

Trends in Biopharma M&A

With a Focus on Public and VC-Backed US and European Biopharma Companies Sold in 2022 and Previous Years

Key Findings

- Worldwide biopharma M&A volume of announced deals including contingent payments and sale of subsidiaries and business lines reached \$96.1 billion in 2022 (as compared to \$78 billion in 2021 and \$136 billion in 2020). Please note that all numbers provided in this report relate to companies or businesses sold with a therapeutic product focus only.
- US transactions accounted for 90% of deal value (\$86.3 billion) including the eight largest deals. M&A activity in Europe was relatively weak with only \$6.2 billion of transaction volume (vs. \$29.3 billion in 2021).
- There were only two transactions over \$10 billion in 2022: The sale of US-based Horizon to Amgen for \$17.8 billion and Pfizer's acquisition of US Biohaven for \$11.6 billion.
- As in previous years, M&A activity outside of the US and Europe in 2022 was very modest with a reported transaction volume of only \$3.6 billion.
- Premiums paid for public companies remained high in 2022 (85% premium).
- The number of deals and the return multiples from the sale of VC-backed US and European biopharma companies dropped significantly in 2022 (especially when compared to 2020 which was the best year for VC returns by M&A). However, profits from upfront proceeds to investors and additional potential profits from contingent payments remained high (\$6.6 billion plus potentially a further \$3.5 billion of profits).

About the HBM Biopharma M&A Report

The HBM Pharma/Biotech M&A Report covers all announced trade sales of US and European biotechnology and pharma companies with a therapeutic focus (Rx incl. generics as well as OTC). For year 2015 or later, additional data for sale of subsidiaries and business divisions and transactions outside of US and Europe is also provided. Product acquisitions and licensing deals or similar are not included. Companies that are headquartered for tax reasons outside of the USA (mainly in Ireland) but have their business predominantly in the US were classified as US companies.

The report does not cover diagnostics, medical technology, digital health, life sciences tools, CROs, pharma manufacturing and services. Reverse or SPAC mergers and minority investments are not included. Acquisitions that were structured as mergers for tax or other reasons are included.

Upfront transaction value is defined in this report as the upfront consideration in cash and/or shares. By contrast, the total transaction value also includes contingent ("biodollar") payments linked usually to reaching certain milestones.

Additional data such as invested capital, exit multiples (for private companies), stage of lead product etc. were collected from various sources. Please note that such data may be based on estimates and may not have been available for all transactions.

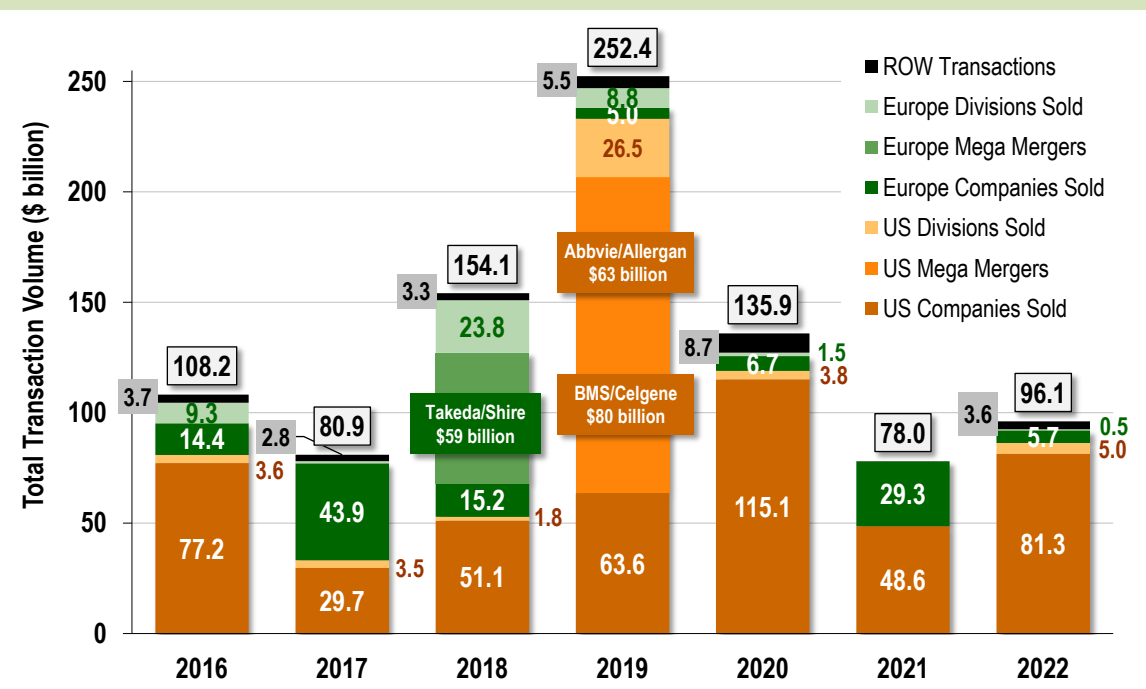
Further information about the HBM Biopharma M&A Report including a list of all transactions (Excel) can be found under on HBM Partners News&Reports [here](#). The use of data and charts is permitted with reference to "HBM Partners Biopharma M&A Report".

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Worldwide Biopharma M&A Deal Volume in 2022 and in Previous Years

Worldwide Biopharma M&A Deal Volume 2016-2022



Announced transactions, including sale of business divisions and subsidiaries. Transaction volume including contingent payments. Europe includes Israel. ROW = Countries outside of the US and Europe (i.e. China, India, Canada, Australia etc.)

A list of the larger biopharma M&A transactions during 2022 can be found on [page 3](#).

- After a slow start, 2022 turned out to be quite an active year for biopharma M&A with total deal value reaching close to \$100 billion with 90% (!) coming from US deals. Deal volume in Europe (\$5.7 billion from companies sold and \$0.5 billion from business lines sold) was rather weak as compared to previous years.
- The \$96.1 billion deal volume includes the sale of whole companies as well as the sale of divisions, subsidiaries or business lines with a total value of \$8.8 billion, thereof \$5.0 billion from US deals, \$0.5 billion from European transactions and \$3.3 billion from rest of the world (mainly Asian) deals¹.
- How does 2022 compare to previous years? Only in 2020, 2019 and 2018 were transaction volumes significantly higher. 2020 was without question one of the strongest years for biopharma M&A. And in 2018 and 2019, “mega-mergers” were driving up the numbers. Without these mega-mergers transaction volume in these two years would have been comparable to 2022. M&A deal volumes in 2021 and 2017 were weaker than in 2022, with European deals somewhat compensating for the lower US M&A volume.
- In 2022, 32 US and 10 European companies were sold for \$100 million or more (more on page 5). A further 4 US and 1 European transactions whereby only parts of companies were changed hands reached that threshold (see also table of 2022 M&A transactions on next page).
- M&A activity outside of the US and Europe was again modest with only \$3.6 billion of transaction volume reported (whole or parts of companies sold) with only 5 transactions reaching \$100 million or more, thereof 3 in India. By far the largest deal in this category was the buyout of Biogen’s stake in biosimilar joint-venture Samsung Bioepis by Samsung Biologics for \$2.3 billion.

¹ In case of divisions or subsidiaries being sold, the deal was allocated to the country/region with the target’s main business activity.

Table: Largest Biopharma M&A Transactions in 2022

Region	Target	Private/ Public	VC- or PE- Backed / Premium Buyer		Upfront Value (\$m)	Total Value (\$m)	Phase/ Stage of Lead Product	Est. VC Inv. (\$m)	Therapeutic Area(s) / Business
US	Horizon Therapeutics (US)	Public	48%	Amgen (US)	27'800	27'800	Market		Rare, autoimmune diseases
US	Biohaven Pharmaceuticals (US)	Public	78%	Pfizer (US)	11'600	11'600	Market		Migraine, CGRP portfolio
US	Nimbus Lakshmi (Nimbus main asset) (US)	Private	VC	Takeda (Japan)	4'000	6'000	2	427	Psoriasis
US	Global Blood Therapeutics (US)	Public	42%	Pfizer (US)	5'400	5'400	Market		Sickle cell disease
US	Turning Point Therapeutics (US)	Public	122%	Bristol-Myers Squibb (US)	4'100	4'100	3		Cancer, first-line NSCLC, solid tumors
US	ChemoCentryx (US)	Public	116%	Amgen (US)	3'700	3'700	Market		ANCA-associated vasculitis, autoimmune
US	Viatra (biosimilars) (US)	Div./Subs.		Biocon (India)	3'000	3'000	Market		Biosimilars
US	Affinivax (US)	Private	VC	GlaxoSmithKline (UK)	2'100	2'700	2	377	Next-generation pneumococcal vaccines
Asia	Samsung Bioepis (Biogen's stake) (South Kor)	Div./Subs.		Samsung (South Korea)	2'300	2'300	Market		Biosimilars
Europe	Norgine (Netherlands)	Private		Goldman Sachs (US)	2'000	2'000	Market		Various prescription drugs
US	Sierra Oncology (US)	Public	39%	GlaxoSmithKline (UK)	1'900	1'900	3		Myelofibrosis, other rare cancers
US	Zogenix (US)	Public	72%	UCB (Belgium)	1'760	1'900	Market		Dravet syndrome, epilepsy
US	Myovant (remaining shares) (US)	Public	50%	Sumitomo Dainippon (Sumitovar)	1'700	1'700	Market		Prostate cancer, gynecology
US	Villarix Therapeutics (US)	Private	VC	Incyte (US)	70	1'430	Preclinical		Vitiligo, autoimmune, dermatology
US	Theramex (US)	Private	PE	Carlyle, PAI (US)	1'400	1'400	Market		Women's health
US	Imago BioSciences (US)	Public	107%	Merck & Co. (US)	1'350	1'350	2		MPN, bone marrow diseases
US	TeneoTwo (US)	Private	VC	AstraZeneca (UK)	100	1'265	1		Cancer, Lymphoma
US	Forma Therapeutics (US)	Public	92%	Novo Nordisk (Denmark)	1'100	1'100	2		Sickle cell and rare blood disorders
US	Channel Biosciences (sub Knopp) (US)	Div./Subs.		Biohaven (US)	100	1'100	Preclinical		Epilepsy
Europe	Syndesi Therapeutics (Denmark)	Private	VC	AbbVie (US)	130	1'000	1		Neurology, Cognitive dysfunction, Alzheimer's
US	Antares Pharma (US)	Public		Halozyme Therapeutics (US)	960	960	Drug Del.		Drug delivery
US	Radius Health (US)	Public	12%	Gurnet Point Capital, Patient Squ	547	890	Market		Osteoporosis, neuro- orphan diseases, cancer
US	Aerie Pharmaceuticals (US)	Public	37%	Alcon (Switzerland)	770	770	Market		Ophthalmology, glaucoma
US	Akouos (US)	Public	84%	Eli Lilly (US)	487	610	Preclinical		Hearing loss
US	Bio Delivery (US)	Public	54%	Collegium Pharmaceutical (US)	604	604	Market		Pain
US	Aveo Onology (US)	Public	43%	LG Chem (South Korea)	566	566	Market		Renal cell carcinoma
Europe	ReViral (UK)	Private	VC	Pfizer (US)	525	525	2	121	Respiratory syncytial virus (RSV)
Europe	Albumedix (UK)	Private		Sartorius AG (Germany)	502	502	Market		Recombinant human albumin
Europe	mAbxience (sub. Insud) (Switzerland)	Div./Subs.		Fresenius Kabi (Germany)	500	500			Biosimilars
Asia	Alvogen (China)	Div./Subs.	PE	Aziq & Innobio (Iceland)	500	500	Market		Generics, biosimilars
US	Oyster Point (US)	Public	32%	Viatris (US)	415	475	Market		Ophthalmology, eye care
US	Intercept (non US business) (US)	Div./Subs.		Advanz Pharma (UK)	405	450	Market		Primary biliary cholangitis, autoimmune
US	Epizyme (US)	Public	158%	Ipsen (France)	247	417	Market		Cancer, refractory follicular lymphoma (FL)
Europe	MiroBio (UK)	Private	VC	Gilead Sciences (US)	405	405	1	125	Autoimmune, discovery platform
US	Cullinan Pearl (sub Cullinan) (US)	Div./Subs.		Otsuka (via Taho) (Japan)	275	405	2		Lung cancer
US	Bioniz Therapeutics (US)	Private	VC	Equillium (US)	21	329	2	14	Cutaneous T-cell lymphoma
US	ViaCyle (US)	Private	VC	Vertex (US)	320	320	2	235	Type 1 diabetes
Europe	Neogene (Netherlands)	Private	VC	AstraZeneca (UK)	200	320	Preclinical	125	Solid tumors, cell therapy
US	ModeX Therapeutics (US)	Private		Opko Health (US)	300	300	1		Oncology and infectious diseases
Asia	Famy Life Sciences (Taparia Group) (India)	Div./Subs.		Viatris (US)	280	280			Ophthalmology
Asia	Panacea Biotech Pharma (sub Panacea) (Ind)	Div./Subs.		Mankind Pharma (India)	255	255	Market		India & Nepal business
Europe	DJS Antibodies (UK)	Private	VC	AbbVie (US)	255	255	Preclinical	8	Idiopathic Pulmonary Fibrosis (IPF)
US	Good Therapeutics (US)	Private	VC	Roche (Switzerland)	250	250	Preclinical	30	Cancer
US	Checkmate Pharmaceuticals (US)	Public	336%	Regeneron Pharmaceuticals (US)	250	250	2		Cancer, PD-1 refractory melanoma
Asia	Curatio Healthcare (India)	Private		Torrent Pharmaceuticals (India)	245	245	Market		Cosmetic dermatology
US	Focus-X Therapeutics (US)	Private	VC	Full-Life Technologies (China)	245	245	Preclinical	2	Cancer, radiopharmaceuticals
Europe	CellPoint (Netherlands)	Private	VC	Galapagos (Belgium)	131	237	2		Cancer cell therapy
US	Opiant Pharmaceuticals (US)	Private	VC	Indivior (UK)	145	205	Market	52	Addiction
US	La Jolla Pharmaceutical (US)	Public	84%	Innoviva (US)	149	149	Market		Sepsis, acute care, bacterial infections
Europe	Acacia Pharma (UK)	Public		Eagle Pharmaceuticals (US)	78	131	Market		Acute care, postoperative nausea
US	GeneTx (US)	Private		Ultragenyx (US)	75	115	2		Angelman syndrome (AS)
Europe	Versantis (Switzerland)	Private	VC	Genfit (France)	41	108	2	21	Acute liver failure
US	Applied Genetic Technologies (US)	Public	42%	Syncona (UK)	24	74	3		Inherited retinal diseases, others
US	LogicBio (US)	Private		AstraZeneca (UK)	68	68	2		Gene therapy, rare diseases
US	TYME technologies (US)	Public		Syros Pharmaceuticals (US)	60	60	1		Cancer, acute myelogenous leukemia (AML)
Europe	Diurnal (UK)	Public	144%	Neurocrine Biosciences (US)	57	57	Market		Chronic hormonal diseases
US	Tarus Therapeutics (US)	Private		Portage Biotech (US)	23	56	1		Immuno-oncology
US	Renovacor (US)	Public	37%	Rocket Pharmaceuticals (US)	53	53	Preclinical		AAV-based cardiac gene therapy
US	EPI Health (US)	Private		Novan (US)	11	51	2		Dermatology

Notes:

Biopharma M&A transactions ranked by total transaction value.

Regions and countries: In case of whole companies sold = location of headquarter; in case of division, subsidiaries or business lines sold = main country of business sold (if available)

“Div./Subs.” = Sale of divisions, subsidiaries or business lines

Phase/Stage of Lead Product: “Market” = Approved or marketed drugs | “NDA” – NDA filed | “1”, “2” and “3” = Phase

1 2 3, stage of lead product

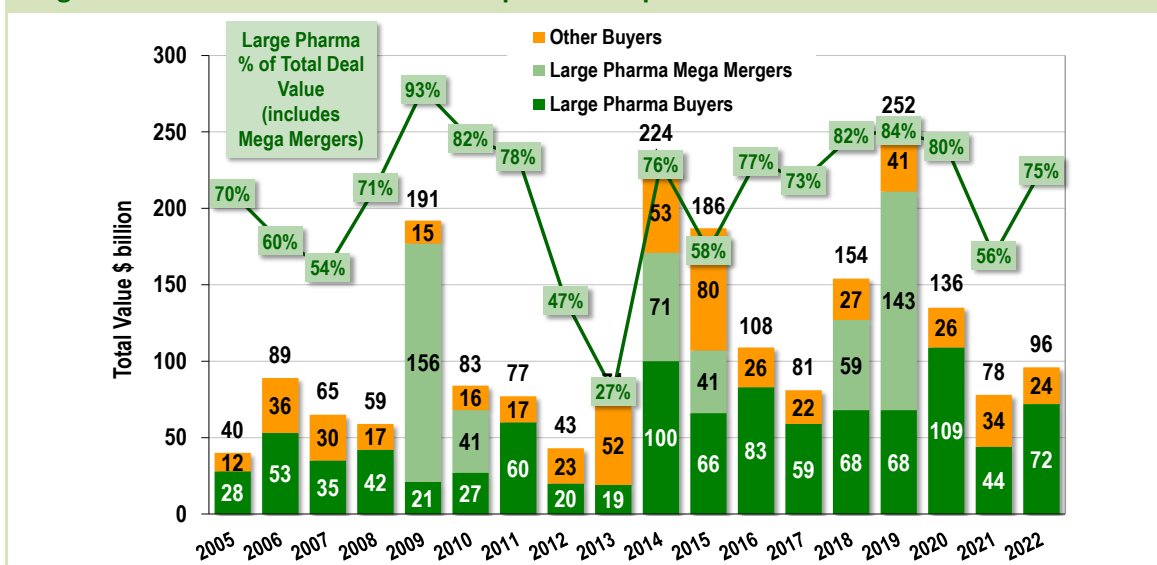
Large Pharma Companies as Most Active Buyers

“Large pharma companies” are hereby defined as the 20 largest pharma companies (ranked by pharma revenues) at the time of acquisition. Astellas, which dropped in some years just below the rank 20, is included in the “Large pharma” category. The numbers in the chart below include total value of all deals worldwide (including the sale of company parts).

Over the years, large pharma companies have been clearly the most active buyers of biopharma companies of all sizes. Looking back the last ten years, large pharma has spent 73% of the total \$2 trillion used in acquisitions (15% of the total amount went to mega mergers).

There have been years when other buyers – mostly mid-sized pharma companies – disbursed quite high amounts for acquisitions leading to a higher portion of transaction volume of this group. Readers might remember e.g. the once high-flying Valeant that spent \$29 billion to buy 24 companies from 2005 to 2015 or Shire (\$23.7 billion spent for 17 acquisitions 2005-2018).

Large Pharma’s Share of Worldwide Biopharma Acquisitions



Worldwide M&A Transactions, including sale of business divisions and subsidiaries. Transaction volume including contingent payments. Mega mergers = Large pharma mergers with a deal value of at least \$40 billion: Roche/Genentech (remaining stake) \$46.8bn 2009, Pfizer/Wyeth \$66.7bn 2009, Merck & Co./Schering Plough \$43bn 2009, Novartis/Alcon (remaining stake) \$41.2bn 2010, Actavis/Allergan \$70.5bn 2014, Teva/Allergan Generics Business \$40.5bn 2015, Takeda/Shire \$59bn 2018, BMS/Celgene \$80bn 2019, Abbvie/Allergan \$63bn 2019

Buyer	# of Deals	Total Deal Value \$ billion	Rank	Buyer	# of Deals	Total Deal Value \$ billion	Rank
Bristol-Myers Squibb	4	98.2	1	Eli Lilly	8	15.5	14
Takeda	7	66.5	2	Mylan (new Viatris)	1	12.0	15
Abbvie	4	64.3	3	CSL	1	11.7	16
Amgen	7	50.2	4	Roche	7	9.0	17
AstraZeneca	5	41.2	5	Novo Nordisk	5	8.7	18
Pfizer	8	38.7	6	Jazz Pharmaceuticals	2	7.9	19
Sanofi	11	30.8	7	Bayer	5	7.5	20
Gilead Sciences	6	29.6	8	Sumitomo D. (Sumitovant)	3	4.9	21
Novartis	9	29.0	9	Fresenius	1	4.8	22
GlaxoSmithKline	6	26.9	10	Alexion	4	4.6	23
Merck & Co.	12	25.8	11	Servier	3	4.4	24
Johnson & Johnson	6	24.9	12	Astellas	7	4.4	25
Celgene	2	16.0	13	UCB	5	4.3	26

The table on the left shows the most significant buyers during the last 5 years (2018-2022) spending at least \$4 billion on acquisitions. The top three on the list (BMS, Takeda and Abbvie) all were engaged in mega mergers.

Table: Most active buyers of biopharma companies during 2018-2022, minimum total deal value including contingent payments of \$4 billion or more. Worldwide transactions including sale of business divisions and subsidiaries.

Besides the large pharma “usual suspects” there are still a good number of mid-sized pharma companies engaging in sizable deals. However, the biopharma M&A market currently is clearly dominated by the largest US and European pharma companies, and sellers that can attract the interest of large pharma are clearly in a favorable position.

Trade Sales of US and European Biopharma Companies

Please note that the findings on the next pages include trade sales of US and European biopharma companies only (i.e. do not include the sale of subsidiaries and business divisions or transactions in the “rest of the world”).

Table: US & European Biopharma Companies Sold 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
US Companies Sold TV \$bn 1)	37.9	80.0	110.8	77.2	29.7	51.1	63.6	115.1	48.6	81.3
# Deals \$100m or more 2)	32	36	31	24	24	22	34	32	31	32
European Companies Sold TV \$bn 1)	25.5	11.7	17.9	14.4	43.9	15.2	5.0	6.7	29.3	5.7
# Deals \$100m or more 2)	16	10	17	14	10	13	8	8	13	10
Total Value \$bn 1)	63.3	91.7	128.6	91.6	73.6	66.3	68.6	121.8	78.0	87.0
Mega Mergers		70.5	Allergan		Shire	59.0	143.0	Celgene & Allergan		
Total incl. Mega Mergers \$bn 3)	63.3	162.2	128.6	91.6	73.6	125.3	211.6	121.8	78.0	87.0
# Deals \$100m or more 2)	48	46	48	38	34	35	42	40	44	42
Public Companies Sold TV \$bn 1)	44.3	66.2	86.7	66.9	63.6	49.1	51.3	99.2	59.2	66.7
US Companies Sold TV \$bn 1)	22.5	65.3	86.6	58.7	21.9	37.6	49.0	98.8	36.9	66.5
European Companies Sold TV \$bn 1)	21.7	0.8	0.2	8.2	41.8	11.5	2.4	0.5	22.4	0.2
# Deals \$100m or more 2)	19	15	14	13	14	14	19	18	18	21
Private Companies Sold TV \$bn 1)	19.1	25.5	41.9	24.7	9.9	17.2	17.3	22.5	18.7	20.3
US Companies Sold TV \$bn 1)	15.3	14.7	24.2	18.5	7.8	13.5	14.7	16.3	11.7	14.8
European Companies Sold TV \$bn 1)	3.8	10.8	17.7	6.2	2.2	3.7	2.6	6.2	7.0	5.5
# Deals \$100m or more 2)	29	31	34	25	20	21	23	22	26	21
% Private of Total Deal Value 4)	43%	39%	48%	37%	16%	35%	34%	23%	32%	30%
% Private of Upfront Deal Value 4)	30%	28%	33%	27%	14%	26%	25%	18%	24%	23%

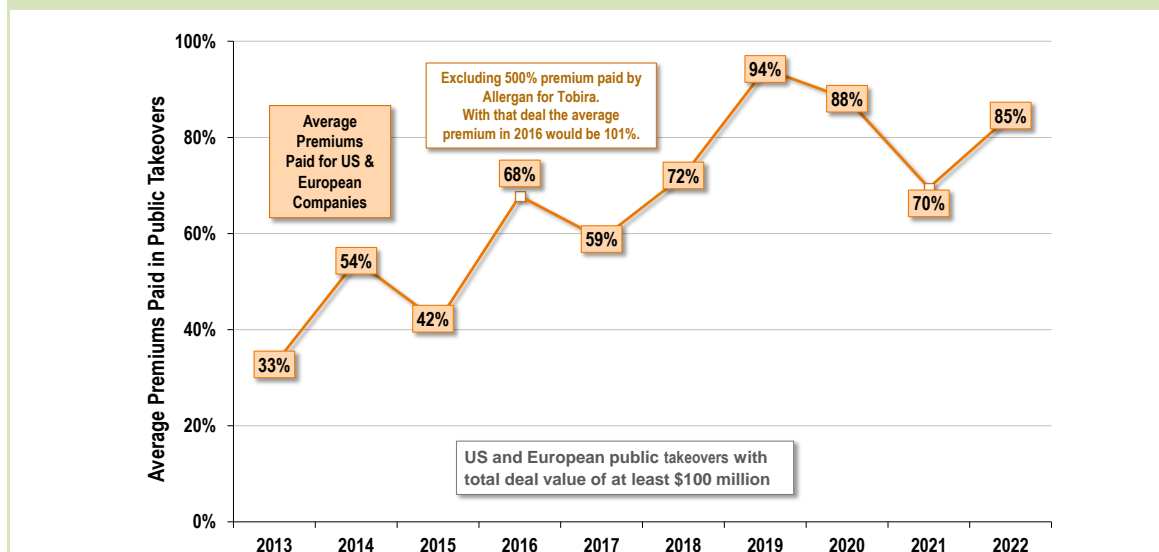
US and European companies sold. | 1) TV = total value including contingent payments (all deal sizes). | 2) Number of deals (including mega mergers) with a total value of \$100m or more. | 3) Mega mergers: Actavis/Allergan 2014, Takeda/Shire 2018, BMS/Celgene and Abbvie/Allergan 2019. | 4) % of total value or upfront value from sale of private companies (all deal sizes)

- The number of US and European biopharma companies sold for at least \$100 million has been remarkably stable over the years with about 35-45 such deals in each year.
- Public M&A activity in 2022 was quite strong, accelerating as usual in the second half of the year. It seems that larger buyers were taking advantage of the depressed stock prices of attractive smaller public firms. As shown on next page, average premiums paid for public biopharma companies remained very high.
- The “music was playing” mostly in the US, where 24 public companies were acquired (of which 10 companies for over \$1 billion and another 10 for over \$100 million). Only 2 European public biotech companies were sold in 2022: Acacia Pharma (UK) to Eagle Pharmaceuticals (US) for \$131 million and Diurnal (UK) to Neurocrine (US) for \$57 million.
- Overall 2022 has been a reasonable year for private M&A transactions. While the number of significant deals (with \$100 million in value or more) was on the low side with 21, transaction volume including contingent payments reached just over \$20 billion with the sale of Nimbus’ lead drug to Takeda for a whopping \$4 billion upfront and \$2 billion potential milestone payments being the largest transaction. *Note: The Nimbus-Takeda deal was strictly speaking not a sale of company but rather the sale of a Nimbus subsidiary holding the lead product, i.e. the transaction could have been classified as a sale of assets or product. However, as investment banks and other data providers listed the Nimbus deal in their M&A tables, we also followed that classification.*

Premiums Paid for Public US and European Biopharma Companies

“Premiums paid” as used in this analysis is defined as increase of stock price compared to the last closing price before the deal announcement.

Premiums Paid for Public US and European Biopharma Companies 2013-2022



Average premiums paid for public US and European biopharma companies. Total deal value at least \$100 million.

- The premiums paid for US and European public biopharma companies have trended higher over the years and in 2022 such premiums were within the trend. It seems that premiums are not affected much by a buoyant (e.g. 2020) or depressed stock market (e.g. in 2022).
- In recent years (since 2018) premiums paid for European public companies have been as high as for US companies and there is no significant difference anymore.
- As mentioned in previous reports, premiums were highest for phase 2 companies (see table below).

Average Premiums Paid for US & European Public Biopharma Companies 2018-2022 by Stage of Lead Product (for transactions with total deal value of \$100 million or more)

For transactions with total deal value of at least \$100m	Pre-Clinical / Phase 1	Phase 2	Phase 3 / NDA Filed	Approved/ Marketed	Total
# of public companies sold	62	51	32	56	201
Average premium paid	83%	123%	73%	65%	80%

(Non-weighted) average premiums paid for public US and European biopharma companies 2018-2022.

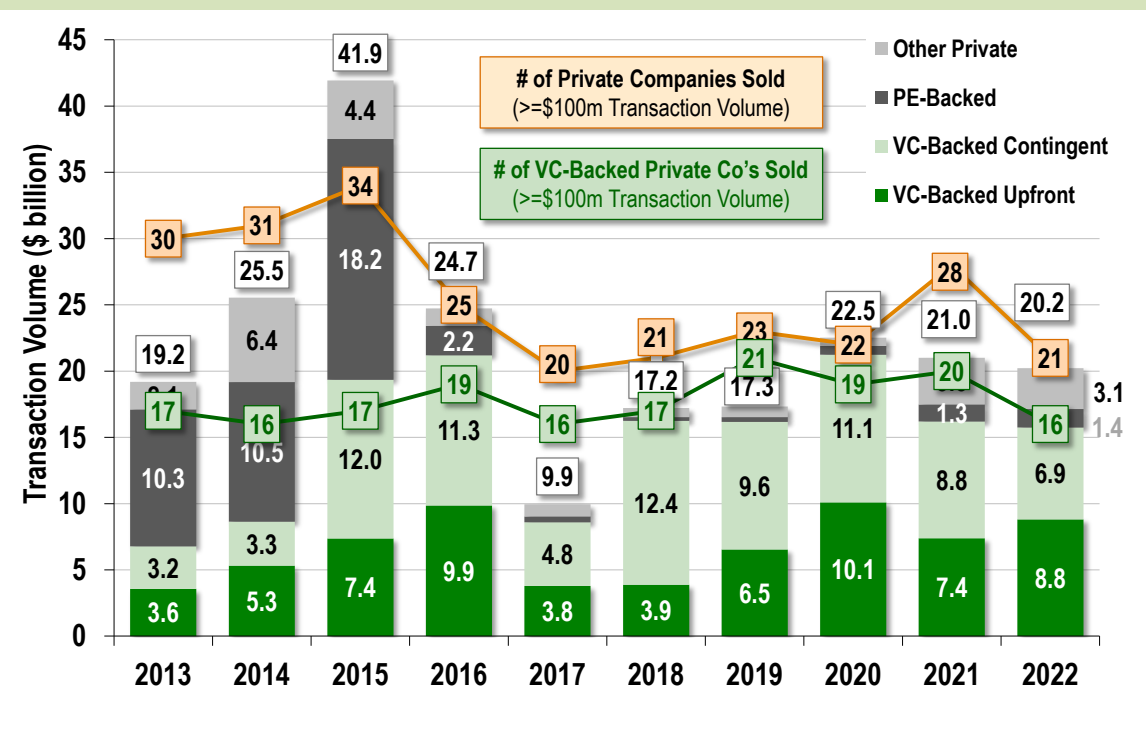
Contingent Payments in Public Takeovers?

While contingent payments are now the norm in deals with clinical-stage private companies (often amounting to over 50% or more of total deal value), such deal structures were quite rare in public transactions. Recently, however, transactions with contingent value rights (CVRs) have become more common also in public transactions with CVRs applied in 5 of the 18 public deals in 2021 and in 6 of the 22 deals in 2022 (transactions with a value of at least \$100 million). The value of CVRs in these 11 deal was on average 25% of total deal value or 33% of the upfront paid.

Interestingly, the three new public deals announced in 2023 so far (23 January) all have a CVR component averaging 20% to 25% of total deal value.

Trade Sales of Private US & European Biopharma Companies

Trade Sales of Private US & European Biopharma Companies

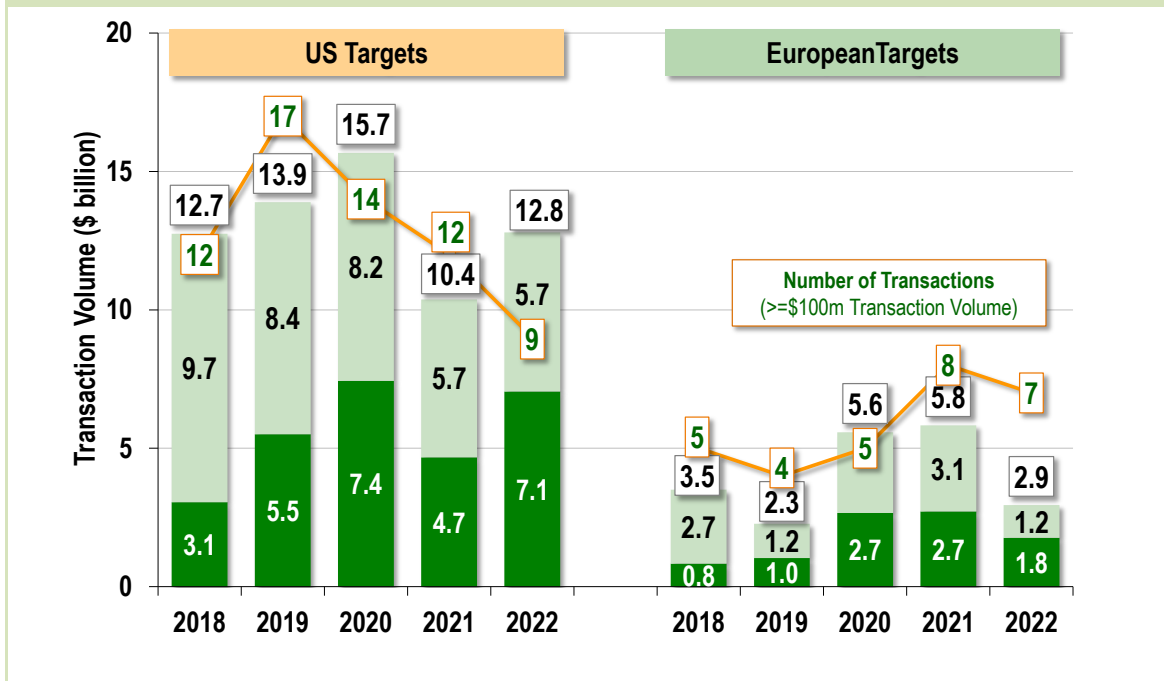


Trade sales of private US and European biopharma companies, not including asset deals or purchases of divisions. "Other private companies" are companies not majority-owned by venture or private equity investors.

- As in the years before, the bulk of transaction volume from private deals in 2022 was generated by trade sales of venture-backed companies (\$8.8 billion upfront plus \$6.9 billion potential further value).
- In 2022, 21 private companies were sold for a total value of \$100 million or more (16 thereof were VC-backed companies). This is one of the lower numbers seen during the 10-year period since 2013. There are probably two reasons for this: (1) Many of the higher quality and later-stage companies went public in the preceding years and the staple of private companies of interest to buyers might have been reduced. (2) With public biotech valuations being quite depressed, public companies may have presented more attractive targets than private firms.
- By far the largest VC-backed exits were the already mentioned Takeda/Nimbus deal and the sale of US Affinivax with its 24-valent pneumococcal vaccine candidate in phase II to GSK for \$2.1 billion upfront and further \$0.6 billion in potential milestone payments. There were three further trade sales that could surpass \$1 billion in value: Villarix sold to Incyte, TeneoTwo sold to partner AstraZeneca and Syndesi sold to Abbvie. The upfront payments in these three transactions were relatively modest, ranging from \$70-130 million.
- Notable transactions outside of VC-backed exits were the buyout (majority stake) of UK's Norgine by Goldman Sachs funds in a \$2 billion transaction and the sale of US women's health company Theramex to Carlyle and another fund for \$1.4 billion.
- In the years 2013-2015 quite a number of medium-sized private-equity backed private pharma companies (former buyouts) were sold leading to high deal volumes in that category. The largest such transactions were Bausch & Lomb (US) sold to Valeant (Canada) for \$8.7 billion in 2013, Omega Pharma (Belgium) sold to Perrigo for \$4.5 billion in 2014 and Par Pharmaceuticals (US) sold to Endo (Ireland) for \$8 billion in 2015. In recent years VC-backed company trade sales clearly dominated private M&A with fewer other private biopharma companies sold for significant amounts.

Analysis of US and European VC-Backed Company Exits

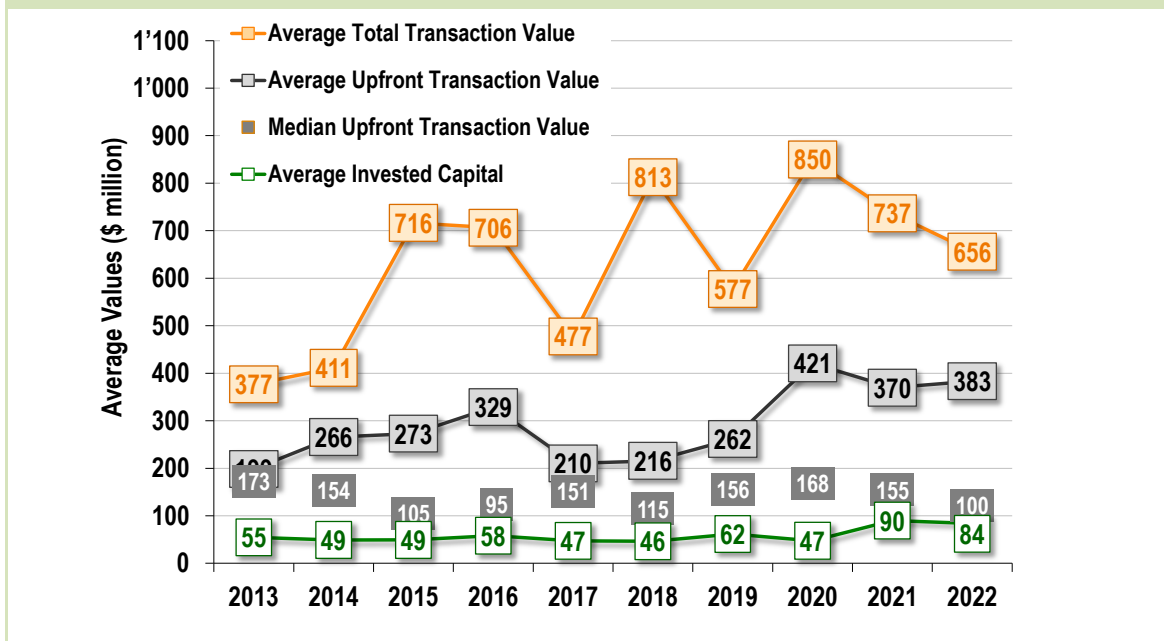
Trade Sales of Private VC-Backed US vs. European Biopharma Companies 2018-2022



Trade sales of private VC-backed US and European biopharma companies.

- Europe is and has been lagging the US in terms of VC-backed biopharma M&A exits. The same is true, of course, for venture funding and even more for IPOs. The chart above also shows that deal numbers and volumes on both sides of the Atlantic have dropped from a high point in 2020.

Trade Sales of VC-Backed Companies – Avg. Investment Amounts & Transaction Values

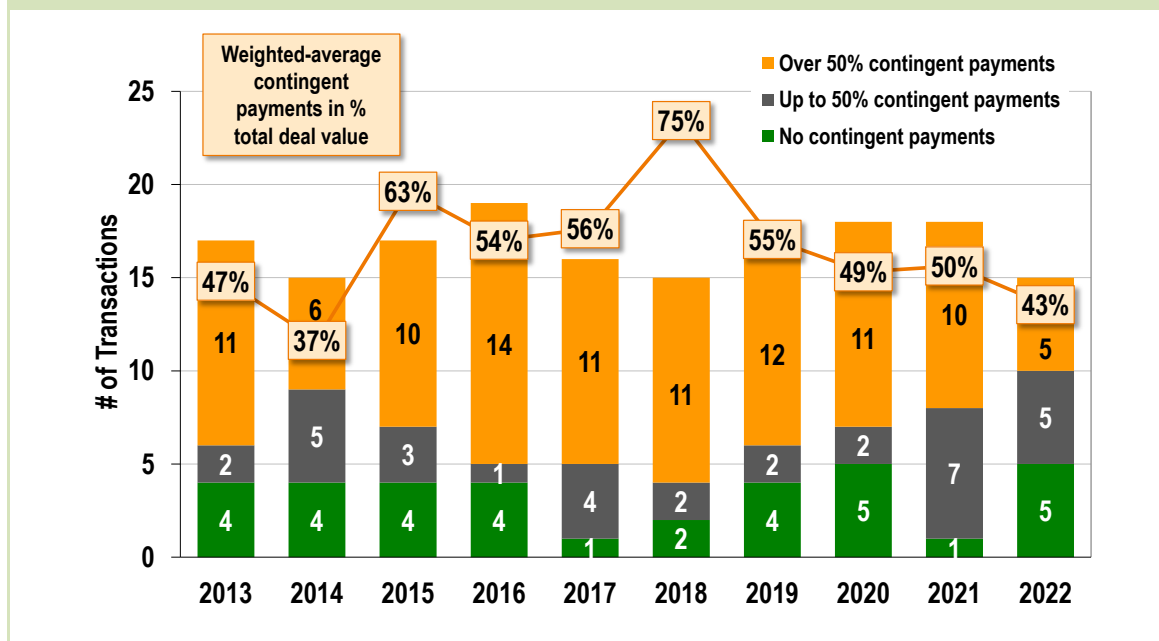


Trade sales of private VC-backed US and European biopharma companies. Only for deals where respective information was available, [all deal sizes](#).

- Average upfront and especially total exit values have trended higher during the last 10 years and have remained quite high since 2020, the best year for VC-backed company exits. One should note however, that average values can be skewed by large deals in a certain year and median exit values have been about 50% lower.

- Average investment amounts - until an exit could be achieved – have shown an increase recently with venture investors deploying larger amounts of money early on. Again, median values here are lower. And the high average investment amounts until exit in 2022 was driven by the approximately \$400 million each invested in Nimbus and Affinivax, the largest VC-backed exits in this year. Furthermore, we do not know how much cash companies had at the time of sale, so the net amount used up by such companies might actually have been lower than shown in the investment numbers above.

Trade Sales of VC-Backed Companies – Contingent Payments



Trade sales of private VC-backed US and European biopharma companies. Only for deals where respective information was available and for transactions with a total value of \$100 million or more. Average contingent payments in % of total deal amounts, weighted by deal amounts.

- As shown above, the majority of M&A transactions with VC-backed biopharma companies have a significant contingent component averaging about 50% or more of the overall value, i.e. contingent considerations are often higher than the upfront payments.
- It seems however that since 2017/2018 the share of transactions¹ with no or less than 50% of a contingent portion is increasing. This and the increase in average upfront amounts might be an indication that VC-backed biopharma companies selling out have further improved their negotiation position.

Further Reading – 2021 SRS Acquiom Life Sciences M&A Study

The recent 2021 SRS Acquiom Life Sciences M&A Study (published in September 2021 [here](#)) provides interesting additional insights into private biopharma M&A deals structured with contingent payments.

The study covers over 100 private biotech M&A deals from 2011 up to June 2021 with a total of \$30.7 billion upfront payments and \$51.6 billion of contingent or earn-out payments. While SRS does not specify exactly which deals are included (i.e. US, Europe, stage of company etc.), we can assume that the majority deals are trade sales of VC-backed US clinical-stage biopharma companies with a few European deals included. As a comparison, the total upfront paid for the 178 VC-backed exits from our database 2013-2022 amounts to \$67 billion with \$84 billion contingent value.

¹ Deal value at least \$100 million

Here are the most important results of the study:

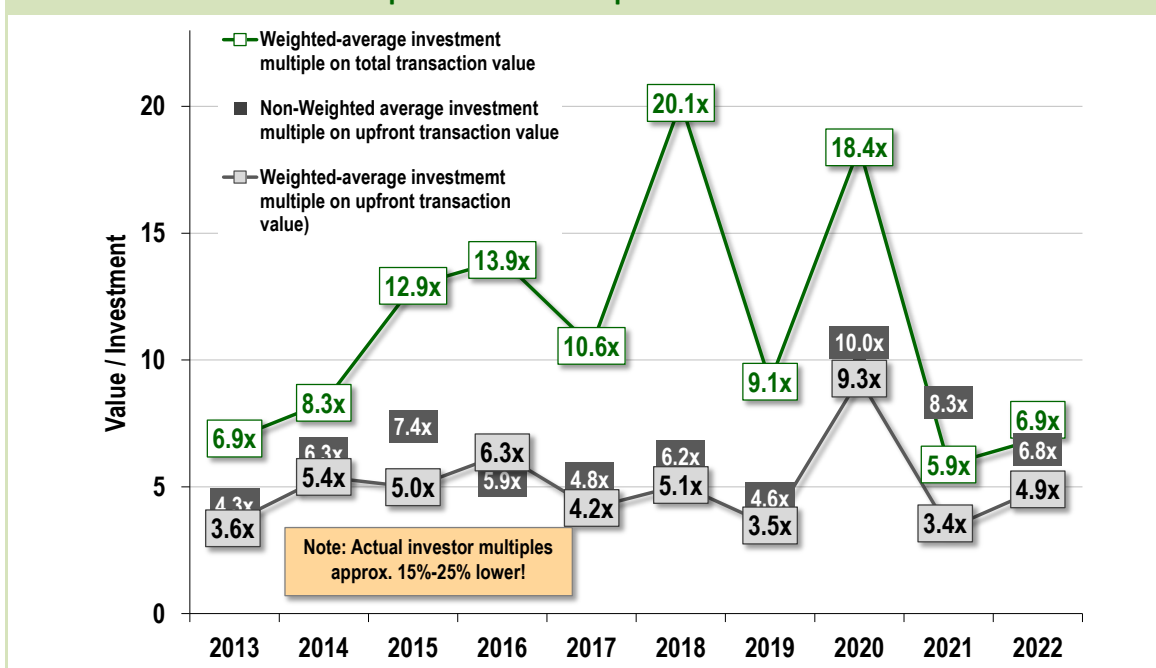
- Over 80% of biopharma transactions had an earn-out structure. This percentage was much higher than in medical device, diagnostics or tech deals.
- The earn-out amounts in biopharma deals are often higher than the upfront amounts.
- Pre-clinical and phase 1 milestones are achieved more often (61% and 52% reached) than phase 2 or 3 milestones (27% and 32% reached).
- By mid-2021, 34% of milestones due at that time had been reached with 34% of such earnout amounts paid. One can thus assume that, on average, about 35%-40% of contingent payments will eventually be paid out.

Investor Returns from the Sale of VC-Backed Biopharma Companies

We have approximated the return multiples for venture investors from biopharma trade sales using the ratio of upfront (and total) consideration divided by invested capital. To calculate the average multiples in a given year, we have divided the sum of exit values (upfront or including contingent payments) by aggregate VC investments. These averages, weighted by deal size, provide – in our view – a good indicator of the overall exit performance in a given year. Non-weighted averages (included in the chart below as well) were generally a bit higher and medians generally a bit lower.

The valuations paid by investors in private biopharma companies are generally higher than the invested capital (as some of the fully-diluted equity belongs to founders, management etc.). Therefore, actual investor returns are likely about 15%-25% lower than the multiples shown here.

Trade Sales of VC-Backed Companies – Exit Multiples

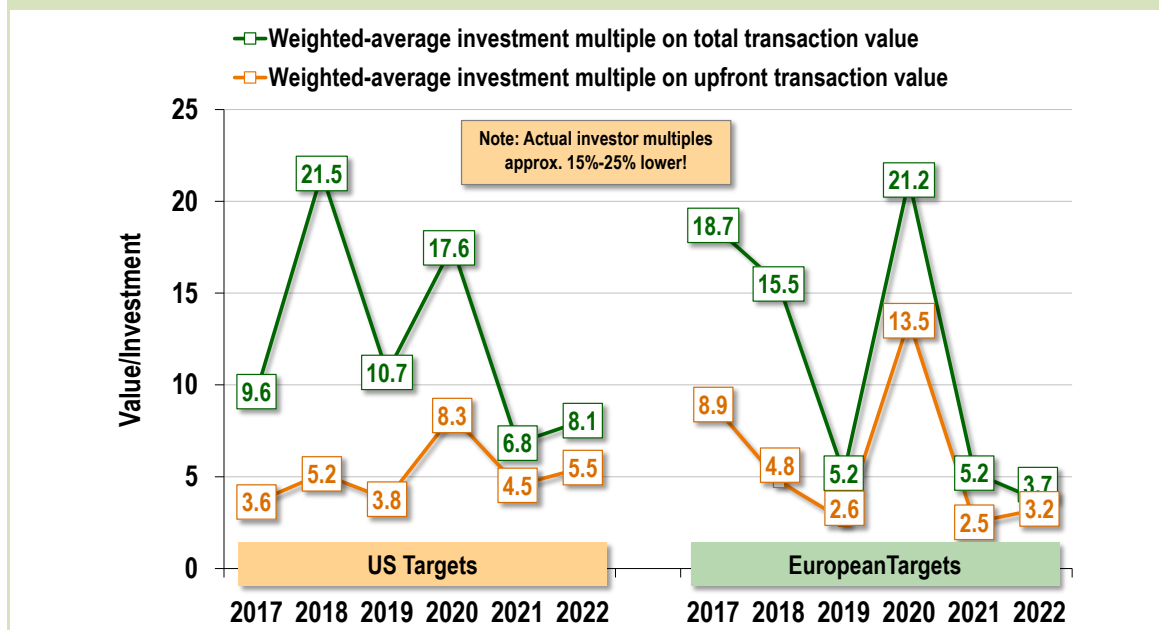


Trade sales of private VC-backed US and European biopharma companies. Only for deals where respective information was available, all deal sizes.

- Exit multiples (non-weighted and weighted) have until 2020 generally shown an upward trend with 2019 being a weaker year. Both 2021 and 2022 have seen multiples fall to more “normal”, but still very good levels. We can assume that exits by M&A provided VC investors with much better multiples on average than the numerous recent IPOs (~150 IPOs in 2020 and 2021) especially considering that many of these stocks now trade below their IPO price.
- A comparison of VC returns achieved in the US versus Europe (next page) shows similar numbers with European multiples being higher in some years and lower in other years (such as 2021 and 2022). One

should note that a single large deal with a very high multiple can influence averages such as German Myr sold to Gilead in 2020 for \$1.4 billion upfront and \$1.7 billion total deal value with an upfront multiple of 67x (\$21 million of VC investment). This transaction explains the very high exit multiples in 2020 from European deals.

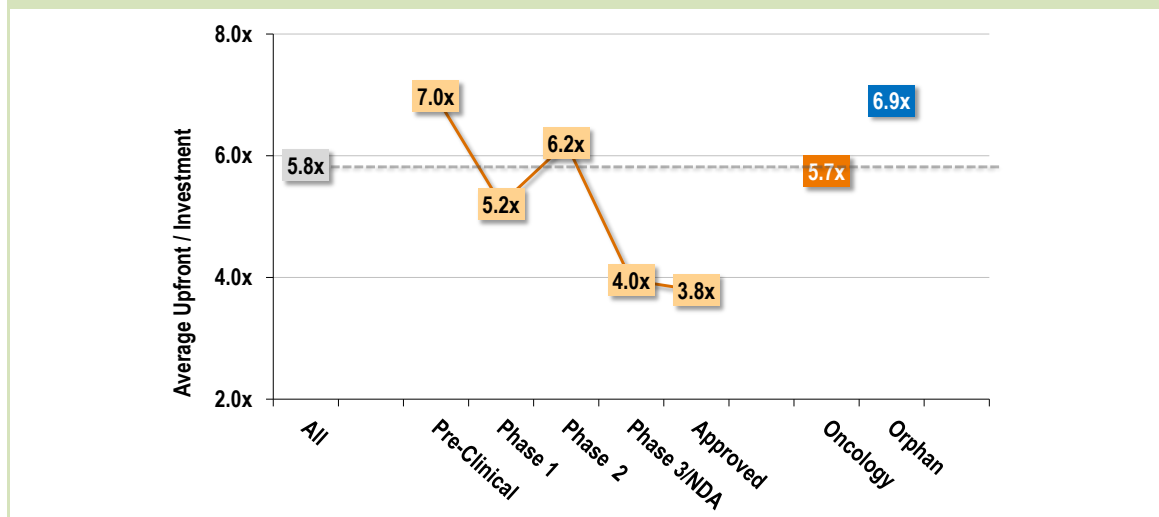
Trade Sales of VC-Backed Companies 2017-2022 – Exit Multiples US vs. Europe



Trade sales of private VC-backed US and European biopharma companies. Only for deals where respective information was available, all deal sizes.

- Our return data also indicate that in recent years (2018-2022) early exits, i.e. at earlier stages of clinical development and when less money has been invested, generated higher average multiples (see chart below). Please note that the high multiple of 67x from Myr’s exit which had its drug approved in Europe at the time of sale is not included in the multiples for the category “Approved”.
- Oncology exits which showed higher-than-average multiples in the past (from 2011 to 2017) are now in line with overall return numbers. Oncology companies are often sold at earlier stages.
- Companies developing drugs with on orphan designation yielded still somewhat better returns than average during the last five years, but returns have come down recently.

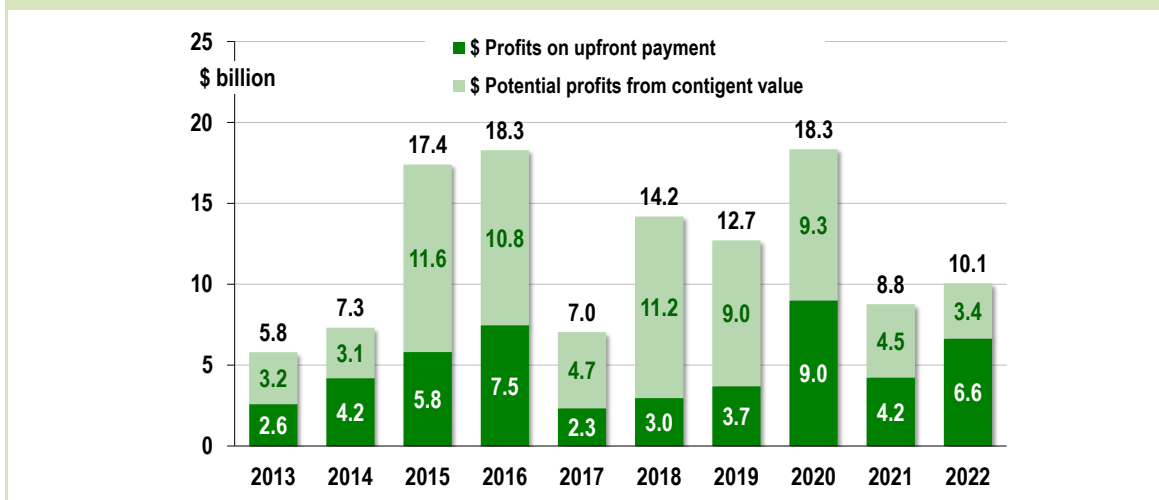
Trade Sales of VC-Backed Companies 2018-2022– Exit Multiples by Stage of Lead Product



Trade sales of private US and European VC-backed biopharma companies. All deal sizes. Stage of lead product at time of company sale. Average (non-weighted) exit multiples (upfront / investment).

- Another way of analysing the strength of VC-backed biopharma exits by M&A is to calculate the absolute profit amounts (exit value minus investment amounts) generated by upfront considerations or the total deal value. In that respect, 2022 was a pretty good year with \$6.6 billion of profits for VCs and founders from the upfront proceeds alone and a further \$3.4 billion of potential gains from contingent payments.

Trade Sales of VC-Backed Companies – Profit Amounts to (VC) Investors & Founders*



*and other non-VC shareholders. / Trade sales of private VC-backed US and European biopharma companies. Only for deals where respective information was available.

Summary and Outlook

- Despite the weak stock market and the gloomy economic outlook, 2022 turned out to be a surprisingly good year for biopharma M&A with mainly large pharma companies snapping up a good number of smaller public and private companies generating a respectable transaction volume. Biopharma M&A thus seems quite resilient to economic downturns. This was also shown during the “great financial crisis” when the stock market bottomed, but M&A volume reached a record \$191 billion in 2009.
- We believe that the fundamentals for biopharma M&A remain intact as larger companies want to get hold of innovative drugs developed by smaller companies. And there will be no shortage of willing sellers as many (or too many?) biotech companies went public and even more new biotech companies have been started and funded. The potentially increased scrutiny of the FTC of certain transactions will make very large deals or mega mergers less likely or at least make such transaction more complicated.

February 2023 / Authors: Dr Ulrich Geilinger, Dr Chandra Leo, Dr Emil Bujak

About HBM Partners

HBM Partners is among the global leaders in healthcare-focused investing with approximately \$2 billion in assets under management. HBM focuses on development stage and growth financings of private and public biopharma, medical device and diagnostics companies. HBM Partners has a track record of over 100 private investments that resulted so far in significant value creation by more than 60 trade sales and IPOs since inception in 2001.

HBM Partners is regulated by FINMA and advises listed HBM Healthcare Investments (SIX: HBMN) and further specialized public and private equity investment products.

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