

## Movers & Shakers brands of Pharmaceutical industry. What's your take with respect to Enterprise strategy and Business Process Re-engineering?

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Translates concepts to profits, consistently!

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IMS Health has compiled a list of the top 15 bestselling drug classes (Table 1). Oncology drugs stand head and shoulders above the rest, bringing in \$52 billion annually. That's \$17 billion more than the next category, lipid regulators like Lipitor. Anti-epileptics saw the biggest drop in annual growth last year, while sales of autoimmune agents like Enbrel, Remicade and Humira soared almost 20 percent over 2008 levels.

Table 1: Top 15 Global Fastest growing Therapeutic Classes of 2009 (Data courtesy of IMS Health)

Drug Class	2009 Sales (billions)	Annual Growth
Oncologics	\$52.37	8.8%
Lipid Regulators	\$35.28	4.9%
Respiratory Agents	\$33.59	11.0%
Antidiabetics	\$30.40	13.4%
Anti-ulcerants	\$29.61	0.6%
Angiotensin II Antagonists	\$25.20	11.4%
Antipsychotics	\$23.24	4.6%
Antidepressants	\$19.41	-1.3%
Autoimmune Agents	\$17.96	18.0%
Platelet Aggr. Inhibitors	\$14.60	9.0%
HIV Antivirals	\$13.75	14.9%
Anti-epileptics	\$12.99	-19.8%
Narcotic analgesics	\$11.23	8.6%
Non-narcotic analgesics	\$11.17	7.3%
Erythropoietins	\$10.80	-4.1%

### IMS data at a glance:

**Fastest average growth:** Autoimmune agents.

**Lowest average growth:** Erythropoietins.

**Biggest single-year gain:** Narcotic analgesics (2006 to 2007).

**Biggest single-year loss:** Anti-epileptics (2008 to 2009).

**Largest overall class:** Oncologics.

Oncologics, lipid regulators, respiratory agents, antidiabetics and anti-ulcerants are the five largest drug classes by sales. But annual sales are only half the story. Which drug classes are booming, and which have plateaued--or even dropped?

Table 2 below, gives a closer look at the average sales growth of the 15 largest therapeutic classes over the five years 2005-09. (Data courtesy of IMS Health).

Market	2009	2008	2007	2006	2005	Avg. Growth (%)
Autoimmune agents	18.0	19.3	17.4	21.6	32.0	17.86
Oncologics	8.8	13.4	15.8	21.6	19.2	15.76
Angiotensin II Antagonists	11.5	13.3	14.0	15.2	18.3	12.06
Respiratory Agents	11.0	5.9	11.9	11.4	13.8	10.8
HIV Antivirals	14.9	12.7	12.8	10.9	11.4	10.34
Antidiabetics	13.4	10.1	10.8	12.7	12.6	9.7
Antipsychotics	4.6	7.7	11.4	11.7	11.0	9.28
Platelet Aggr. Inhibitors	9.0	10.4	8.7	8.1	10.1	9.26
Narcotic analgesics	8.6	8.9	12.9	-1.1	3.1	6.48
Non-narcotic analgesics	7.3	4.1	7.9	3.1	6.7	5.82
Anti-epileptics	-19.8	9.8	13.7	11.3	1.3	3.26
Lipid Regulators	4.9	-1.2	-5.8	7.9	6.9	2.54
Anti-ulcerants	0.6	0.0	2.6	3.0	4.2	2.08
Antidepressants	-1.3	1.1	-6.2	3.6	-3.6	-1.28
Erythropoietins	-4.1	-13.2	-8.3	12.0	7.2	-3.48

Though oncologics are the biggest overall market, with \$52.37 billion in 2009 sales, they are the second-fastest growing therapeutic class. Autoimmune agent sales have been increasing at a faster overall pace for five years straight, averaging almost 18 percent annual growth. This category includes blockbuster biologics--like Remicade, Enbrel and Humira--that treat a wide variety of immunological diseases.

Oncologics have been holding steady at 16 percent annual growth, while Angiotensin II Antagonists (which treat blood pressure, congestive heart failure and diabetic neuropathy) have seen 12 percent growth. Respiratory drugs and HIV treatments round out the double-digit growth categories.

On the opposite end of the spectrum are the classes whose market is shrinking. Erythropoietins (such as Aranesp, Epogen and Procrit) experienced strong growth until 2006, beyond, sales of the drugs dropped 20 percent in a single year following safety warnings that the class caused heart and vascular problems at higher doses.

Antidepressants have also experienced a pull-back. Regulators have upgraded warnings on all antidepressants to include an increased risk of suicidal thoughts and behaviour among young adults taking the meds.

A more recent trend is the almost -30 % drop in anti-epileptic sales from 2008 to 2009. The drug class was growing at a good clip until 2008, when the FDA issued a black box warning for suicidal thoughts and behaviour among patients using the medicines. Physicians prescribe the drugs to treat migraines, certain

types of pain and some psychiatric disorders, in addition to epilepsy. With only one year of data following the 2008 warnings, it's too soon to tell what the long-term effects on the therapeutic class growth will be.

#### **Future path:**

There are reports by WHO which point a need for increased research efforts in the field of TB cure, medicated implants as well as effective pain management replacing morphine based drugs.

Innovator companies are now focussing research efforts on cures for "Rare diseases" as statistics states that approximately 30 million Americans, 30 million Europeans and millions more around the world have rare diseases and for most of those people, there is no specific treatment.

Increasingly, large pharmaceutical companies are restructuring their business models so that they can collaborate with small biotech firms to develop medications which target small groups, rather than large populations. This move is influenced in part by a new emphasis on personalized medicine and the need for targeted therapies. For instance, Pfizer has partnered with Abbott Molecular to develop a treatment called crizotinib, which would only benefit four percent of lung cancer patients. Meanwhile, AstraZeneca is seeking FDA approval so that its drug Iressa [gefitinib] can be used to treat EGFR-positive lung cancer patients.

More than 6000 diseases have been classified as orphan diseases, fewer than 10% of them are directly targeted by specific drugs. The pharmaceutical industry traditionally has invested little in rare-disease research and its scientific advances in this field have proceeded slowly as a result. This vast space of opportunity is currently being tapped by the pharmaceutical giants companies and year 2010 has initiated a new era in life science research.

*Is your Product pipeline strategy compliant with market need? Will technology platforms and production machinery available so far be acceptable for delivery presentations of the new era? Most certainly not... so do you have your list of options ready?*

*How can generic players deal with these innovative products once data exclusivity is lost? How do we gear up for the challenges ahead? Is your IP (intellectual property) strategy in place?*

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**About the author:**



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**S**hruti Accelerates ROI ...

For the past 18 years, Shruti has been consistently endorsed as - “Thought Leader par excellence”, and “Strategy Expert” spearheading profitable business process improvement initiatives for her clients.

Her mantra is to "Create a Positive Change" in an organization by providing "Strategic, Substantial and Pragmatic advise" to meet organization's "Fast to Market", "Lean Processes" and "Super-Profit" objectives.

Shruti has her handle on Enterprise wide strategy including- Business strategy, Business process re-engineering & continuous improvement, Intellectual property management & capitalization, Organizational leadership & team development, Market expansions, mergers & acquisitions, Startup & early stage business development & growth, Quality risk management, Quality by design, Strategic alliances & Business process outsourcing. Through her customized “ROI strategy design”, Shruti provides cutting-edge concepts of innovation to create affordable quality products that are "Tough to copy".

She is a gold-medalist, with PhD, MBA from ITM- Southern New Hampshire University School of Business, USA with numerous patents and publications to her credit.

She is an invited keynote speaker at several international conferences and workshops. She blogs ardently and contributes her thoughts to journals, magazines & newspapers.

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