

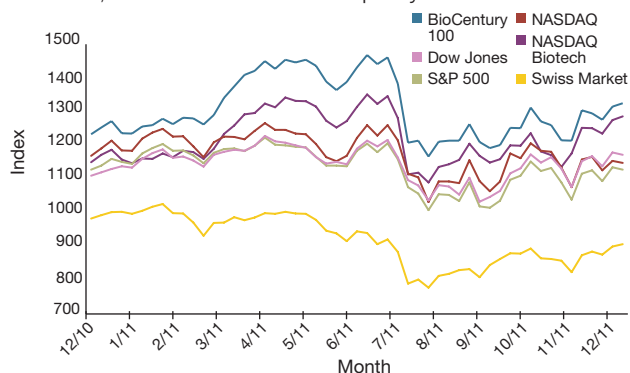
2011—Big biotechs gorge on debt

Walter Yang

Although biotech stocks ended up and companies raised a record \$49 billion last year, excluding partnership monies, nearly three-fourths of that total came from debt deals. Moreover, \$32.3 billion of the debt was issued by only 11 public companies. Amounts raised from initial

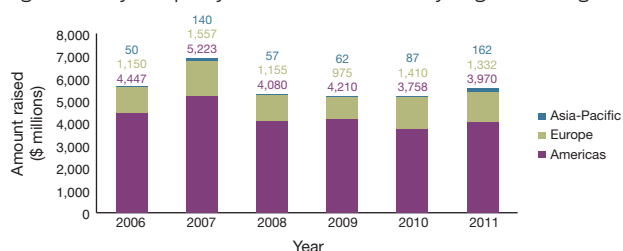
Stock market performance

The BioCentury 100 and NASDAQ Biotech have risen >28% over 24 months, whereas the S&P 500 is up only 13%.



Global biotech venture capital investment

Venture funding was up 4% from 2010; Asian investments were the highest in 5 years partly attributable to two very large financings.



	2006	2007	2008	2009	2010	2011
Americas	219	231	219	213	235	228
Europe	85	113	106	93	102	111
Asia-Pacific	10	13	6	5	9	11

Table indicates number of VC investments and includes rounds where the amount raised was not disclosed. Source: BCIQ: BioCentury Online Intelligence

Notable 2011 deals

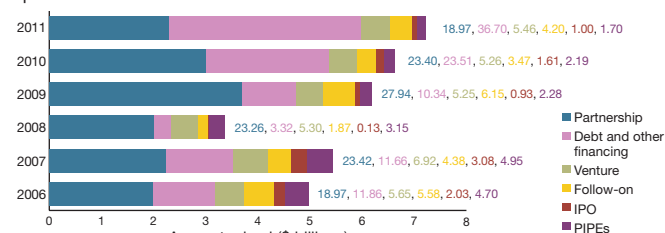
Venture capital			
Company (lead investors)	Amount raised (\$ millions)	Round number	Date closed
Valeritas (Welsh, Carson, Anderson & Stowe)	150	3	12-Sep
Symphogen (Novo A/S)	133	5	6-Jan
Tesaro (Kleiner Perkins Caufield & Byers)	101	2	21-Jun
Intrexon (not disclosed)	100	5	31-May
Circassia (Imperial Innovations)	98	4	19-Apr
Biocartis (Debiopharm)	97	3	17-Nov
Portala (not disclosed)	89	Not disclosed	21-Nov
IPOs			
Company (lead underwriters)	Amount raised (\$ millions)	Change in stock price since offer	Date completed
Clovis Oncology (JPMorgan; Credit Suisse)	139.1	8%	15-Nov
Sagent (Morgan Stanley; Banc of America; Jefferies)	105.8	31%	20-Apr
Fluidigm (Deutsche Bank; Piper Jaffray)	86.3	-3%	10-Feb
Endocyte (RBC; Leerink)	86.3	-37%	4-Feb
RaQualia (Daiwa Securities)	79.4	-63%	8-Jul
Tranzyme (Citigroup)	57.4	-28%	1-Apr

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public offerings (IPOs; \$972.7 million), follow-ons and private investments in public equity (PIPEs) were meager, nearly a third less than totals in 2007, whereas debt raised dwarfed previous years. Private companies raised \$5.5 billion in 2011, up 6% from 2010.

Global biotech industry financing

Excluding partnership monies, the industry raised \$49 billion in 2011, up 36% from 2010.



Partnership figures are for deals involving a US company. Source: BCIQ: BioCentury Online Intelligence, Burrill & Co.

Global biotech initial public offerings

Nineteen biotechs raised \$972.7 million through IPOs in 2011, down from 31 that raised \$1.6 billion in 2010.



Table indicates number of IPOs. Source: BCIQ: BioCentury Online Intelligence

Notable 2011 deals (continued)

Mergers and acquisitions			
Target	Acquirer	Value (\$ millions)	Date announced
Genzyme ^a	Sanofi	23,900	16-Feb
Nycomed	Takeda	13,600	19-May
Pharmasset	Gilead	11,000	21-Nov
Cephalon	Teva	6,800	2-May
Clinical Data ^a	Forest	1,116	22-Feb
Enobia ^a	Alexion	1,080	28-Dec
BioVex ^a	Amgen	1,000	24-Jan
Plexikon ^a	Daiichi Sankyo	935	28-Feb
Licensing/collaboration			
Researcher	Investor	Value (\$ millions)	Deal description
Otsuka	Lundbeck	1,800	Co-develop/co-commercialize two Otsuka small molecules in phase 2 trial for psychiatry
Alios	Vertex	1,560	Rights to preclinical HCV candidates ALS-2200 and ALS-2158
BioPharma	Astellas	1,425	Co-develop Aveo's cancer candidate tivozanib outside of Asia
Boehringer Ingelheim ^b	Eli Lilly	1,193	Co-develop Boehringer's dipeptidyl peptidase-4 inhibitor linagliptin and B110773, a sodium glucose co-transporter 2 inhibitor
Eli Lilly ^b	Boehringer Ingelheim	1,175	Co-develop Lilly's insulin analogs, LY2605541 and LY2963016; option to co-develop Lilly's anti-TGF-beta monoclonal antibody
Micromet	Amgen	983	Develop bispecific T-cell engager antibodies against three undisclosed solid tumor targets
Pharmacocyclics	Johnson & Johnson	975	Co-develop Pharmacocyclics' hematological cancer compound PCI-32765, a Bruton's tyrosine kinase inhibitor
Evotec	Roche	830	Exclusive, worldwide rights to develop/commercialize Alzheimer's disease candidate EVT 302

^aValue includes milestones. ^bPart of a single deal between the two companies. Source: BCIQ: BioCentury Online Intelligence

