

# Biotech drug market steadily expands

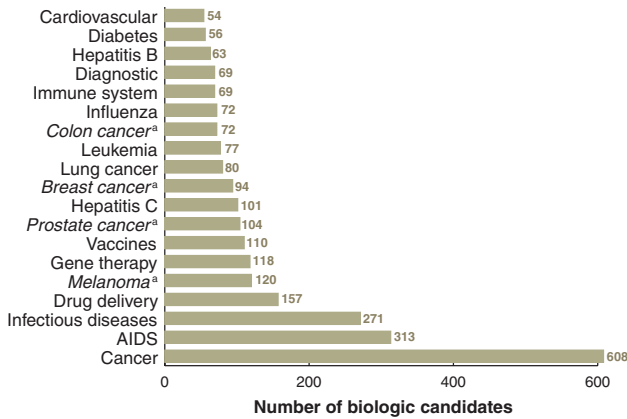
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Unlike last year's billion dollar approvals, Avastin (bevacizumab) and Erbitux (cetuximab), no biotech blockbusters were launched in 2005 and none appear to be on the horizon. Almost half of the biologics license applications pending at the US Food and Drug Administration (FDA) are for supplementary indications (for drugs already on the

market). Certain biotech therapies are among the fastest growing drug market segments (mAbs sales grew by 52% in 2005); five of the 20 best-selling drugs are large molecules. Biotech increasingly dominates the pipeline (44% of all discovery stage candidates) and has a growing share of drug applications (about one in ten of filings).

## Investigational biotech drugs by area

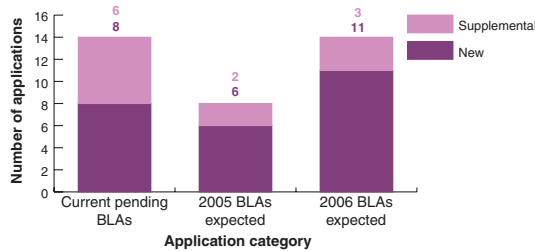
Cancer continues to dominate, closely followed by AIDS and other infectious diseases. Drug delivery research gets considerable attention.



<sup>a</sup>Cancer subtype broken out from total cancer. Source: BioPharm Insight

## Biotech drug applications

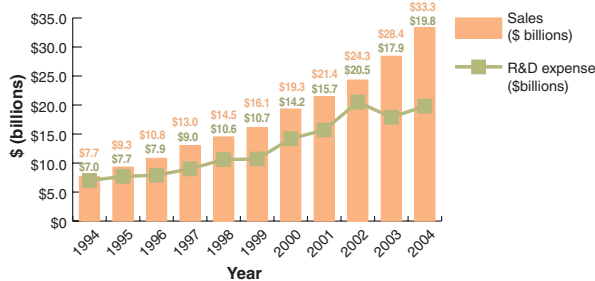
Of the pending/expected biologic license applications (BLAs), almost one-third are for supplementary indications; unlike 2004, none of the new applications is for projected blockbusters.



Data as of October 2005, based on FDA BLA applications. Source:SG Cowen

## Public biotech sales and R&D

Biotech sales continue to grow in the double digits, but research spending has leveled off.



Based on public company data. Source: Ernst & Young

## Top 10 biotech drugs by global sales

Products (company)	2004 sales (\$ millions)	Percent change	Annual growth <sup>a</sup>	2004 market share
Erypo/Procrit (Johnson & Johnson)	\$3,989	-4.2%	23.0%	9.0%
Epogen (Amgen)	\$2,897	-3.8%	14.1%	6.5%
Enbrel (Amgen/Wyeth)	\$2,578	58.8%	42.1%	5.8%
Aranesp (Amgen)	\$2,569	77.9%	***	5.8%
Remicade (Johnson & Johnson/Schering-Plough)	\$2,506	19.8%	130.8%	5.6%
Mabthera/Rituxan (Roche)	\$2,192	24.4%	62.7%	4.9%
Neulasta (Amgen)	\$1,873	52.1%	***	4.2%
Avonex (Biogen Idec)	\$1,383	16.4%	18.1%	3.1%
Neupogen (Amgen/Roche)	\$1,344	-6.8%	2.5%	3.0%
Lantus (Aventis)	\$1,014	80.9%	***	2.3%
<b>Total top 10</b>	<b>\$22,346</b>	<b>20.7%</b>	<b>31.3%</b>	<b>50.4%</b>
<b>Global biotech market</b>	<b>\$44,353</b>	<b>17.0%</b>	<b>21.6%</b>	<b>100.0%</b>

<sup>a</sup>Compound annual growth 1999-2003. Source:IMS Health

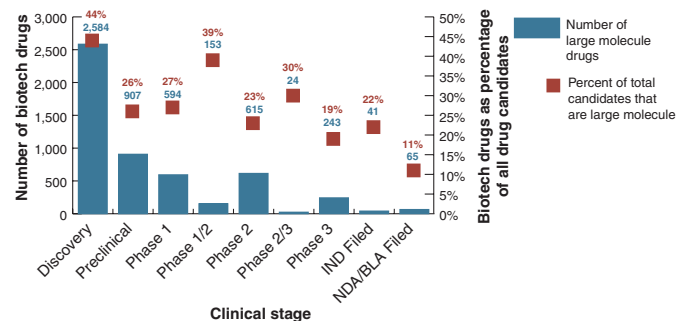
## Potential blockbusters in the pipeline

Company	Generic name	Type	Indication	Annual sales (\$ millions) <sup>a</sup>
Amylin/Lilly	Exenatide <sup>b</sup>	Peptide	Type II diabetes	\$1000+
Onyx/Bayer	Sorafenib	Small molecule	Kidney cancer	\$500-1000
CV Therapeutics	Ranolazine	Small molecule	Chronic angina	\$400-500
MGI/Supergen	Decitabine	Small molecule	Myelodysplastic syndrome	\$300-500
Cephalon	Modafenil	Small molecule	Pediatric attention deficit/hyperactivity disorder	\$300-500
Celgene	Lenalidomide	Small molecule	MDS and myeloma	\$300-500
Cephalon	Naltrexone	Small molecule	Alcoholism	\$300-500
NPS	Preos	Recombinant hormone	Osteoporosis	\$300-500

<sup>a</sup>Peak annual sales potential (\$millions). <sup>b</sup>Already approved in April 2005. Source: SG Cowen

## Biotech drug candidates by phase

More than 2,500 large molecules in discovery represents 40% of all drug candidates.



Source: BioPharm Insight