

# the *Pharm Exec*

# 50

We leap tall buildings  
to bring you the  
definitive guide to  
the world's top  
pharma companies  
BY PHARM EXEC STAFF



**T**he *Pharm Exec* 50—the world's top 50 pharmaceutical companies—accounted for prescription drug sales of \$558 billion in 2008. Though a few more companies dipped into negative growth than last year, more than half of the list achieved double-digit growth, a sign that although recession eventually hits even pharma, it usually hits later than in many other industries.

Our rankings are based on companies' own reported sales, taken from SEC filings and annual reports. In a handful of cases—mostly involving private companies that do not disclose sales figures—we have relied on sales figures graciously provided by IMS Health. (These numbers are marked by an asterisk in the rankings chart.) Though IMS numbers typically vary somewhat from the figures reported to the SEC, we feel they are close enough to give a fair sense of how the non-reporting companies compare with their peers.

Our sales figures reflect global sales of human prescription drugs and vaccines. As far as possible, we have excluded royalty revenue, contract manufacturing, animal health, and

over-the-counter drug revenue. Foreign currencies are converted using the interbank rate for the last day of the company's fiscal year—December 31, 2008, for most European companies and March 31, 2008, for most Japanese companies. This year, we made one exception to this policy: GlaxoSmithKline, the only company among the 50 to report its revenue in British pounds. At the end of 2008, the pound dipped to record lows against the dollar. At those rates, the company would have fallen to fifth place in the rankings, posting a revenue loss of more than 20 percent. Because that seemed a distortion of GSK's performance, we converted the company's sales figures as if the fiscal year ended in April 2009. This may slightly overstate GSK's performance, but it seems to better reflect reality.

Next year's list will of course be much different, thanks to the round of mergers announced since the beginning of the year. For a preview of how the Top Ten will change, we offer a "what if" version of the Top Ten—recalculating 2008 revenue of the Top Ten as if the mergers took place last year—on page 76.

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CHARACTER (OPPOSITE) CREATED AND ILLUSTRATED BY CRAIG FOSTER

## THE PHARM EXEC 50

1. Pfizer
2. GlaxoSmithKline
3. Sanofi-Aventis
4. Novartis
5. AstraZeneca
6. Johnson & Johnson
7. Merck
8. Roche
9. Eli Lilly
10. Wyeth
11. Bristol-Myers Squibb
12. Abbott
13. Bayer
14. Amgen
15. Schering-Plough
16. Boehringer Ingelheim
17. Takeda
18. Teva
19. Genentech
20. Astellas
21. Daiichi Sankyo
22. Novo Nordisk
23. Merck KGaA
24. Eisai
25. Otsuka
26. Baxter
27. Servier
28. Gilead Sciences
29. Nycomed
30. Mylan
31. UCB
32. Genzyme
33. Solvay
34. Ratiopharm
35. Mitsubishi Tanabe
36. Chugai
37. Allergan
38. Forest
39. CSL
40. Procter & Gamble
41. Menarini
42. Biogen Idec
43. Shire
44. Alcon
45. Lundbeck
46. Dainippon Sumitomo
47. Cephalon
48. Hospira
49. Watson
50. Actavis



Rank [‘07 Rank]	Company & Headquarters [Web site]	2008 Global Pharma Sales [change from 2007]	R&D Spend	2008 Top-Selling Drugs [2008 sales]
<b>1</b> [1]	<b>Pfizer</b> New York, NY [pfizer.com]	<b>\$44.2 B</b> [-0.5%]	<b>\$7.9 B</b>	Lipitor [\$12.4 B] Lyrica [\$2.6 B] Celebrex [\$2.5 B]
<b>2</b> [2]	<b>GlaxoSmithKline</b> Brentford, England [gsk.com]	<b>\$43.0 B</b> [11.2%]	<b>\$5.2 B</b>	Seretide/Advair [\$6.0 B] Valtrex [\$1.7 B] Lamictal [\$1.4 B]
<b>3</b> [3]	<b>Sanofi-Aventis</b> Paris, France [sanofi-aventis.com]	<b>\$38.7 B</b> [4.8%]	<b>\$6.5 B</b>	Lovenox [\$3.9 B] Plavix [\$3.7 B] Lantus [\$3.5 B]
<b>4</b> [4]	<b>Novartis</b> Basel, Switzerland [novartis.com]	<b>\$36.0 B</b> [10.7%]	<b>\$7.2 B</b>	Diovan/Co-Diovan [\$5.7 B] Gleevec/Glivec [\$3.7 B] Zometa [\$1.4 B]
<b>5</b> [5]	<b>AstraZeneca</b> London, England [astrazeneca.com]	<b>\$31.6 B</b> [10.1%]	<b>\$5.1 B</b>	Nexium [\$5.2 B] Seroquel [\$4.5 B] Crestor [\$3.6 B]
<b>6</b> [6]	<b>Johnson &amp; Johnson</b> New Brunswick, NJ [jnj.com]	<b>\$24.6 B</b> [-1.2%]	<b>\$5.1 B</b>	Remicade [\$3.7 B] Topamax [\$2.7 B] Procrit [\$2.5 B]
<b>7</b> [7]	<b>Merck</b> Whitehouse Station, NJ [merck.com]	<b>\$23.6 B</b> [-2.4%]	<b>\$4.8 B</b>	Singulair [\$4.4 B] Cozaar/Hyzaar [\$3.6 B] Fosamax [\$1.6 B]
<b>8</b> [8]	<b>Roche</b> Basel, Switzerland [roche.com]	<b>\$21.0 B</b> [3.4%]	<b>\$7.2 B</b>	MabThera/Rituxan [\$5.6 B] Avastin [\$4.9 B] Herceptin [\$4.8 B]
<b>9</b> [10]	<b>Eli Lilly</b> Indianapolis, IN [lilly.com]	<b>\$19.3 B</b> [9.6%]	<b>\$3.8 B</b>	Zyprexa [\$4.7 B] Cymbalta [\$2.7 B] Gemzar [\$1.6 B]
<b>10</b> [9]	<b>Wyeth</b> Madison, NJ [wyeth.com]	<b>\$19.0 B</b> [2.3%]	<b>\$3.4 B</b>	Effexor [\$3.9 B] Prevnar [\$2.7 B] Enbrel [\$2.6 B]

## [The Top 10: The Year in Review]

**Pfizer:** Acquired Coley Pharmaceutical Group, CovX Research, Encysive, and Serenex // Toviaz approved in the US // By year's end had 106 projects in development, including 84 NMEs // Launched Pfizer Regenerative Medicine in Cambridge, UK, and Cambridge, MA // Completed pivotal trial for Dimebon in Alzheimer's

**GSK:** Twelve product launches, including US launches of Promacta, Entereg, Rotarix, Boostrix, Kinrix // Moved five candidates into Phase III // Created 35 Discovery Performance Units // Acquired RNAi specialist Sirtris

**Sanofi-Aventis:** Submitted Cytiri for sleep disorders, and Multaq

for atrial fibrillation // Acquired Acambis, long-time vaccine development partner of Sanofi Pasteur // Announced acquisition of generics manufacturer Zentiva

**Novartis:** 152 projects in clinical development // Struck deal with Nestlé for multi-stage purchase of majority stake in eye care specialist Alcon // Reorganized and put new leaders in charge of several divisions; Joerg Reinhardt became COO // Three submissions received accelerated US review

**AstraZeneca:** JUPITER study demonstrated that Crestor cuts heart attack risk even in patients with normal cholesterol // Successfully defended patents of Seroquel and Nexium // 144

projects in development, 10 in Phase III

**Johnson & Johnson:** Launched Zyrtec OTC // Acquired Omrix Biopharmaceuticals, manufacturer of biosurgical hemostats // In the consumer products arena, acquired Beijing Dabao Cosmetics // Received FDA approval of Nucynta immediate release tablets for moderate to severe acute pain

**Merck:** Rolled out new commercial models in US and other top markets // Filed NDAs for Isentress and Gardasil // Launched restructuring, including loss of 7,200 positions // The results of the ENHANCE trial, which found that Vytorin did not reduce arterial plaque, became one of the

year's top pharma industry stories

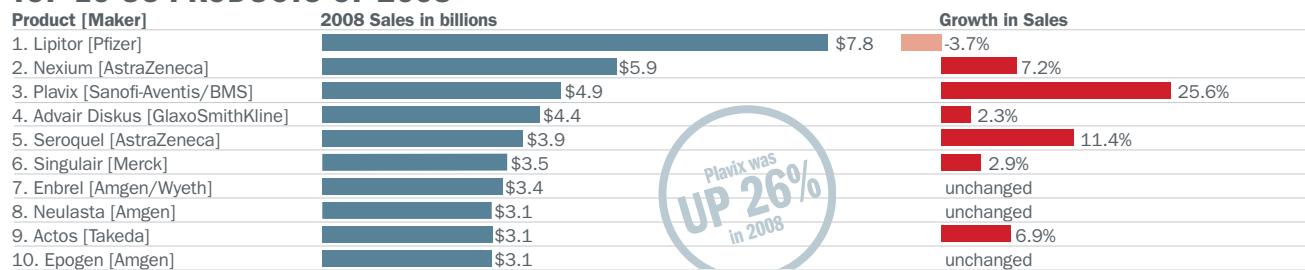
**Roche:** Acquired Piramed, Mirus, and ARIUS // 12 Phase III programs initiated // In July, announced intention to purchase shares of Genentech it did not already own

**Lilly:** John Lechleiter replaced Sidney Taurel as CEO // Acquired ImClone Systems // New indications approved for Alimta, Cymbalta, Cialis, and others

**Wyeth:** FDA approved Xyntha for hemophilia and Pristiq for depression // Biotech products hit 43 percent of total revenue // On January 26, 2009, announced plans to merge with Pfizer.

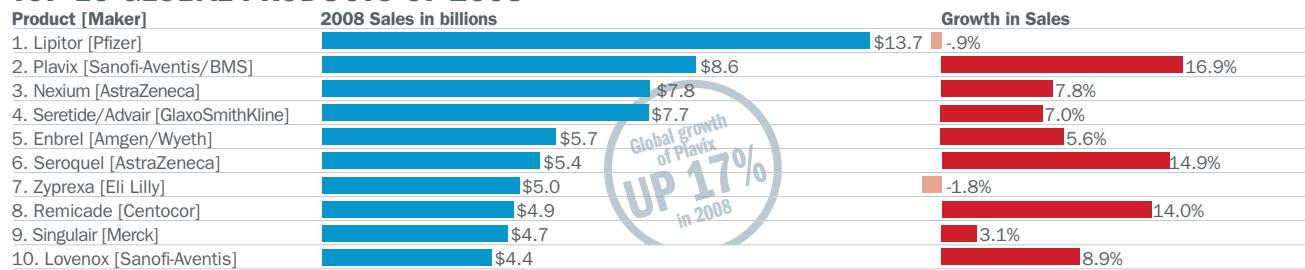
Rank ['07 Rank]	Company & Headquarters [Web site]	2008 Global Pharma Sales [change from 2007]	R&D Spend	2008 Top-Selling Drugs [2008 sales]
<b>11</b> [11]	<b>Bristol-Myers Squibb</b> New York, NY [bms.com]	<b>\$17.7 B</b> [13.6%]	<b>\$3.6 B</b>	<b>Plavix</b> [\$5.6 B]
<b>12</b> [13]	<b>Abbott</b> Abbott Park, IL [abbott.com]	<b>\$16.7 B</b> [14.4%]	<b>\$2.7 B</b>	<b>Humira</b> [\$4.5 B]
<b>13</b> [12]	<b>Bayer</b> Leverkusen, Germany [bayer.com]	<b>\$15.1 B</b> [0.6%]	<b>\$2.5 B</b>	<b>YAZ/ Yasmin/ Yasminelle</b> [\$1.7 B]
<b>14</b> [14]	<b>Amgen</b> Thousand Oaks, CA [amgen.com]	<b>\$14.7 B</b> [2.7%]	<b>\$3.0 B</b>	<b>Enbrel</b> [\$3.6 B]
<b>15</b> [16]	<b>Schering-Plough</b> Kenilworth, NJ [schering-plough.com]	<b>\$14.2 B</b> [39.7%]	<b>\$3.5 B</b>	<b>Remicade</b> [\$2.1 B]

## TOP 10 US PRODUCTS OF 2008



SOURCE: IMS Health

## TOP 10 GLOBAL PRODUCTS OF 2008

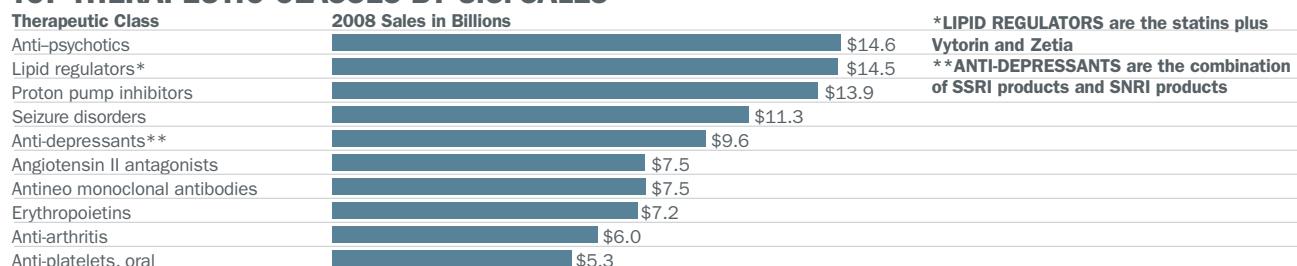


SOURCE: IMS Health

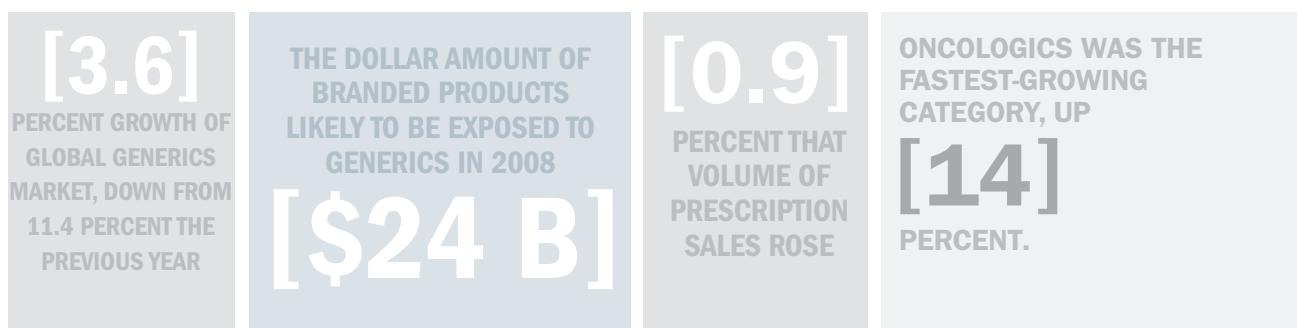
Rank ['07 Rank]	Company & Headquarters [Web site]	2008 Global Pharma Sales [change from 2007]	R&D Spend	2008 Top-Selling Drugs [2008 sales]
<b>16</b> [15]	<b>Boehringer Ingelheim</b> Ingelheim, Germany [boehringer-ingelheim.com]	<b>\$13.6 B</b> [8.3%]	<b>\$2.9 B</b>	<b>Spiriva</b> [\$2.9 B]
<b>17</b> [17]	<b>Takeda</b> Osaka, Japan [takeda.com]	<b>\$12.2 B</b> [25.4%]	<b>\$2.7 B</b>	<b>Pioglitazone</b> [\$4.0 B]
<b>18</b> [19]	<b>Teva</b> Petach Tikva, Israel [tevapharm.com]	<b>\$11.1 B</b> [17.8%]	<b>\$786 M</b>	<b>Copaxone</b> [\$2.3 B]
<b>19</b> [18]	<b>Genentech</b> South San Francisco, CA [gene.com]	<b>\$10.5 B</b> [11.7%]	<b>\$2.8 B</b>	<b>Avastin</b> [\$2.7 B]
<b>20</b> [21]	<b>Astellas</b> Tokyo, Japan [astellas.com]	<b>\$9.7 B</b> [24.4%]	<b>\$1.3 B</b>	<b>Prograf</b> [\$2.0 B]

Rank ['07 Rank]	Company & Headquarters [Web site]	2008 Global Pharma Sales [change from 2007]	R&D Spend	2008 Top-Selling Drugs [2008 sales]
<b>21</b> [22]	<b>Daiichi Sankyo</b> Tokyo, Japan [ <a href="http://daiichisankyo.com">daiichisankyo.com</a> ]	<b>\$8.8 B</b> [23.6%]	<b>\$1.6 B</b>	<b>Olmesartan</b> [\$2.0 B]
<b>22</b> [20]	<b>Novo Nordisk</b> Bagsvaerd, Denmark [ <a href="http://novonordisk.com">novonordisk.com</a> ]	<b>\$8.6 B</b> [5.4%]	<b>\$1.5 B</b>	<b>Human insulins</b> [\$2.2 B]
<b>23</b> [23]	<b>Merck KGaA</b> Darmstadt, Germany [ <a href="http://merck.de">merck.de</a> ]	<b>\$7.6 B</b> [25.2%]	<b>\$1.5 B</b>	<b>Rebif</b> [\$1.9 B]
<b>24</b> [24]	<b>Eisai</b> Tokyo, Japan [ <a href="http://eisai.co.jp">eisai.co.jp</a> ]	<b>\$7.2 B</b> [29.3%]	<b>\$2.2 B</b>	<b>Aricept</b> [\$2.9 B]
<b>25</b> [25]	<b>Otsuka</b> Tokyo, Japan [ <a href="http://otsuka.com/en">otsuka.com/en</a> ]	<b>\$6.5 B</b> [21.4%]	<b>\$1.0 B</b>	<b>Abilify</b> [\$2.8 B]

## TOP THERAPEUTIC CLASSES BY U.S. SALES



SOURCE: IMS Health

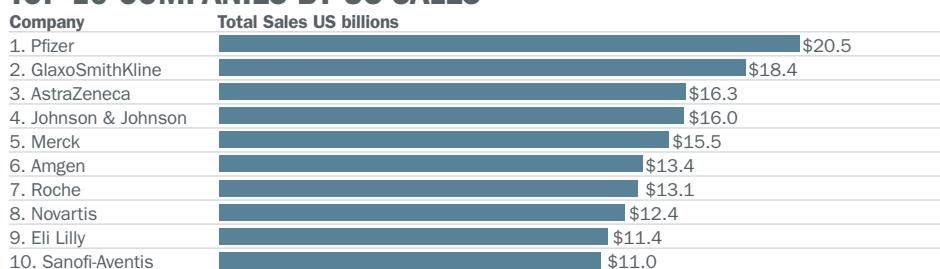


SOURCE: IMS Health

Rank ['07 Rank]	Company & Headquarters [Web site]	2008 Global Pharma Sales [change from 2007]	R&D Spend	2008 Top-Selling Drugs [2008 sales]
<b>26</b> [28]	<b>Baxter International</b> Deerfield, Illinois [ <a href="http://baxter.com">baxter.com</a> ]	<b>\$5.3 B</b> [14.2%]	<b>\$868 M</b>	<b>Advate</b> [\$1.5 B]
<b>27</b> [26]	<b>Servier</b> Neuilly-sur-Seine, France [ <a href="http://servier.com">servier.com</a> ]	<b>\$5.2 B</b> [2.1%]	<b>N/A</b>	<b>N/A</b>
<b>28</b> [31]	<b>Gilead Sciences</b> Foster City, CA [ <a href="http://gilead.com">gilead.com</a> ]	<b>\$5.1 B</b> [36.3%]	<b>\$722M</b>	<b>Truvada</b> [\$2.1 B]
<b>29</b>	<b>Nycomed</b> Zurich, Switzerland [ <a href="http://nycomed.com">nycomed.com</a> ]	<b>\$4.8 B</b> [-4.3%]	<b>\$317 M</b>	<b>Pantoprazole</b> [\$1.8 B]
<b>30</b>	<b>Mylan</b> Canonsburg, PA [ <a href="http://mylan.com">mylan.com</a> ]	<b>\$4.3 B</b> [180.2%]	<b>\$317 M</b>	<b>CNS generics</b> [\$1.2 B]

Rank ['07 Rank]	Company & Headquarters [Web site]	2008 Global Pharma Sales [change from 2007]	R&D Spend	2008 Top-Selling Drugs [2008 sales]
<b>31</b> [27]	<b>UCB</b> Brussels, Belgium [ucb.com]	<b>\$4.3 B</b> [-8.4%]	<b>\$1.1 B</b>	<b>Keppra</b> [\$1.8 B]
<b>32</b>	<b>Genzyme</b> Cambridge, MA [genzyme.com]	<b>\$4.2 B</b> [30.3%]	<b>\$1.3 B</b>	<b>Cerezyme</b> [\$1.2 B]
<b>33</b> [30]	<b>Solvay</b> Brussels, Belgium [solvay.com]	<b>\$3.8 B</b> [0.7%]	<b>\$603 M</b>	<b>Tricor/Lipanthyl/Trilipix</b> [\$720 M]
<b>34</b> [39]	<b>Ratiopharm</b> Ulm, Germany [ratiopharm.com]	<b>\$3.7 B</b> [39.6%]	<b>N/A</b>	<b>Generics</b> N/A
<b>35</b> [36]	<b>Mitsubishi Tanabe</b> Osaka, Japan [mt-pharma.co.jp/e]	<b>\$3.6 B</b> [19.9%]	<b>\$729 M</b>	<b>Remicade</b> [\$288 M]

## TOP 10 COMPANIES BY US SALES



**[1.4%]**

AMOUNT SALES GREW  
IN THE US FOR 2008.  
TOTAL US SALES WERE  
\$291.5 BILLION,  
COMPARED WITH  
\$287.6 BILLION IN 2007

SOURCE: IMS Health

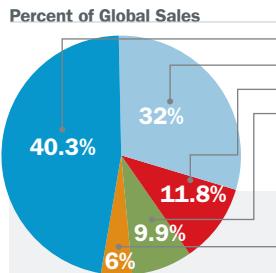
SOURCE: IMS Health

## RANK AFTER MERGERS OF THIS YEAR'S PHARM EXEC 50

RANK AFTER MERGERS	THIS YEAR'S 50	COMPANY NAME	HEADQUARTERS	WEBSITE	2008 GLOBAL PRESCRIPTION DRUG SALES
1.	1.	Pfizer + Wyeth	New York, NY	pfizer.com	\$63.2 B
2.	2.	GlaxoSmithKline	Brentford, England	gsk.com	\$43.0 B
3.	3.	Sanofi-Aventis	Paris, France	sanofi-aventis.com	\$38.7 B
4.	4.	Novartis + Alcon	Basel, Switzerland	novartis.com	\$38.6 B
5.	7.	Merck + Schering-Plough	Whitehouse Station, NJ	merck.com	\$37.8 B
6.	5.	AstraZeneca	London, England	astrazeneca.com	\$31.6 B
8.	8.	Roche + Genentech	Basel, Switzerland	roche.com	\$31.5 B
7.	6.	Johnson & Johnson	New Brunswick, NJ	jnj.com	\$24.6 B
9.	10.	Eli Lilly	Indianapolis, IN	lilly.com	\$19.3 B
10.	11.	Bristol-Myers Squibb	New York, NY	bms.com	\$17.7 B

Rank ['07 Rank]	Company & Headquarters [Web site]	2008 Global Pharma Sales [change from 2007]	R&D Spend	2008 Top-Selling Drugs [2008 sales]
<b>36</b> [37]	<b>Chugai</b> Tokyo, Japan [chugai-pharm.co.jp]	<b>\$3.6 B</b> [19.5%]	<b>\$589 M</b>	<b>Epogen</b> [\$497 M]
<b>37</b> [35]	<b>Allergan</b> Irvine, CA [allergan.com]	<b>\$3.5 B</b> [12.6%]	<b>\$798 M</b>	<b>Botox</b> [\$1.3 B]
<b>38</b> [33]	<b>Forest</b> New York, NY [frx.com]	<b>\$3.5 B</b> [10.1%]	<b>\$671 M</b>	<b>Lexapro</b> [\$2.3 B]
<b>39</b> [40]	<b>CSL</b> Victoria, Australia [csl.com.au]	<b>\$3.4 B</b> [26.9%]	<b>\$216 M</b>	<b>Immunoglobulins</b> [\$1.0 B]
<b>40</b> [38]	<b>Procter &amp; Gamble</b> Cincinnati, OH [pg.com]	<b>\$3.4 B</b> [16.8%]	<b>N/A</b>	<b>Actonel</b> [\$714 M]

## GLOBAL PHARMACEUTICAL SALES BY REGION, 2008



The global pharmaceutical market grew by **4.8 percent** to approximately **\$773 billion**, at constant exchange rates

2008 Sales (US\$B)	% Growth from 2007
\$311.8	1.4%
\$247.5	5.8%
\$90.8	15.3%
\$76.6	2.1%
\$46.5	12.6%

SOURCE: IMS Health Market Prognosis, March 2009

## TOP 10 R&D SPEND

Company	Total R&D Spend US billions
1. Pfizer	\$7.9
2. Roche	\$7.2
3. Novartis	\$7.2
4. Sanofi-Aventis	\$6.5
5. GSK	\$5.2
6. AstraZeneca	\$5.1
7. Johnson & Johnson	\$5.1
8. Merck	\$4.8
9. Lilly	\$3.8
10. Bristol-Myers Squibb	\$3.6

### LOST FROM THE LIST

- 41 Barr Pharmaceuticals, acquired by Teva
- 43 Mundipharma, dropped way off the list
- 46 Stada and 47 King Pharmaceuticals, missed by a few \$100M

SOURCE: PHARM EXEC 50 (right); IMS Health Market Prognosis, March 2009 (top)

## The Future is Full of Possibilities

Move Beyond Base-Case

PORTFOLIO MANAGEMENT	SALES FORECASTING	STRATEGY	LICENSING VALUATION	TRAINING/ FACILITATION
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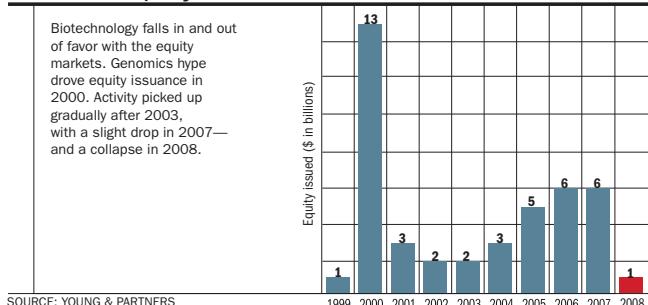


Base-case assessments focus on the most likely scenario. However, the most likely scenarios do not always lead to the best decision. At Kromite, we look at the future as it really is, full of uncertainties and options to choose from. We assist clients in making good decisions by helping them identify the key drivers impacting their decisions and working with them to develop strategies to maximize value and manage risk. If you are still making decisions using base-case assessments, give us a call. We can show you a whole new approach for making good decisions in the face of future uncertainties and risks.

Call us at 908.758.5850 x101 or visit us at [www.kromite.com](http://www.kromite.com).

Rank ['07 Rank]	Company & Headquarters [Web site]	2008 Global Pharma Sales [change from 2007]	R&D Spend	2008 Top-Selling Drugs [2008 sales]
<b>41</b> [34]	<b>Menarini</b> Florence, Italy [menarini.com]	<b>\$3.1 B</b> [-10.4%]	<b>\$310 M</b>	N/A
<b>42</b> [45]	<b>Biogen Idec</b> Cambridge, MA [biogenidec.com]	<b>\$2.8 B</b> [32.7%]	<b>\$1.1 B</b>	<b>Avonex</b> [\$2.2 B]
<b>43</b> [44]	<b>Shire</b> Dublin, Ireland [shire.com]	<b>\$2.8 B</b> [26.9%]	<b>\$526 M</b>	<b>Adderall XR</b> [\$1.1 B]
<b>44</b> [42]	<b>Alcon</b> Hünenberg, Switzerland [alcon.com]	<b>\$2.6 B</b> [10.9%]	<b>\$564 M</b>	<b>Patanol</b> [\$212 M]
<b>45</b> [48]	<b>Lundbeck</b> Copenhagen, Denmark [lundbeck.com]	<b>\$2.1 B</b> [5.3%]	<b>\$557 M</b>	<b>Cipralex</b> [\$910 M]

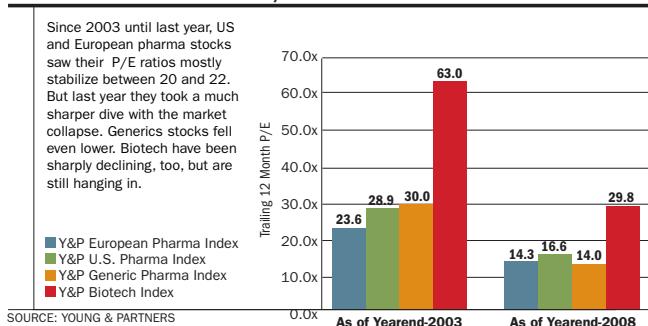
### Biotech Equity: Dollar Value



**2008 PHARMA STOCKS**  
**S&P 500: -37.6%**  
**US pharma: -18.1 %**  
**European pharma: -6.4%**  
**Generic pharma: -10.6%**  
**Large Cap biotech: +16.5%**  
**Mid-Cap biotech: -7.0%**  
**Small Cap biotech: +0.5%**

Last year, the market plunged due to the financial and economic crises. Pharma stocks also fell, but only modestly by comparison. Large cap biotech outperformed the rest of the industry

### Pharma & Biotech P/E Ratios



Rank ['07 Rank]	Company & Headquarters [Web site]	2008 Global Pharma Sales [change from 2007]	R&D Spend	2008 Top-Selling Drugs [2008 sales]
<b>46</b>	<b>Dainippon Sumitomo</b> Osaka, Japan [ds-pharma.co.jp]	<b>\$2.1 B</b> [20.3%]	<b>\$477 M</b>	<b>Amlodipine</b> [\$640 M]
<b>47</b>	<b>Cephalon</b> Frazer, PA [cephalon.com]	<b>\$1.9 B</b> [12.5%]	<b>\$362 M</b>	<b>Provigil</b> [\$990 M]
<b>48</b>	<b>Hospira</b> Lake Forest, IL [hospira.com]	<b>\$1.8 B</b> [9.4%]	<b>\$214 M</b>	<b>Vancomycin</b> N/A
<b>49</b> [50]	<b>Watson</b> Corona, CA [watson.com]	<b>\$1.8 B</b> [1.2%]	<b>\$119 M</b>	<b>Hydrocodone/APAP</b> N/A
<b>50</b> [49]	<b>Actavis</b> Hafnarfjordur, Iceland [actavis.com]	<b>\$1.8 B</b> [0.6%]	<b>N/A</b>	<b>Kadian</b> [\$245 M]