



M&A Activity of the BioPharma Top 20 (2001-2006)

October 2006



BioPharma Global Top 20 in 2005, by Drug Sales

Rank	Company	2005 Global Sales (\$MM)	Rank	Company	2005 Global Sales (\$MM)
1	Pfizer	\$44.28	11	Abbott Labs	\$13.99
2	GlaxoSmithKline	\$33.96	12	Roche	\$12.90
3	Sanofi-Aventis	\$32.34	13	Amgen	\$12.02
4	Novartis	\$24.96	14	Boehringer-Ingelheim	\$10.84
5	AstraZeneca	\$23.95	15	Takeda	\$8.53
6	Johnson&Johnson	\$22.32	16	Astellas	\$8.04
7	Merck	\$22.01	17	Schering-Plough	\$7.56
8	Wyeth	\$15.32	18	Bayer	\$7.56
9	Bristol-Myers Squibb	\$15.25	19	Schering AG	\$6.29
10	Eli Lilly	\$14.65	20	Genentech	\$5.49

Source: PharmExec 2006



M&A Summary for BioPharma Top 20 (2001-2006)

Total Deals – 82

Average Deal Size - \$3.9B

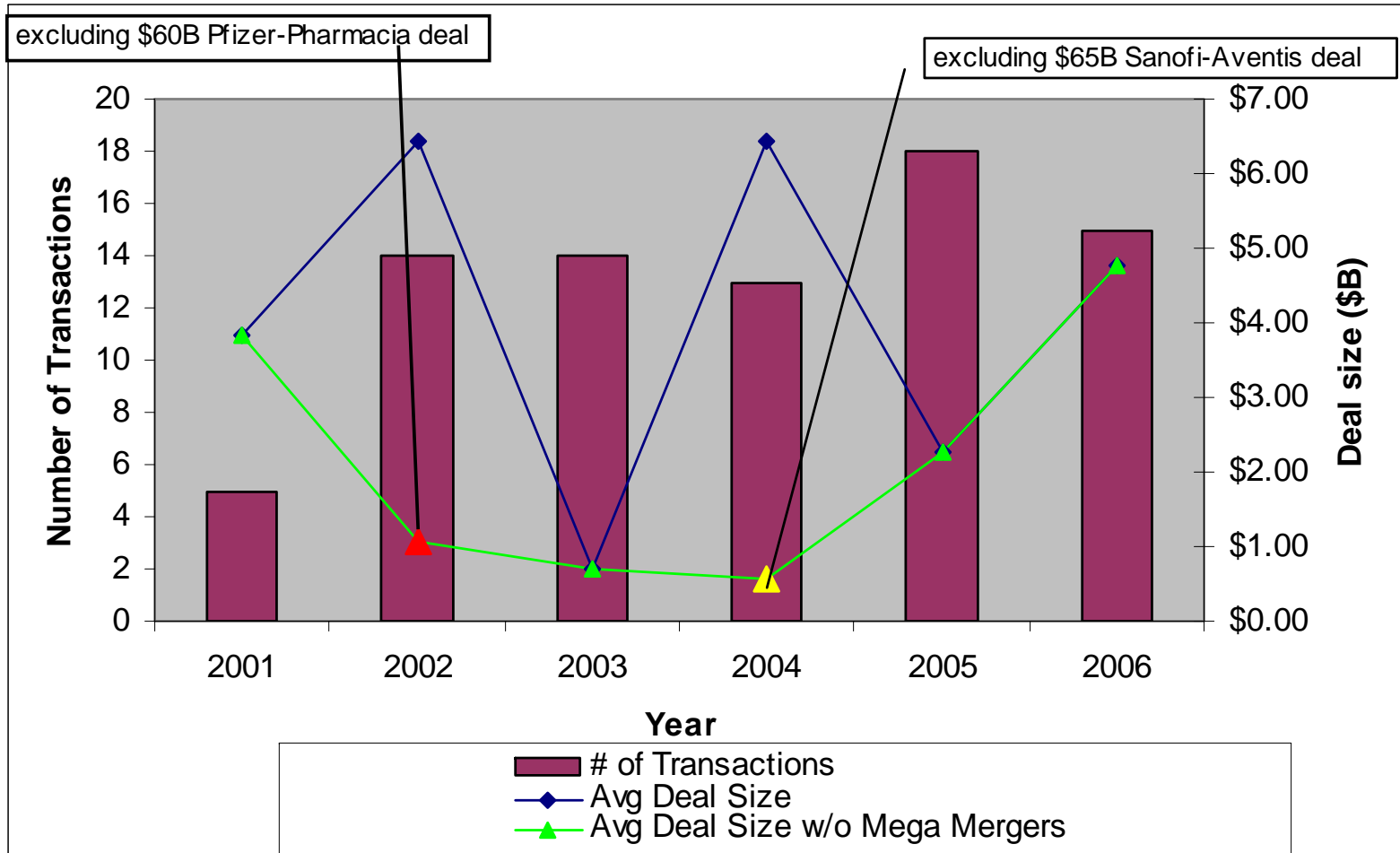
Largest Deal - \$65B Sanofi/Synthelabo acquisition of Aventis (4/04)

The 5 Most Active M&A Players:

	<u>Number of Deals</u>
1 Johnson&Johnson	19
2 Abbott	13
3 Pfizer	8
4 Bayer	7
5 Novartis	6



Number of M&A and Deal Size Trends



Source: Medtrack, ReCap



Enhancing internal drug discovery capabilities

- In recent years, Big Pharma has been paying top dollar to supplement waning pipelines with specialized **drug discovery** and enhancing technology platforms, particularly for **antibody therapies**.

Top 20 who may benefit from this approach:

- GSK
- Bayer-Schering:
- Abbott Labs
- Astellas
- Boehringer-Ingelheim
- BMS
- Lilly

Acquirer	Target	Year	Description	Deal Value (\$MM)
AstraZeneca	Cambridge Antibody Technology	2006	discovery and development of antibody therapies	1,100
Novartis	NeuTec Pharma	2006	discovery and development of antibody therapies	569
Merck	GlycoFi	2006	yeast glycoengineering for optimizing sugar modifications of biotherapeutics	400
Merck	Abmaxis	2006	discovery and development of antibody therapies	80
Amgen	Abgenix	2005	discovery and development of antibody therapies	2,200
J&J	TransForm Pharmaceuticals	2005	high-throughput technologies in solid-state chemistry and formulations design	230
AstraZeneca	KuDOS Pharmaceuticals	2005	discovery and development of oncology therapies based on the inhibition of DNA repair	210
Roche	GlycArt Biotechnology	2005	discovery and development of antibody therapies	181
Pfizer	Bioren	2005	antibody optimization	42
Amgen	Tularik	2004	drug discovery related to cell signaling and the control of gene expression.	1,300
J&J	Egea Biosciences	2004	discovery and development of biologics and antibody therapies	36
Lilly	Applied Molecular Evolution	2003	directed molecular evolution for discovering, optimizing and developing human biotherapeutics	400
J&J	3-D Pharmaceuticals	2003	discovery and development of therapeutic small molecules.	88

Source: Medtrack, ReCap



Industry Consolidation – Europe is Showing the Way

Japan experienced consolidation of smaller players following creation of Astellas

- Japanese Pharma Mergers 2004-2005
 - Fujisawa – Yamanouchi (2004) to create Astellas
 - Sumitomo – Dainippon (2004)
 - Sankyo – Daiichi (2005)

Europe is witnessing a similar trend post the sanofi-aventis merger

- European Pharma Mergers 2004-2006
 - Sanofi/synthelabo - Aventis (2004)
 - Bayer – Schering (2006)
 - Merck KGaA – Serono (2006)
 - Nycomed – Altana Pharma (2006)
 - UCB – Schwarz (2006)

Is the US ripe for something similar?

- BMS – Schering-Plough?
- Merck - ????



“Pfizer” Sure Knows How to Know to Grow by M&A

