

## Malaysia: Going Herbal

Over the past decade, Malaysia has shown strong expertise in the development of generic medicines, a market that is growing in acceptance both domestically and internationally. At the same time, the country is exploiting its natural flora and fauna to build up capacity and expertise in the area of biotechnology. With global demand for natural and herbal medicines on the rise, the country feels it is well positioned to become a centre of excellence for the research and production of bio-generic medicines.

With the global pharmaceutical market forecast to grow to \$897bn in 2011 at a compound annual growth rate of 6.9%, according to consultancy firm Frost & Sullivan, countries all over the world are looking to capture their share of the pie. While the multinational giants from the likes of the US, Japan and Germany have a stronghold in the over-the-counter branded products, as global trends shift towards generic and biotech consumption in the form of herbal and traditional medicines, Malaysia hopes to capture a significant share of these fields.

While having a population of just 27m, the country is becoming a large market for drug sales as Malaysians are growing in affluence and are becoming increasingly health conscious. Malaysia's spending in domestic healthcare grew 8%, the sixth highest growth in Asia, ranking behind the Philippines, Indonesia, India, South Korea and China. Frost & Sullivan estimated that by 2013, the Malaysian market would be worth \$1.80bn with a compound annual growth rate of 10.5%.

Though imports account for

60% of the domestic market, the country is becoming an increasingly popular destination for production. Most of the major global manufacturers already have a strong presence in the country, with Johnson & Johnson, GSK and Ranbaxy among others having established their own production facilities. It is estimated that 60% to 70% of the market is private sector led, and as of December 31, 2006, 246 pharmaceutical companies had been registered by the regulating body, the Drug Control Authority.

According to the Malaysian Organisation of Pharmaceutical Industries, exports of Malaysian-made pharmaceuticals are estimated to be at around \$130mn, with vitamins leading the pack.

One of the main issues looming over the sector is the pending Free Trade Agreement (FTA) with the US. The two countries failed to reach a formal agreement over a proposed FTA in April 2007, with government procurement the highest profile issue of contention. Another cause for concern lies over the US demand that Malaysia extend the patent period for new drugs. While the length of the extension is still up for debate, an extension would make Malaysia a far more attractive market for US companies to enter, but would come at the detriment of the local industry, especially for manufacturers of generics. South Korea's ministry of health and welfare, for instance, has estimated that a proposed FTA with the US could cost the South Korean pharmaceutical industry up to \$1.05bn in accumulated damage.

In light of the pending FTA, which some believe could come into effect within the next year, there has been increased focus from both the private and public sector to look at niche activities where Malaysia can most strongly compete. In this regard, the "biogeneric" market has been identified as the major driver for Malaysia's pharmaceutical market. Although relatively new, Frost & Sullivan expects the biogeneric market to grow globally at annual average of more than \$16bn by 2011 as herbal medicines and vitamins supplements gain in popularity.

With naturally diverse flora and fauna and a desire to move away from low-cost industries, biotechnology has been targeted by the govern-

### INSIDE THIS ISSUE:

<i>Malaysia Going Herbal</i>	1 
	2
<i>News Clips</i>	2
<i>Top 25 Most Attractive Cities for FDI (Europe)</i>	2
<i>Vietnam Pharma Market Opens Up</i>	3
<i>The World's Most Admired Companies</i>	3
<i>Top Industries for New and Expanding Facilities</i>	4

## Top 25 Most Attractive Cities for FDI (Europe)

1. London, UK
2. Flanders, Belgium
3. Paris, France
4. Leipzig, Germany
5. Wallonia, Belgium
6. Tallinn, Estonia
7. Cardiff, UK
8. Bristol, UK
9. Berlin, Germany
10. Scotland, UK
11. Ostergötland, Sweden
12. Valencia, Spain
13. Dundee, UK
14. Luxembourg, Luxembourg
15. Waterford City, Ireland
16. Miskolc, Hungary
17. Copenhagen, Denmark
18. Indjija, Serbia
19. Razgrad, Bulgaria
20. Northern Ireland, UK
21. Amsterdam, Holland
22. Warsaw, Poland
23. Flensburg, Germany
24. Madrid, Spain
25. Frankfurt, Germany
26. Budapest, Hungary

Source: FDI Magazine, February/March 2008

## Malaysia: Going Herbal (continued)

ment as a key segment that can accelerate Malaysia's transformation into an industrialised nation by 2020. Accordingly, the sector, which includes bio-pharmacy, receives strong government commitment in the forms of grants and investor-friendly legislation.

In 2005, the government established the Malaysian Biotechnology Corporation as the lead agency to facilitate the industry's development. Companies can apply for "Bionexus" status, which allows 100% tax exemption for the first 10 years of operation, the freedom to source funds globally and the ability to bring in unlimited knowledge workers. The country also benefits from a strong and dedicated intellectual property regime. Moreover, to encourage research and development in the area, the government aims to set up three "centres of excellence" for the study and advancement of locally registered patents.

Source: [www.oxfordbusinessgroup.com](http://www.oxfordbusinessgroup.com), March 4, 2008

## News Clips

### RFID In Pharmaceutical Manufacturing

In order to efficiently cope with the changing structure and multiple challenges of the pharmaceutical manufacturing industry, pharmaceutical companies and distributors are working to find suitable technologies to maintain patient safety and to streamline business. There are a number of solutions to help in this effort, but radiofrequency identification (RFID) is positioned to be a top solution in manufacturing and distribution, clinical trials, and sample distribution.

Technology companies who position themselves in pharmaceutical manufacturing may find opportunity awaits, as this industry discovers the myriad ways RFID can cut cost and refine operations. With the proper market information, tech companies can benefit as applications for RFID in pharma are implemented.

Source: [www.kaloramainformation.com](http://www.kaloramainformation.com)

### Researchers Use Light To Detect Alzheimer's

A team of researchers in Bedford, Mass. has developed a way of examining brain tissue with near-infrared light to detect signs of

Alzheimer's disease.

The new technique can detect alterations to the optical properties of the brain that occur as the tissue undergoes microscopic changes due to Alzheimer's — sometimes far in advance of clinical symptoms. The technique is now being tested for its effectiveness at diagnosing Alzheimer's disease in living people.

This technique will be a boon to medicine if it is able to detect microscopic changes that can be related to disease progression. While techniques like MRI are good at identifying the gross anatomical features associated with Alzheimer's, they cannot detect more microscopic changes.

Accurate, early detection of Alzheimer's could save many lives. While there is no cure for the disease, clinically proven treatments can slow its progress — especially if they are administered early on. Moreover, being able to follow the disease progression over time would greatly enhance the ability of researchers and pharmaceutical companies to find new and improved drugs and treatment strategies for people at all stages of the disease.

Source: [Optical Society of America](http://Optical Society of America), March 17, 2008



## Vietnam Pharma Market Opens Up

Vietnam, the fourth most populous country in the Far East Asia, entered the World Trade Organization (WTO) in early 2007. Its entry is now helping the development of the domestic pharmaceutical industry that has traditionally been regarded as high risk and disorganized, due to considerable counterfeit activity and a substandard intellectual property (IP) regime. However, this is now changing as the industry now needs to improve its production standards as MNC entry in the market intensifies competition.

### Industry Scenario

Buoyed by the market potential and a favorable market scenario, the number of foreign pharmaceutical companies operating in Vietnam has increased, as the local companies are still dependent on the imported materials. According to the Vietnam Drug Administration, there are around 800 pharmaceutical companies currently operating in the country.

The number of MNCs ballooned by 58 over last year, bringing the total number to 370, according to the Vietnam Pharmaceutical Management Bureau. Most of these companies are small or medium enterprises and mostly from Asian region. India tops the list with 81 companies, followed by Korea and China. Indian and Korean-made medicines make up 58% of Vietnam's total imports.

Vietnam imports both finished products and pharmaceutical raw materials. Imported drugs include patented medicines, Traditional Chinese Medicine and some high quality generics. The pharmaceuticals import value is on the rise and accounts for 50% of the total drug consumption annually.

However, it is not just the number of foreign companies that is rising in the country, local companies are also on the growth path. Vietnam has 180 pharmaceutical factories, 75 of which meet Good Manufacturing Practices (GMP) standards, 25 of which are

foreign-invested. It is expected that local pharmaceutical production will earn about \$560 million in 2007, up 18% from 2006. Of the \$560 million, about \$160.3 million was spent on improving raw materials, up 23% from 2006.

### Government Initiatives

The Vietnamese government is investing in the health sector and has recently announced a scheme expanding the healthcare network throughout the country. This will include the establishment of hospitals in more remote areas as well as investment in drug production.

The Prime Minister of Vietnam Mr Nguyen Tan Dung, has approved a new pharmaceutical production plan in first half of 2007 that will allow the country to become less dependent on foreign drug manufacturers. The project, entitled "Development of Drug, Industry and Medical Supply Model" in Vietnam for 2007-2015, will further expand its pharmaceutical production system, thus gradually meeting the nation's basic demands, namely 70% of the drug market by 2015 and 80% by 2020.

The government is keen to attract foreign investment in the pharmaceutical industry to produce much-needed medicines, such as antibiotics. In December 2005, 100 foreign enterprises had received licenses for medical equipment and pharmaceutical investment, with the total proposed capital investment reaching \$800 million. Most interest was received from firms based in South Korea, followed by the United Kingdom and France.

About 370 foreign enterprises—mainly from China, Japan, South Korea, France and Thailand—have invested in the Vietnamese pharmaceutical industry. There are currently 46 projects underway, worth some \$111.6 million.

*Source: BioSpectrum, Vol 3 Issue 2, February*

## The World's Most Admired Companies

### Pharmaceuticals

1. Johnson & Johnson
2. Novartis
3. Merck
4. Abbott Laboratories
5. Eli Lilly
6. GlaxoSmithKline
7. Roche Group
8. Amgen

### Electronics

1. General Electric
2. Sony
3. Siemens
4. Emerson Electric
5. Royal Philips
6. Samsung
7. LG
8. Toshiba

### Semiconductors

1. Texas Instruments
2. Flextronics
3. Intel
4. Applied Materials

*Source: Fortune, March 2008*



Invest-In-Penang Berhad  
 1 Jalan Sultan Azlan Shah  
 PSDC Building  
 Bayan Lepas  
 11909 Penang  
 Malaysia

Tel: 604-646 8833  
 Fax: 604-646 8811  
 Email:  
[enquiry@investpenang.gov.my](mailto:enquiry@investpenang.gov.my)

## Top Industries for New and Expanding Facilities

2007 Chemicals/Pharmaceuticals				
Company	Country	Product	Category	Investment \$US millions
Reliance Industries Ltd.	India	Acrylonitrile	N	\$6,000
Total/Sonatrach	Algeria	Petrochemicals	N	3,000
Jurong Energy Corp./Glencore/ Noor Financial/Jiangsu Sanfangxiang Industrial Group	Singapore	Petrochemicals	N	2,000
Southeast Idaho Energy	U.S.A.	Fertilizer & diesel fuel	N	2,000
Eastman Chemical Company	U.S.A.	Industrial gasification	N	1,600
Faustina Hydrogen Products LLC/ US Transcarbon LLC	U.S.A.	Petro Chemical	N	1,600
Westlake Chemical Corp.	Trinidad and Tobago	Polyethylene	N	1,500
Eastman Chemical Company	U.S.A.	Chemicals	E	1,300
Lake Charles Cogeneration, LLC	U.S.A.	Gas Plant	N	1,300
Abbott Laboratories	U.S.A.	Pharmaceuticals	N	1,200
SP Chemicals	Vietnam	Petrochemicals	N	1,200
Terra Industries/Orica Mining Services	Peru	Ammonium Nitrate	N	1,200

Source: Conway Data Inc.'s New Plant Database N = New E = Expansion

Top Industries by Number of Projects			
Industry	New	Exp.	Total
Chemicals/ Pharmaceuticals	577	221	798
Transportation Equipment Mfg.	436	309	745
Food Processing	268	232	500
Machinery (excl. Electrical)	232	220	452
Computer and Electronics Mfg.	293	133	426

Source: Conway Data Inc.'s New Plant Database

2007 Computers/Electronics				
Company	Country	Product	Category	Investment \$US millions
Videocon Industries	Poland	LCD TVs	N	\$7,000
United Microelectronics Corp.	Taiwan	Semiconductors	N	5,000
Intel	Israel	Memory chips	N	4,000
Sharp Corp.	Japan	LCD TVs	N	3,500
SVA-NEC Group	China	LCD panels	N	3,000
SemIndia	India	Semiconductors	N	3,000
Qimonda AG/Infineon Technologies AG	Singapore	Semiconductors	N	2,700
ProMOS Technologies Inc.	Taiwan	Memory	N	2,500
Innolux Display Corp.	Taiwan	LCDs	N	2,434
Intel/Micron	Singapore	Flash Memory	N	2,000

Source: Conway Data Inc.'s New Plant Database N = New E = Expansion

This article will be archived in our website:  
<http://www.investpenang.gov.my>

*Talk to us!*



2007 Machinery (excluding Electrical)				
Company	Country	Product	Category	Investment \$US millions
Alstom	U.S.A.	Turbines and generators	N	\$280
Bosch	Germany	Wind turbines	N	248
Hansen Transmissions International NV/ Suzlon Energy	India	Gearboxes for wind turbines	N	220
Mitsubishi Heavy Industries	Japan	Gas turbines	E	206
Harbin Bearing Group Co.	China	Bearings	N	200
Shanghai Electric Power Generation Equipment Co. Ltd.	China	Power plant components	N	164
Volvo Construction Equipment	Sweden	Construction equipment	E	158
Telco Construction Equipment	India	Construction equipment	N	152
Bucyrus International	U.S.A.	Mining equipment	E	135
Alstom/Wuhan Boiler Co.	China	Boilers	N	113

Source: Conway Data Inc.'s New Plant Database N = New E = Expansion

Source: <http://www.siteselection.com/issues/2008/mar/topIndustries/index.htm>