DATA PAGE

3Q21—the market stalls

It was an up and down quarter for biotech stocks; the pace of financing as a whole slowed, with follow-on financings of public companies in particular falling off a cliff. The thirst for initial public offerings (IPOs), however, continued, with Keymed Biosciences and Brii Biotech raising large amounts on the Hong Kong exchange; in the United States, companies developing small molecules capable of drugging drug-resistant kinases or pioneering innovative epigenetic approaches in cancer figured prominently. RNA therapeutics and novel types of adoptive immune cell therapy raised substantial private rounds. The last quarter also saw a rash of prominent licensing deals between US and Chinese biotechs.

Stock market performance

The Biotech index performed roughly the same as the NASDAQ and slightly better than the other major indices.

Global biotech financing

Across the board financing was down, but debt in particular was over 20-fold lower than the same time last year.

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

Global biotech initial public offerings

Although companies continued their march onto public markets, US funding was down and European IPOs in particular tanked.

Global biotech venture capital investment

Last quarter saw the lowest number of rounds (96) for the past two years.

Number of IPOs

	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21
Asia-Pacific	8	13	20	9	12	9
Europe	6	4	2	7	8	0
Americas	17	22	26	25	25	27

Source: BCIQ BioCentury Online Intelligence

Number of rounds

	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21
Asia-Pacific	23	31	35	23	10	14
Europe	40	50	38	41	34	23
Americas	107	102	86	132	93	59

Source: BCIQ BioCentury Online Intelligence

Top 10 IPOs of 3Q21

Company (principal underwriters)	Amount raised (\$ millions)	Date completed	Latest stage and focus	Percent change in stock price (as of 9/30/2021)	Exchange
Keymed Biosciences (Morgan Stanley, CICC, Huatai Securities, China Everbright)	400	7 July	Phase 2; mAbs, bispecifics and antibody–drug conjugates in cancer and autoimmune indications	–24%	Hong Kong
Adagio Therapeutics (Morgan Stanley, Jefferies, Stifel, Nicolaus, Guggenheim Securities)	356	5 August	Phase 2/3; Adimab spinout developing broadly neutralizing mAbs for SARS-CoV-2 variants and zoonotic sarbecoviruses	28%	NASDAQ
Erasca (J.P. Morgan, Morgan Stanley, BofA Securities, Evercore ISI, Guggenheim Securities)	345	15 July	Phase 1/2; RAS/MAPK pathway cancer therapeutics	22%	NASDAQ
Brii Biosciences (Morgan Stanley, UBS, CICC)	320	13 July	Phase 2/3; infectious disease, neurology	70%	Hong Kong
Caribou Biosciences (BofA Securities, Citigroup, SVB Leerink)	304	22 July	Market; genome editing tools, services	35%	NASDAQ
Dice Therapeutics (BofA Securities, SVB Leerink, Evercore ISI)	204	14 Sept	IND; small-molecule inhibitors of dimeric or trimeric protein–protein interactions for autoimmune disease	–11%	NASDAQ
Tyra Biosciences (BofA Securities, Jefferies, Cowen)	199	14 Sept	Preclinical; structure-based drug design of small-molecule inhibitors to avoid inducing known resistance mutations at catalytic or allosteric sites	–36%	NASDAQ
Nuvalent (J.P. Morgan, Cowen, Piper Sandler)	191	28 July	Preclinical; structure-based drug design of small-molecule kinase inhibitors to improve their selectivity and efficacy against resistance	27%	NASDAQ
Icosavax (Jefferies, Cowen, Evercore ISI, William Blair)	182	28 July	Phase 1; virus-like particle vaccines	16%	NASDAQ
Imago BioSciences (Jefferies, Cowen, Stifel, Nicolaus, Guggenheim Securities)	134	15 July	Phase 2; small-molecule inhibitors and PROTACs of lysine-specific demethylase in thrombocythemia and myelofibrosis	29%	NASDAQ

IND, Investigational New Drug application; mAb, monoclonal antibody. Source: BCIQ BioCentury Online Intelligence

Top ten venture financings of 3Q21

Company (lead investors)	Amount raised (\$ millions)	Round	Date completed	Location	Focus
Suzhou Abogen Biosciences (Temasek, Invesco, Loyal Valley Capital, GL Ventures and others)	700	C	19 August	China	mRNA vaccines
Laronde (Flagship Pioneering, T. Rowe Price, Invus and others)	440	B	30 August	United States	Circular RNA for protein expression
Sonoma Biotherapeutics (Ally Bridge Group, Arrowmark Partners, Avidity Partners and others)	265	B	4 August	United States	Chimeric antigen receptor (CAR)-T regulatory cell therapy for oncology
InterVenn Biosciences (SoftBank Group, Heritage Provider Network, Irving Investors and others)	201	C	2 August	United States	Liquid biopsies using glycoproteomics
Deep Genomics (SoftBank Vision Fund, Alexandria Venture Investments, Fidelity Management and Research and others)	180	C	28 July	Canada	Artificial intelligence-enabled discovery of antisense oligonucleotides
Wugen (Abingworth, Tybourne Capital Management, Fidelity Management & Research, Intermediate Capital Group and others)	172	B	15 July	United States	CAR-memory natural killer (NK) cell and CAR-T cell therapies for oncology
Amylyx Pharmaceuticals (Viking Global Investors, Bain Capital Life Sciences, Perceptive Advisors and others)	135	C	20 July	United States	Combination of small-molecule histone deacetylase inhibitor (sodium phenylbutyrate) and the chaperone-like ursodiolcoltaurine for use in amyotrophic lateral sclerosis
Skyhawk Therapeutics (Fidelity Management and Research, undisclosed investors)	133	E	14 September	United States	Small molecules that modify mRNA expression
Ring Therapeutics (Invus, Altitude Life Science Ventures, Partners Investment and others)	117	B	28 July	United States	Anelloviral vectors for delivering foreign genes as single-stranded DNA episomes
PepGen (RA Capital Management, Oxford Sciences Innovation, CureDuchenne Ventures and others)	113	Not disclosed	5 August	United Kingdom	Peptide-conjugated oligonucleotides

Source: BCIQ BioCentury Online Intelligence

Top 10 licensings/collaborations of 3Q21 by up-front cash

Researcher	Partner	Up-front cash (\$ millions)	Description
Arvinas	Pfizer	650	Co-development and commercialization of PROTAC estrogen receptor degrader ARV-471
RemeGen	Seagen	200	Co-development of disitamab vedotin, an antibody-drug conjugate comprising a humanized IgG1 mAb targeting HER2 linked to monomethyl auristatin E
Adaptimmune Therapeutics	Genentech	150	Collaboration to research, develop and commercialize cancer-targeted allogeneic T-cell therapies
InnoCare Pharma	Biogen	125	Licensing and collaboration agreement for orelabrutinib, a CNS-penetrant Bruton's tyrosine kinase small-molecule inhibitor against multiple sclerosis
Arena Pharmaceuticals	Aristea Therapeutics	60	Co-development of RIST4721, a small-molecule inhibitor of interleukin-8B receptor, for treating immune-mediated inflammatory diseases
Lycia Therapeutics	Eli Lilly	35	Collaboration to discover and develop novel lysosomal targeting chimera (LYTAC) degraders comprising an mAb conjugated to a synthetic oligoglycopeptide that binds CI-M6PR (cation-independent ligand that binds mannose-6-phosphate receptor), responsible for lysosome trafficking
Incyte	InnoCare Pharma	35	Collaboration and license agreement in Greater China for tafasitamab, an anti-CD19 humanized IgG1/2 hybrid with an Fc region engineered to bind FcγRIIIa and FcγRIIIa to potentiate antibody-dependent cell-mediated cytotoxicity and cellular phagocytosis
Bicycle Therapeutics	Ionis Pharmaceuticals	34	Exclusive licensing agreement aimed at further advancing ligand-associated antisense oligonucleotide technology
BeyondSpring	Jiangsu Hengrui Medicine	30	Exclusive commercialization and co-development agreement for plinabulin, a vascular disrupting agent, in Greater China
Ascentage Pharma	Innovent	30	Agreements for commercialization in China of olverembatinib, a small-molecule inhibitor of BCR-ABL and KIT receptor; for joint clinical development of lisaftoclax, a small-molecule selective BCL-2 inhibitor; and for equity investments in Ascentage

mAb, monoclonal antibody; IgG, immunoglobulin G; CNS central nervous system. Source: BCIQ BioCentury Online Intelligence

Mergers and acquisitions

Target	Acquirer	Deal focus	Value (\$ millions)	Date announced
Grail	Illumina	Blood-based screening for early cancer detection	8,000	18 August
Translate Bio	Sanofi	mRNA vaccines and therapies	3,200	3 August
Protomer Technologies	Eli Lilly	Glucose-sensing insulin and other small-molecule-activated biologics	1,000	14 July
Thunderbolt Pharma	Aurinia Pharmaceuticals	A BCMA-Fc fusion protein for blocking B-cell activating factor (BAFF) and a proliferation-inducing ligand (APRIL) for B-cell disorders	7	17 August
Stelios Pharmaceuticals	Lexeo Therapeutics	Adeno-associated viral cardiac gene therapies	Undisclosed	21 July
Gotham Therapeutics	858 Therapeutics	Small-molecule epitranscriptomic METTL3 inhibitors	Undisclosed	20 September
Courier Therapeutics	Valo Health	A cowpox virus-encoded orthopoxvirus major histocompatibility complex class I-like protein fused to mutated IL-2 with poor affinity for IL-2Rα	Undisclosed	27 July

METTL3, m⁶-adenosine methyltransferase 3; IL, interleukin; IL-2Rα, interleukin-2 receptor-α. Source: BCIQ BioCentury Online Intelligence.

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