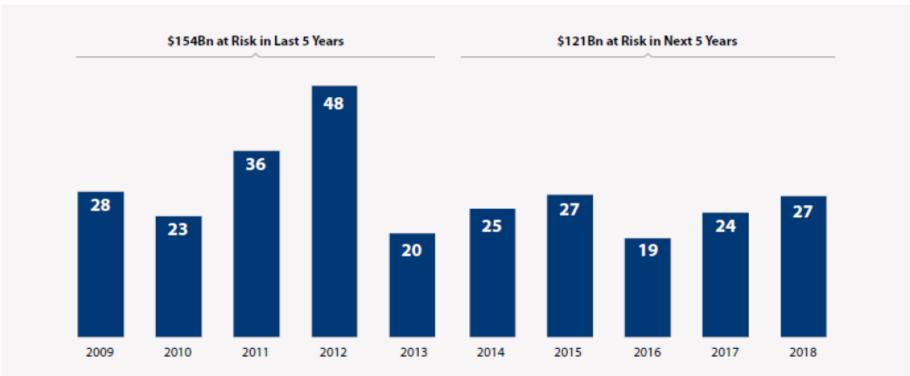
Total global spending will reach \$1.3Tn in 2018, an increase of \$290-320Bn from 2013



Global spending and growth, 2008-2018

Small molecule patent expiries will moderate through 2018 after a peak in 2012

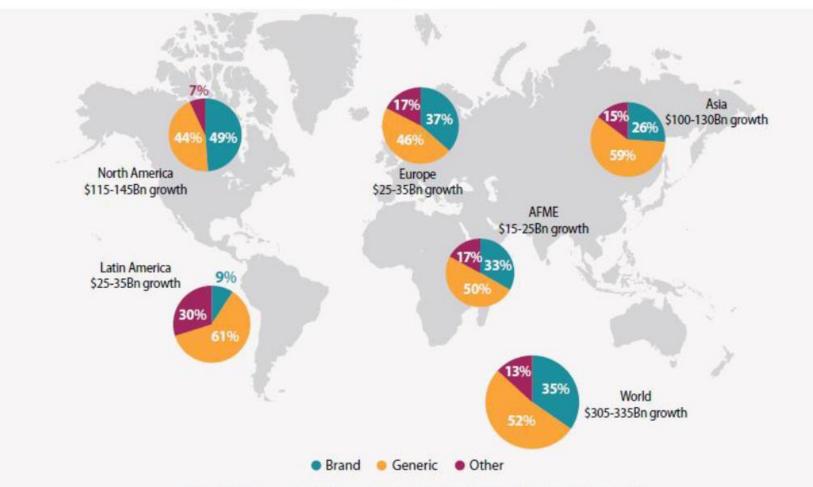
Value of small molecule products facing loss of exclusivity in developed markets



Global country rankings

Rank	2008	Index	Rank	2013	Index	Rank	2018	Index
1	U.S.	100	1	U.S.	100	1	U.S.	100
2	Japan	27	2 🔺	China	29	2	China	36
3 🛕	China	14	з 🛡	Japan	26	3	Japan	22
ŧ	France	14	4 🔺	Germany	14	4	Germany	12
V .	Germany	14	5 V	France	11	5 🔺	Brazil	11
5	Italy	9	6 🔺	Brazil	9	6 V	France	8
,	Spain	7	7 🖤	Italy	8	7 🔺	U.K.	7
V	U.K.	7	8	U.K.	8	8 🔻	Italy	7
	Canada	7	9 🔻	Spain	6	9 🔺	Canada	5
) 🔺	Brazil	5	10 🔻	Canada	6	10 🔺	Russia	5
V	Mexico	4	11 🔺	Russia	5	11 🔺	India	5
2 🔺	Australia	4	12 🔻	Mexico	4	12 🔻	Spain	5
з 🛕	S. Korea	4	13 🛕	India	4	13 🖤	Mexico	4
4	Russia	3	14 🔻	Australia	4	14 🔺	S. Korea	3
5 V	India	2	15 🔻	S. Korea	4	15 V	Australia	3
6 🛕	Turkey	2	16 🔺	Argentina	2	16 🛕	Turkey	2
7 🛕	Greece	2	17 🔺	Poland	2	17 🛕	Saudi Arabia	2
8 🔻	Netherlands	2	18 🔻	Turkey	2	18 V	Poland	2
9 V	Poland	2	19 🔺	Belgium	2	19 🔻	Argentina	2
V 0	Belgium	2	20 🔻	Netherlands	2	20 🔺	Indonesia	2

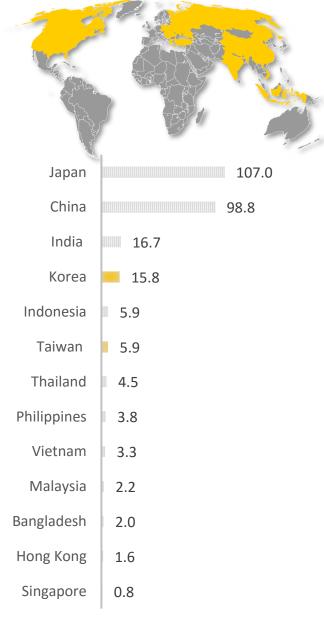
Generics continue to drive growth globally



Korea, 4th largest market in Asia

MARKET OVERVIEW

	2014	2015	2019		
Market	Korea	Korea	Korea		
Population	50m	50m	51m		
Size of RX pharma market, bn	14bn. USD	17bn. USD	20bn. USD		
Pharmaceutical market growth YonY	9.72%	5%	3%		
Retail vs hospital sales	36% vs. 64%	35% vs. 65%	36% vs. 64%		
OTC vs Rx	18% vs. 82%	18% vs. 82%	19% vs. 81%		
	58.4% vs.		57.2% vs.		
State Expenses vs. private expenses	41.6%	58% vs. 42%	42.8%		
Pharmaceutical consumption per					
capita per year	355 USD/year	394 USD/year	458 USD/year		
GDP, bln	1,449 bln USD	1,546 bln USD2	2,042 bln USD		
Expected GDP % growth in next 3					
years	3.7%	3.0%	3.9%		
Healthcare budget	42 bln USD	47 bln USD	74 bln USD		
Number of hospitals	2,548	2,600	2,900		
Number of distributors	2,027	2,000	1,980		
No of local producers	417	402	360		
No of foreign producers	33	33	35		
Top 10 GX market share	21.6%	NA	NA		





Taiwan, 6th largest market in Asia

	2015	2016	2020
Population	23m	23m	23m
Size of RX pharma market	5.9bn. USD	5.9 bn. USD	6.2bn. USD
Pharmaceutical market growth	3%	6%	6%
Retail vs hospital sales	15% vs. 85%	15% vs. 85%	15% vs. 85%
OTC vs Rx	10% vs. 90%	10% vs. 90%	10% vs. 90%
State Expenses vs. private expenses	85% vs. 15%	85% vs. 15%	85% vs. 15%
Drug spend per capita	252 USD/year	259 USD/year	276 USD/year
GDP, bln	472 bln USD	485 bln USD	500 bln USD
Expected GDP % growth in next 3 years	0.9%	2.27%	3.0%
Healthcare budget	33.7 bln USD	34.4 bln USD	35.5 bln USD
Number of hospitals	300	300	300
Number of distributors	700	700	700
No of local producers	109	100	80
No of foreign producers	40	40	45

107.0 Japan 2.1% China 98.8 9.9% India 16.7 11.6% Korea 15.8 3.7% Indonesia 5.9 9.2% 2.2 Taiwan 5.9 7.1% Thailand 4.5 7.3% * Philippines 3.8 5.2% Vietnam 3.3 13.9% Malaysia 2.2 11.5% Bangladesh 2.0 9.2% 5 Hong Kong 1.6 8.0% *** Singapore 0.8 7.6%

Pharma Market Size (US\$bn)

Top products Korea and Taiwan

Taiwan Product	2013	2014	2015	off patent
BARACLUDE	60,735	60,648	58,184	yes
HERCEPTIN	58,183	58,230	58,014	
GLIVEC	51,159	51,551	49,197	yes
PLAVIX	53,251	48,166	46,007	yes
CRESTOR	48,304	49,379	44,911	yes
LIPITOR	52,798	51,249	43,758	yes
NEXAVAR	32,666	35,580	36,725	
ALIMTA	37,377	36,620	36,355	
KOGENATE	33,696	37,327	34,587	
ENBREL	36,423	37,656	32,862	
NORVASC	49,979	42,894	32,616	yes
HUMIRA	34,349	35,199	32,513	
IRESSA	40,564	36,751	31,632	
EXFORGE	34,504	34,355	31,180	yes
REPLAGAL	24,881	28,303	29,871	yes
AVASTIN	30,168	28,211	28,537	
VIREAD	17,625	26,483	28,226	
PROGRAF	28,925	29,563	27,841	yes
DIOVAN	33,680	31,255	26,744	yes
MABTHERA	24,548	24,312	25,841	

BARACLUDE 131,693 133,850 110,602 yes LIPITOR 77,559 84,925 87,370 yes HERCEPTIN 72,577 81,241 82,064 VIREAD 36,023 63,563 79,614 BACCHUS-D 65,314 70,193 72,446 JANUMET 43,224 54,787 62,658 TWYNSTA 57,580 61,080 64,461 PROGRAF 54,657 62,200 60,813 yes PREVNAR 60,625 66,781 53,745 VARIVAX 14,344 49,643 53,616 ARICEPT 38,353 47,728 49,708 yes LANTUS 45,501 50,302 49,254 CRESTOR 71,024 67,710 48,344 yes VYTORIN 49,122 51,411 46,412 yes EXFORGE 60,680 55,427 46,391 yes GLIATILIN 47,452 46,454 45,074 yes HUMIRA 32,977 39,731 44,500 CELEBREX 47,947 57,205 43,859 yes NORVASC 43,950 44,969 42,505 yes PLAVIX 41,279 41,326 41,360 yes

2013

Korea Product

2014

2015

off patent

9 of top 20 brands are shared among both countries

Health Care System

Korea

National health insurance system complete coverage of population

Covering medical care, devices and pharmaceuticals (relatively high copay

Fast aging population creates pressure on healthcare system

Strive to become innovator in pharmaceutical and healthcare

Taiwan

National health insurance system complete coverage of population

Covering medical care, devices and pharmaceuticals (low copay

Fast aging population creates pressure on healthcare system

Strive to become innovator in pharmaceutical and healthcare

Market Leader in the Highly Attractive Asia Pacific Generic Pharmaceutical Industry with Access to Other Advanced Markets

Investment Highlights

- Industry leading footprints: A fast growing, pan-regional, generic and specialty pharma company with direct access to advanced markets including US
- Manufacturing excellence: 1 US FDA, EU EMA, Japan PMDA and TFDA PIC/S approved manufacturing facility focusing on high potency, cytotoxic and softgel products, 2 KGMP approved manufacturing facilities and 2 R&D centers (Korea and Taiwan)
- Leading market share: #1 in Korea in terms of sales from anti-obesity drug, and strong presence in Taiwan for oncology and CNS drugs

Strong Pipeline

- Robust international pipeline through integrated RD platform:
- 6 products approved and 3 products filed ANDA for US
- 4 products/CDMO projects for Japan in pipeline
- 6 products filed and 1 product approved in China
- 5+ products for EU Asia scope in pipeline
- Distribution rights of 2 biosimilars under development by Alvotech

Strong Growth and Margin								
(US\$m)	<u>Q1'15</u>	<u>Q2'15</u>	<u>Q3'15</u>	<u>Q4'15</u>	<u>Q1'16</u>	<u>Q2'16</u>		
Rev	40.7	42.0	44.6	46.3	44.8	50.1		
GP	23.4	23.9	27.5	26.7	24.5	29.7		
GM	57.6%	56.8%	61.6%	57.7%	54.7%	59.3%		
EBIT	2.2	2.9	5.1	4.0	4.7	6.4		
EBIT %	5.4%	6.8%	11.4%	8.6%	10.4%	12.8%		
Net profits	(0.7)	3.9	0.5	1.3	2.9	1.7		
EPS (US\$)	(0.004)	0.012	0.002	0.004	0.008	0.002		
Cash EPS (US\$)	0.014	0.027	0.046	0.055	0.034	0.049		

Regional HQ in Taiwan with many regional functions in Korea

SUMMARY

While superficially Taiwan and Korea might appear to be competing in same space Actually the pharma industry is very complimentary, where strengths and weakness of both countries can be combined to both benefit