

GLOBAL PHARMACEUTICAL INDUSTRY REPORT

2005 Global Pharma Sales By Region

World Audited Market	2005 Sales (In \$Bn)	% Global Sales (%)	% Growth (Constant \$)
North America	\$267.7 bn	47%	+5.2%
Europe	\$169.5 bn	30	7.1
Japan	\$60.3 bn	10.7	6.8
Asia, Africa and Australia	\$46.4 bn	8.2	11
Latin America	\$24 bn	4.2	18.5
Total	565.9	100%	+6.9%

Leading Manufacturer in 2005 in Global Pharmaceutical Sales

Rank	Manufacturer	Nationality	Sales in 2005 In Billion \$	%Growth (Constant \$)
1	Pfizer	USA	47.7	-7%
2	GSK	UK	34.9	5
3	Sanofi-Aventis	France	30.5	8
4	Novartis	Switzerland	28.7	11
5	J&J	USA	25.4	0
6	AstraZeneca	UK	24.2	9
7	Merk & Co	USA	23.6	-3
8	Roche	Switzerland	19.9	17
9	Abbott	USA	15.7	9
10	BMS	USA	14.8	-6

Leading Products in 2005 by Global Pharmaceutical Sales

Rank	Audited World Product Sales	2005 sales in \$ Billion	% Growth (Constant \$)
1	Lipitor	12.9	+6.4%
2	Plavix	5.9	16
3	Nexium	5.7	16.7
4	Seretide/Advair	5.6	19
5	Zocor	5.3	-10.7

Outlook Of Global Pharmaceutical Industry

The retail drug sales in the 13 major markets for the fourth quarter of 2005 are forecast to rise by 7.4% yoy to US\$95.49 billion. The fourth quarter growth in global retail drug sales is likely to be driven by Brazilian and Canadian markets. The growth of US retail drug sales is expected to rise above the 5%-mark in the fourth quarter. Even European retail drug markets are expected to improve upon their third-quarter performance in the current quarter. A major issue for the global pharmaceutical market going forward is the Avian flu the highly pathogenic H5N1 strain. This strain of avian flu has become endemic in parts of Indonesia, Vietnam, China, Thailand, Cambodia and Laos. The Avian flu occurs naturally in birds and rarely infects humans, but when it does, the consequences are fatal. Since 2003, 120 people have come down with the avian flu; half of who died. With the H5N1 strain of Avian flu becoming common in several countries, the probability of a super flu is high. The last century has seen four flu pandemics of which the 1918-pandemic was the most deadly, claiming a shocking 40-50 million lives. Some anti-viral drugs such as Tamiflu (Oseltamivir) and older drugs such as Amantadine can help restrict the outbreak of Super flu, but by far vaccines represent the most-effective way of protecting humans against Super flu. It takes about six months to develop a vaccine for a specific Super flu strain from the date on which it first appears. In the interim period, loss of life is inevitable. Worse, the Super flu strain is known to undergo mutation. Therefore, vaccines have to be renewed on a continuous basis. With the outbreak of Super flu becoming likely, regulators could broaden prevention and treatment options by expediting the approval of promising drugs in the pipeline.

Furthermore, the current global production capacity of 300m flu shots will prove woefully inadequate if a Super flu breaks out on a global scale. Now most of the global vaccine capacity is concentrated in nine countries, which include Australia, Britain, Canada, France, Germany, Italy, Japan, the Netherlands and the USA. If a global outbreak of the Super flu does occur, some experts say that these countries

may restrict or stop the flow of vaccines to other countries in the name of national emergency. In case of a Super flu outbreak, it is likely that the countries, which need the flu vaccine the most, may not get it due to the concentration of production in a few countries. Now international treaties ensuring the flow of vaccines to the needy countries do not exist. The drug safety, meanwhile, continues to draw the attention of the public and the regulators. The devastating side effects of Vioxx have shaken the confidence of the public in big pharmaceutical companies. In the wake of Vioxx, the USFDA has tightened the drug approval process, further lengthening the drug development period. In addition, the problems of Merck have not ended with the withdrawal of COX-2 inhibitor drug Vioxx, but began with thousands of lawsuits being filed against it across the country. Increasing cost-containment measures worldwide, which are leading to a growing substitution of branded prescription drugs by cheaper generic versions, has compounded the problems of the big pharmaceutical companies.

The pharmaceutical companies have sought to relieve growing pressures through mergers and acquisitions. For research-based pharmaceutical companies, the acquisition of biotech companies has emerged as a means to bolster thinning product pipelines. The consolidation among generic companies is also increasing due to competitive reasons. The rapid growth of emerging markets such as Brazil and China are offering hope to the troubled pharmaceutical companies in the short-term. Indeed the global pharmaceutical industry is poised to report better yoy growth in the fourth quarter, but the pressures simmering under the surface could force a slowdown sooner than later. For many of the pharmaceutical companies 2005 was a year of transition as they responded to cost containment challenges, regulatory setbacks and safety issues. A combination of surging underlying demand driven by ageing populations and successful innovation in areas of high unmet needs will continue to fuel growth. Generics will play a great role, as people have to bear more and more of their own expenses. Price moderations for branded drugs is likely as a result increasing the importance of improved product launches and accelerating growth of existing drugs. In 2005, sales of generics in top eight markets exceeded \$55 billion and are expected to experience double-digit growth over the next five years.

The total pharmaceutical market will expand at a compound annual growth rate of 5-8% over the next five years. North America and Europe are projected to grow at a 5- 8% rate; Asia Pacific /Africa to grow at 9-12%; Latin America to grow at 7-10%; and Japan to grow at 3-6%. Pharmaceutical industry will face an unprecedented challenge due to focus on generics as a cost effective alternative to branded drugs and moderate rate of growth on top ten markets. For a long term success, it is important to strike a balance between prevention, treatment and cost containment which will help new delivery systems to improve patient quality of life and vaccines to prevent diseases.