2017—venture funding goes into overdrive

Laura DeFrancesco

Although biotech stocks nose-dived in the last quarter, the NASDAQ Biotech Index still returned a double-digit increase year on year. Compared with 2016, mergers and acquisition were down (just 54 in total), follow-on financings were up and initial public offerings

(IPOs) raised similar totals in funding. But it was venture capital investment that continued to gorge the sector, with a few companies raising eye-popping amounts—all in all, the sector raised just short of \$16 billion in risk capital.

Stock market performance

The biotech index had a volatile year; mediocre earnings and Celgene's disappointing morgan trial sent shares spiraling in the last quarter.

Global biotech industry financing

Though IPOs and debt financing were down, biotechs raised a healthy \$75 billion, excluding partnerships.

PIPEs, private investment in public equity. Source: BCIQ: BioCentury Online Intelligence.

Notable 2017 deals

IPOs		Amount raised (\$ millions)	Date completed	Change in stock price since offer (% as of 1/12/2018)
Company (lead underwriters)				
WuXi Biologics (BofA Merrill Lynch, Morgan Stanley, China Merchants Securities)		585	7-Jun	100%
Denali (Goldman Sachs, Morgan Stanley, JP Morgan, Evercore ISI)		287	7-Dec	-23%
BioHaven Pharma (Morgan Stanley, Piper Jaffray, Barclays Capital, William Blair, Needham)		194	4-May	50%
TissueGene (NH Investment & Securities)		182	6-Nov	100%
ZaiLab (JP Morgan, Citigroup, Leerink Partners)		172	20-Sep	4%

Venture capital

Company	Amount raised (\$ millions)	Round number	Date closed
Grail (Arch Venture Partners, Johnson & Johnson Innovation, Amazon and others)	900	2	1-Mar
Guardant Health (Softbank, T. Rowe Price, Temasek, Sequoia Capital, Khosla Ventures, Lightspeed Venture Partners, OrbiMed Advisors, 8VC)	360	5	11-May
Ginkgo Bioworks (Existing investors, Viking Global Investors LP, Y Combinator, Cascade Investment, William Gates III, General Atlantic, and other undisclosed investors)	275	4	14-Dec
Harmony Biosciences (Valor Equity Partners, Fidelity, HBM Healthcare Investments, Vivo Capital, venBio LLC, Novo Holdings A/S, Nan Fung)	270	ND	6-Oct
23andme (Sequoia Capital)	250	ND	12-Sep

Mergers and acquisitions

Target	Acquirer	Value (\$ millions)	Date announced
Actelion	Johnson & Johnson	30,000	26-Jan
Kite Pharma	Gilead	11,900	28-Aug
Pantheon	Thermo Fisher	7,200	15-May
Ariad	Takeda	5,200	9-Jan
Fresenius	Akorn	4,300	24-May

Licensing/collaboration

Researcher	Investor	Value (\$ millions)	Deal description
AstraZeneca	Merck & Co.	8,500	Codevelop small-molecule PARP inhibitor Lynparza and MEK inhibitor selumetinib to treat multiple tumor types
Assembly Biosciences	Allergan	2,830	Exclusive, worldwide rights to orally delivered, microbiome-derived mixtures of live biotherapeutic products (ABI-M201 and ABI-M301) and two undisclosed compounds to treat irritable bowel syndrome
Abylynx	Sanofi	2,735	Exclusive, worldwide rights to eight multi-specific nanobodies to treat immune-mediated inflammatory diseases
Pieris Pharmaceuticals	AstraZeneca	2,157	Worldwide rights to develop and commercialize five inhaled respiratory disease candidates, including preclinical asthma candidate PRS-060
Halozyyme	Bristol-Myers Squibb	1,865	Rights to use its recombinant human PH20 hyaluronidase delivery technology to develop subcutaneous versions of immuno-oncology products against up to 11 targets

ND, not disclosed. Source: BCIQ: BioCentury Online Intelligence.

Global biotech initial public offerings

Fewer floats seen on European and Asia-Pacific markets; biotech raised more on US markets.

	2013	2014	2015	2016	2017
Americas	40	74	50	26	32
Europe	10	35	40	25	26
Asia-Pacific	9	8	6	23	13

Source: BCIQ: BioCentury Online Intelligence.

Global biotech venture capital investment

The influx of venture capital was a continued bright point, approaching \$16 billion.

	2013	2014	2015	2016	2017
Americas	23	30	34	37	45
Europe	137	138	139	132	125
Asia-Pacific	274	300	327	275	333

Source: BCIQ: BioCentury Online Intelligence.

Laura DeFrancesco is a Senior Editor at Nature Biotechnology.