

HBM Pharma/Biotech M&A Report 2014

including in-depth analysis of trade sales of US and European biopharma companies backed by venture- and private-equity investors

Key Findings

- \$219.4 billion worldwide biopharma M&A transaction volume (including completed and announced deals, asset deals, acquisitions of divisions)
- \$81.8 billion upfront transaction volume of completed US and European biopharma company trade sales (up from \$48.5 billion in 2013). \$87.7 billion overall deal value including contingent payments
- Additional \$78.8 billion value of announced US & European transactions (including the \$66 billion acquisition of Allergan by Actavis and the \$8.4 billion purchase of Cubist by Merck & Co.)
- Further \$45.6 billion worth of transactions involving assets or divisions of US and European companies
- \$13.3 billion deal volume of biopharma acquisitions outside of the US and Europe (ROW)
- Mid-sized biopharma companies spent substantially more on acquisitions than traditional large pharma firms
- Best-ever exit year over last decade for VC-backed US biopharma companies

About the HBM Pharma/Biotech M&A Report

The HBM Pharma/Biotech M&A Report covers all completed trade sales of US and European biotechnology and pharma companies with a therapeutic focus (Rx incl. generics as well as OTC). For 2014, additional data for asset deals and transactions outside of US and Europe is provided.

The report does not cover nutritional supplements, diagnostics, medical technology, life sciences tools, CROs, pharma manufacturing and services. Thus, we focus on the therapeutic drugs sector. Reverse mergers, minority investments and the purchase of assets or divisions are not included in the survey up to 2013. Acquisitions that were structured as mergers for tax or other reasons are included.

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

Additional data such as investment by venture and private equity investors, exit multiples, 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. Also, the results presented in this report may deviate from our earlier reports due to subsequent reclassification or correction of data.

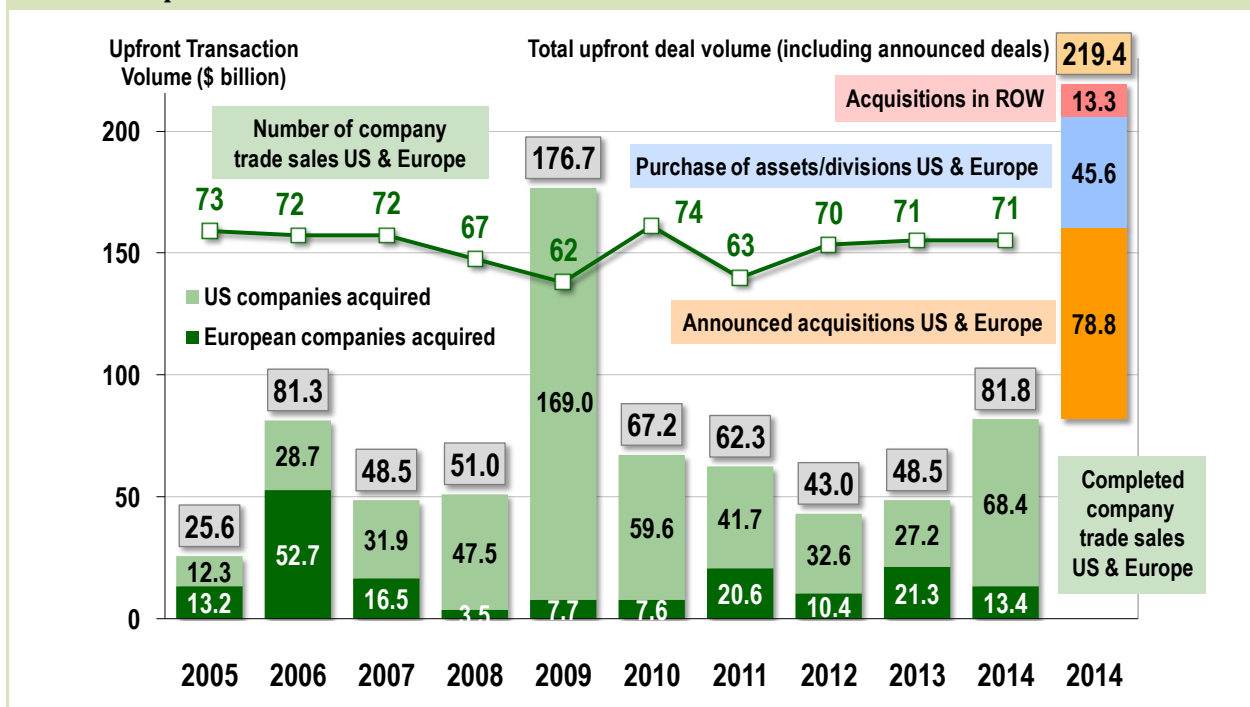
Further information about the HBM Pharma/Biotech M&A Report including a list of all transactions can be found under www.hbmpartners.com/report. The use of data and charts is permitted with reference to "HBM Partners Pharma/Biotech M&A Report".

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Overview Biopharma M&A 2005-2014

Chart 1: Biopharma M&A Transaction Volumes 2005 -2014



- \$81.8 billion upfront transaction volume of completed US and European biopharma company trade sales (up from \$48.5 billion in 2013). \$87.7 billion overall deal value including contingent payments.
- Additional \$78.8 billion deal value of announced^a transactions (including the \$66 billion acquisition of Allergan by Actavis and the \$8.4 billion purchase of Cubist by Merck & Co).
- Further \$45.6 billion worth of transactions involving assets or divisions of US and European companies (Novartis-GSK “asset swap” grabbing the most headlines).
- \$13.3 billion deal value of biopharma acquisitions outside of the US and Europe (ROW)
- In total, this amounts to \$219.4 billion in overall biopharma deal value (including announced deals, asset deals, ROW deals)^b.
- Largest completed company trade sales in 2014: \$28 billion acquisition of Forest by Actavis, \$8.3 billion acquisition of Intermune by Roche, \$5.4 billion acquisition of Questcor by Mallinckrodt.
- Four “asset deals” (including sales of divisions) with a value of over \$5 billion each.

See next page for list of largest biopharma M&A transactions in 2014.

Please note that our M&A data up to 2013 do not cover “asset deals” or the sale of divisions, and the comparisons to previous years (pages 4ff.) only relate to trade sales of (entire) US and European biopharma companies with a therapeutic focus.

a but not completed by year end

b Other pharma-related transactions (manufacturing, API, packaging, services, diagnostics etc.) are not included in our statistics.

Table 1: Largest Biopharma M&A Transactions During 2014

	Target Company	Private/ Public	VC/PE- Backed/ Premium	Buyer	Upfront Deal Value (\$ m)	Total Deal Value (\$m)	Stage of Lead Product
US	* Allergan / US	Public	10%	Actavis / Ireland	66'000	66'000	Market
US	Forest Laboratories / US	Public	31%	Actavis / Ireland	28'000	28'000	Market
Europe	Oncology Products GSK / UK	Asset/Div.		Novartis / Switzerland	14'500	16'000	Market
US	OTC Business Merck / US	Asset/Div.		Bayer / Germany	14'200	14'200	Market
US	* Cubist / US	Public	35%	Merck & Co. / US	8'400	8'400	Market
US	InterMune / US	Public	68%	Roche / Switzerland	8'300	8'300	Market
US	Questcor / US	Public	27%	Mallinckrodt / Ireland	5'600	5'600	Market
US	Abbott Specialty/Branded Generics / US	Asset/Div.		Mylan / US	5'300	5'300	Market
Europe	Novartis Vaccines / Switzerland	Asset/Div.		GlaxoSmithKline / UK	5'250	7'100	Market
Europe	Omega Pharma / Belgium	Private	PE	Perrigo / Ireland	4'500	4'500	Market
US	Viropharma / US	Public	27%	Shire / Ireland	4'200	4'200	Market
US	Idenix / US	Public	239%	Merck & Co. / US	3'900	3'900	Phase 2
Europe	Galderma (L'Oreal) / Switzerland	Asset/Div.		Nestle / Switzerland	3'600	3'600	Market
Asia	Ranbaxy / India	Public	9%	Sun Pharma / India	3'200	3'200	Market
US	Aptalis / US	Private	PE	Forest Laboratories / US	2'900	2'900	Market
ROW	CFR / Chile	Public	141%	Abbott / US	2'900	2'900	Market
Can.	Paladin Labs / Canada	Public	20%	Endo / US	2'700	2'700	Market
Europe	Rottapharm / Italy	Private		Meda / Sweden	2'670	3'100	Market
Europe	Algeta / Norway	Public	37%	Bayer / Germany	2'660	2'660	Market
US	* Auxilium / US	Public	55%	Endo / Ireland	2'600	2'600	Market
US	Santarus / US	Public	39%	Salix Pharmaceuticals / US	2'600	2'600	Market
US	Alios BioPharma / US	Private	VC	Johnson & Johnson / US	1'750	1'750	Phase 2
US	* Kremers Urban (UCB) / US	Asset/Div.		Advent Intern. & Avista Capital / US	1'525	1'525	Market
Can.	Skincare Valeant / Canada	Asset/Div.		Nestle / Switzerland	1'400	1'400	Market
US	Cadence Pharmaceuticals / US	Public	26%	Mallinckrodt / Ireland	1'400	1'400	Market
US	Furiex / US	Public	19%	Forest Laboratories / US	1'100	1'460	Phase 3
Europe	Gentium / Italy	Public	2%	Jazz Pharmaceuticals / Ireland	1'000	1'000	Market
Europe	Allmirall Respiratory Franchise / Spain	Asset/Div.		AstraZeneca / UK	875	2'075	Market
Europe	Lumara / UK	Private		AMAG / US	760	1'100	Market
US	Insight Pharmaceuticals Corp / US	Private	PE	Prestige Brands / US	750	750	Market
US	Seragon / US	Private	VC	Roche / Switzerland	725	1'725	Phase 1
US	Tower Holding / Core Pharma / US	Private	PE	Impax Laboratories / US	700	700	Market
US	Alvogen / US	Private		Pamplona Capital / UK	700	700	Market
Europe	Prosensa / Netherlands	Public	55%	Biomarin / US	680	840	Phase 3
Asia	Dihon / China	Private		Bayer / Germany	680	680	Market
US	Durata / US	Public	66%	Actavis / Ireland	675	822	Market
US	Ophthalmology Business Merck & Co. / US	Asset/Div.		Santen / Japan	600	600	Market
Asia	Beijing Jialin Pharmaceutical / China	Private		Luye Pharma / China	599	599	Market
US	Dava / US	Private		Endo / US	575	600	Market
Can.	Atrium / Canada	Public	23%	Permira / UK	532	532	Market
US	Chelsea Therapeutics / US	Public	29%	Lundbeck / Denmark	530	658	Market
US	Civitas / US	Private	VC	Accorda / US	525	525	Phase 2

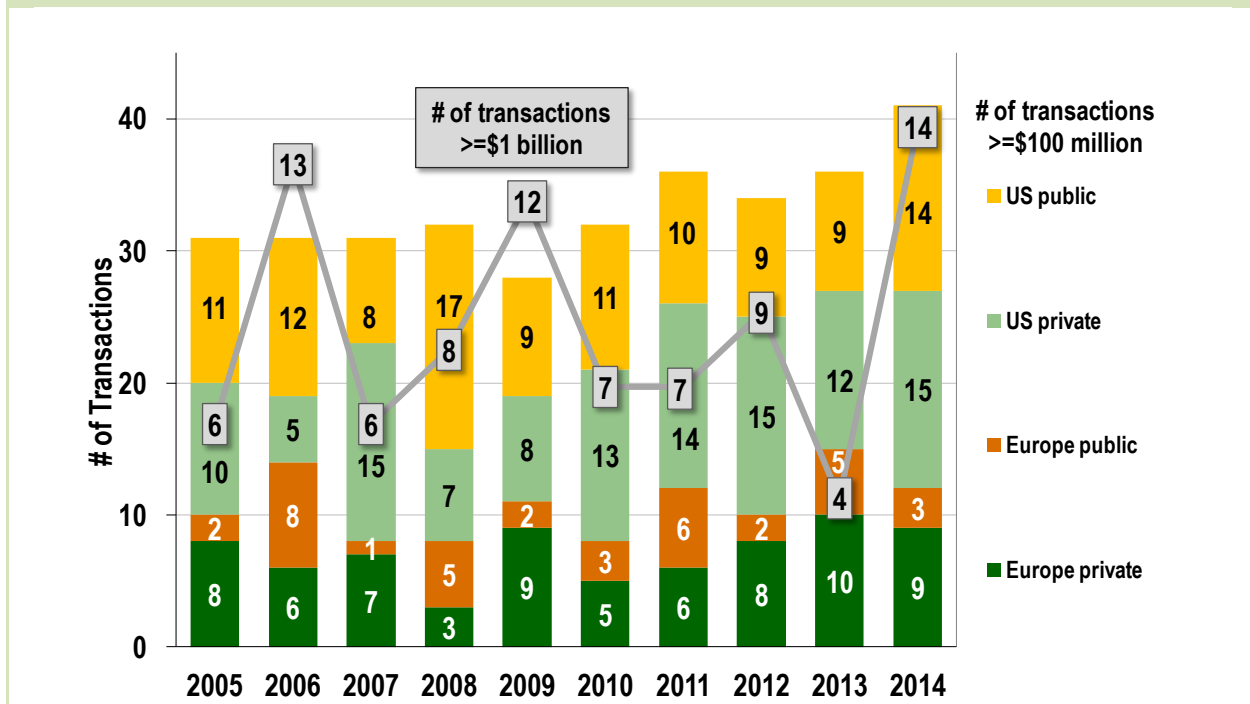
Notes:

* Announced transactions, not completed yet at year end 2014

"Asset/Div." includes sale of assets, products, divisions and subsidiaries

Transactions ranked by upfront value

Chart 2: Significant US and European Biopharma Trade Sales (Upfront of at least \$100 million)



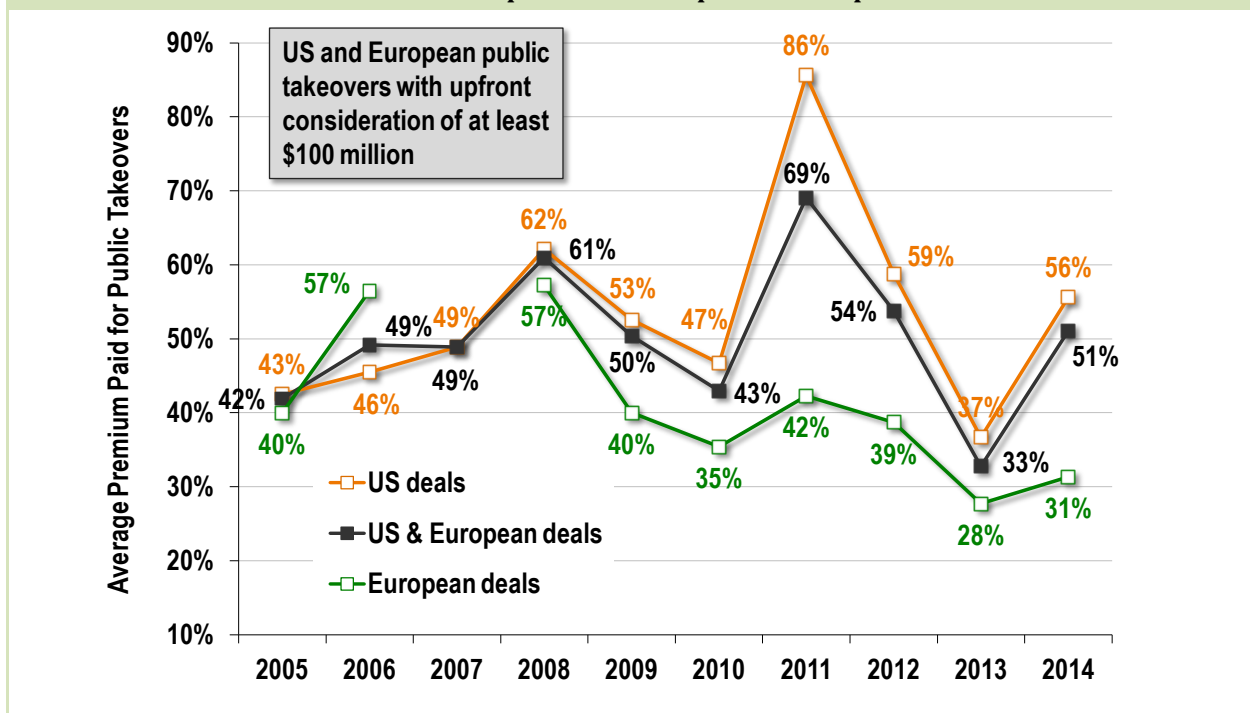
Trade sales of public and private US and European biopharma companies, not including asset deals or purchase of divisions

- US transaction volume more than doubled from \$27.2 billion in 2013 to \$68.4 billion in 2014 (see Chart 1).
- European deal volume dropped from \$21.3 billion to \$13.4 billion (see Chart 1).
- Highest number of \$1 billion plus transactions since 2005 (14 transactions^a, mostly US targets).
- Highest number of larger acquisitions of private companies since 2005 (24 transactions with upfront of at least \$100 million).
- Increase of number of US deals with upfront of \$100 million or more. Stable number in Europe.

^a Not including \$1 billion plus transactions outside of US and Europe (Ranbaxy / Sun Pharma \$3.2 billion, CFR / Abbott \$2.9 billion, Paladin / Endo \$2.7 billion)

Premiums Paid for Public Biopharma Companies

Chart 3: Premiums Paid for US and European Public Biopharma Companies

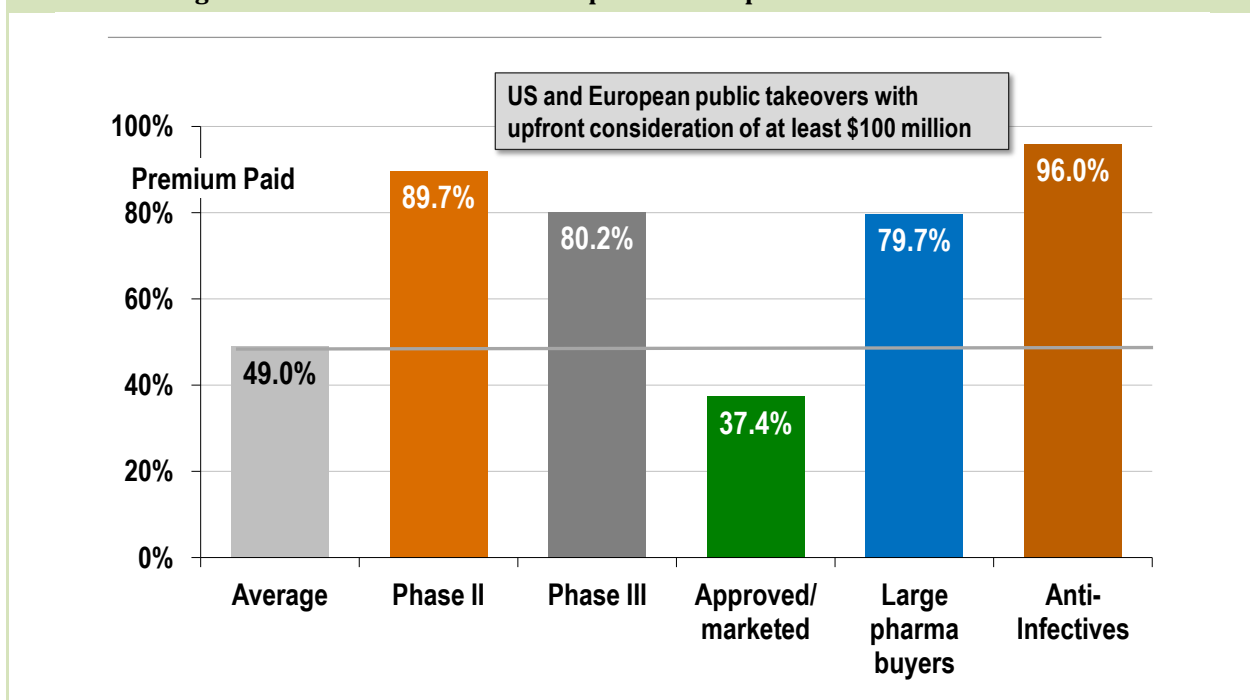


Trade sales of public US and European biopharma companies with an upfront consideration of at least \$100 million.

Comment: Premium = increase of stock price on the day of deal announcement. Only deals with an upfront consideration of at least \$100 million are included. High degree of variation in premiums paid. As usual, average numbers should be interpreted with caution.

- 51% average premium paid for public biopharma companies in 2014 (up from 33% in 2013).
- Premiums paid in the US are generally higher than in Europe.
- European premiums have been trending downwards since 2008 to around 30%.
- US premiums jumped back to 56% from a low of 37% in 2013.

Chart 4: Average Premiums Paid for Public Biopharma Companies 2010-2014

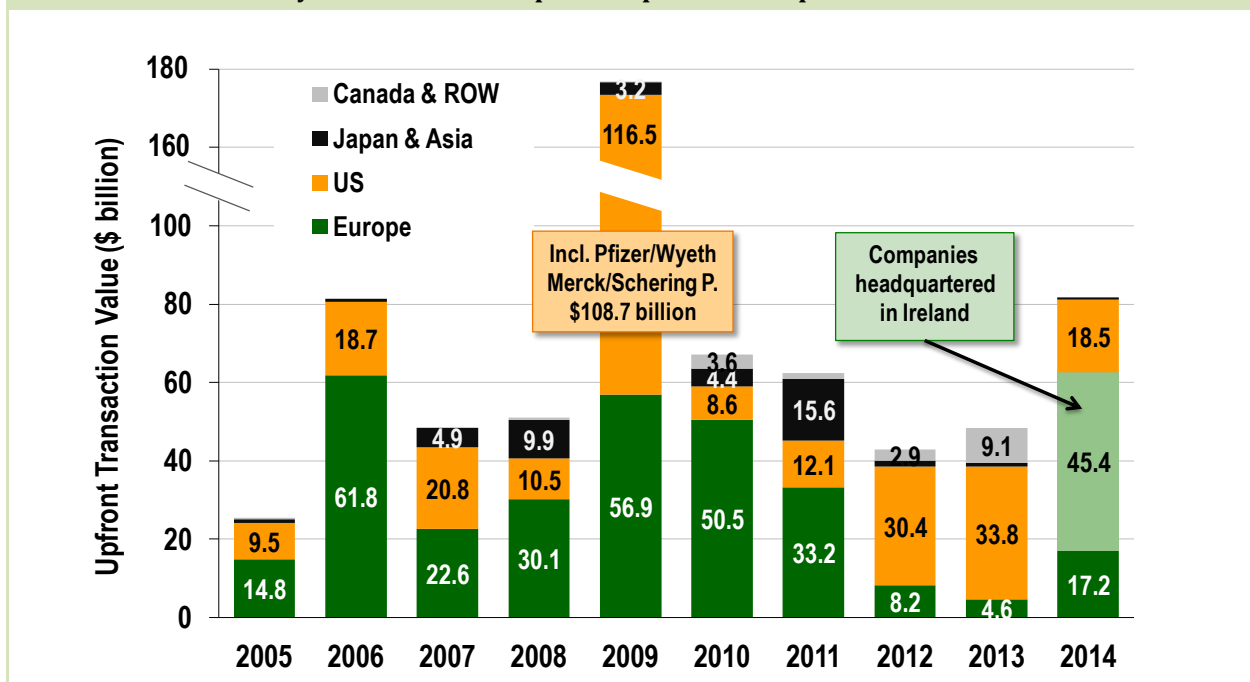


Trade sales of public US and European biopharma companies 2010-2014 with an upfront consideration of at least \$100 million.
 Premium = increase of stock price at day of announcement.

- No significant correlation of premium paid and transaction size was observed.
- Clinical-stage companies generally received higher premiums than companies with approved or marketed products.
- No significant differences in premiums paid across various therapeutic areas with the exception of anti-infectives.
- Premiums for anti-infectives companies averaged over 90% for years 2010 to 2014 (due to very high premiums paid for some anti-viral companies).
- Large pharma buyers on average paid higher premiums than other buyers. This also holds true if we control for the stage of companies acquired.

Location of Buyers

Chart 5: Location of Buyers of US and European Biopharma Companies



Trade sales of public and private US and European biopharma companies, not including asset deals or purchase of divisions

- In 2012 and 2013, US firms were the dominant buyers.
- In 2014, acquisitions by European firms generated the bulk of deal volume. (It should be noted, however, that European companies here include active buyers such as Actavis, Perrigo or Endo which are domiciled in Ireland mainly for tax purposes.)
- As in most previous years, buyers located in other parts of the world such as Japan did not spend significant amounts on US or European acquisitions in 2014.

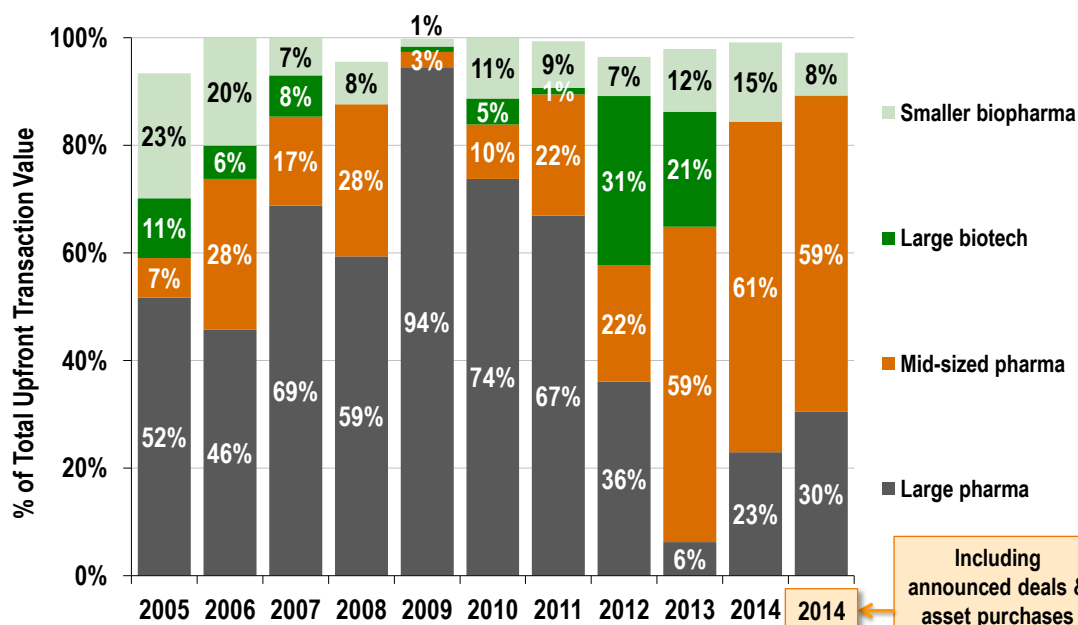
Therapeutic Areas

M&A activity in oncology was very strong in 2013 with an upfront transaction volume of \$13.4 billion in 15 deals. In 2014, the 11 oncology-related transactions generated a comparatively modest \$5 billion of deal value. Fewer transactions than in oncology, but higher overall deal values were seen in autoimmune/inflammation (\$11.8 billion), respiratory (\$8.6 billion) and anti-infectives (\$6.8 billion). Note: Forest's \$28 billion sale is not included in this analysis.

In the very active orphan drug space, 7 transactions generated \$14.6 billion of deal volume, while 11 generics/OTC companies were sold for a total of \$9.7 billion in 2014.

Transaction Volume by Type of Buyers

Chart 6: Share of Upfront Transaction Value by Type/Size of Buyer



Trade sales of public and private US and European biopharma companies. Large pharma companies are incumbent large pharma companies ranked within the top 20 biopharma companies by 2013 sales. Large biotech companies: Amgen, Biogen Idec, Celgene, Genentech (now Roche), Genzyme (now Sanofi) and Gilead. Mid-sized pharma companies are biopharma companies (outside of the categories “Large pharma” and “Large biotech”) that rank within the top 50 biopharma companies by 2013 sales (usually with a market cap of \$10 billion or higher). Smaller biopharma companies are all other companies. Other buyers (delta to 100%) were companies with their main business outside of pharma (such food, chemicals or diversified firms) and private-equity funds.

- Mid-sized pharma companies such as Actavis, Shire, etc. were the most important buyers in 2014 with a ~60% share of deal value.
- Large pharma’s share of transaction volume in 2014 increased over 2013, but is still historically low compared to the years 2005-2011.
- Smaller biopharma companies bought 26 other companies representing a share of deal volume below 10%.

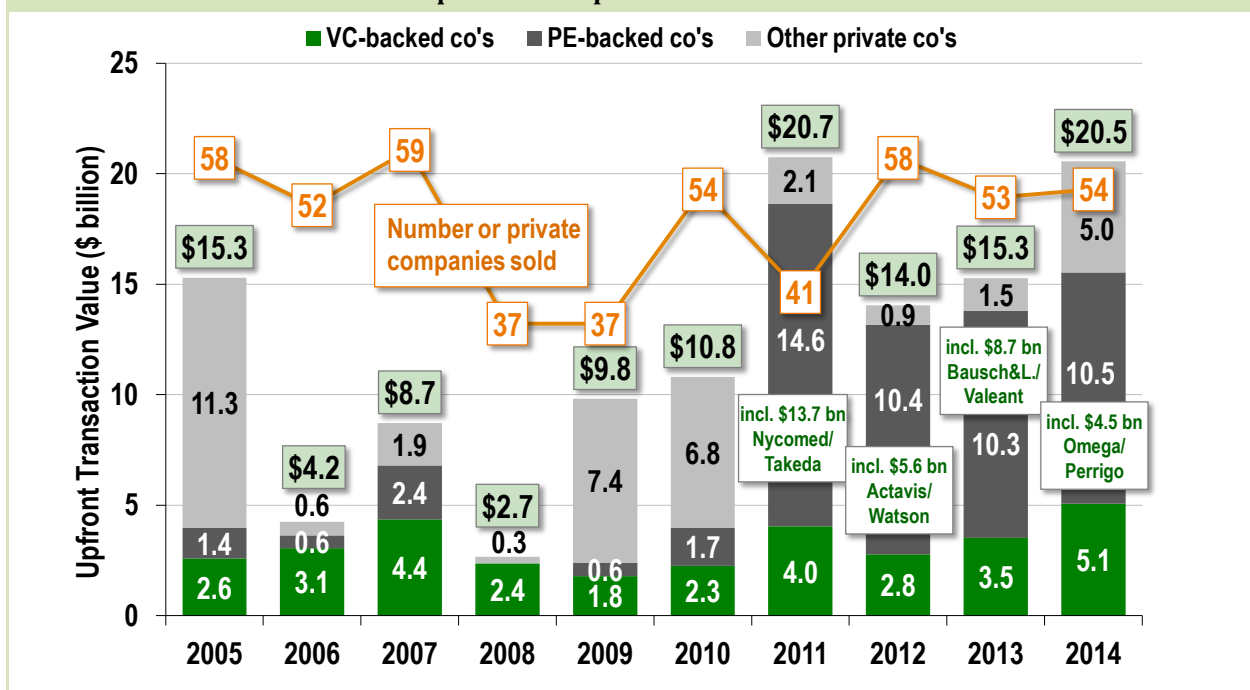
Private-Equity Funds Buying Biopharma Companies

In the 10 years from 2005 to 2014, private-equity funds acquired 22 pharma companies, mostly in the specialty pharma, generics and OTC fields. Recent larger transactions were the acquisition of US Alvogen by Pamplona in 2014 for \$700 million, the acquisition of Italian Doc Generici by Charterhouse in 2013 for \$450 million and the financing of the going private of Swiss Acino in 2013 by Avista and Nordic Capital (deal value \$450 million). CINVEN purchased two pharma companies in 2012: Mercury Pharma for \$730 million and Amdipharm for \$590 million.

Interest from PE funds for pharma companies is high. However, with the high prices paid by strategics, buyout funds have not become a major factor yet in biopharma M&A.

Trade Sales of Private Biopharma Companies

Chart 7: Trade Sales of Private 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 funds.

- \$20.5 billion upfront deal value from 54 private transactions.
- Record upfront transaction volume of \$ 5.1 billion for VC-backed trade sales (see pages 13ff).
- PE-backed pharma company exits have generated over \$10 billion of annual transaction volume every year since 2010.

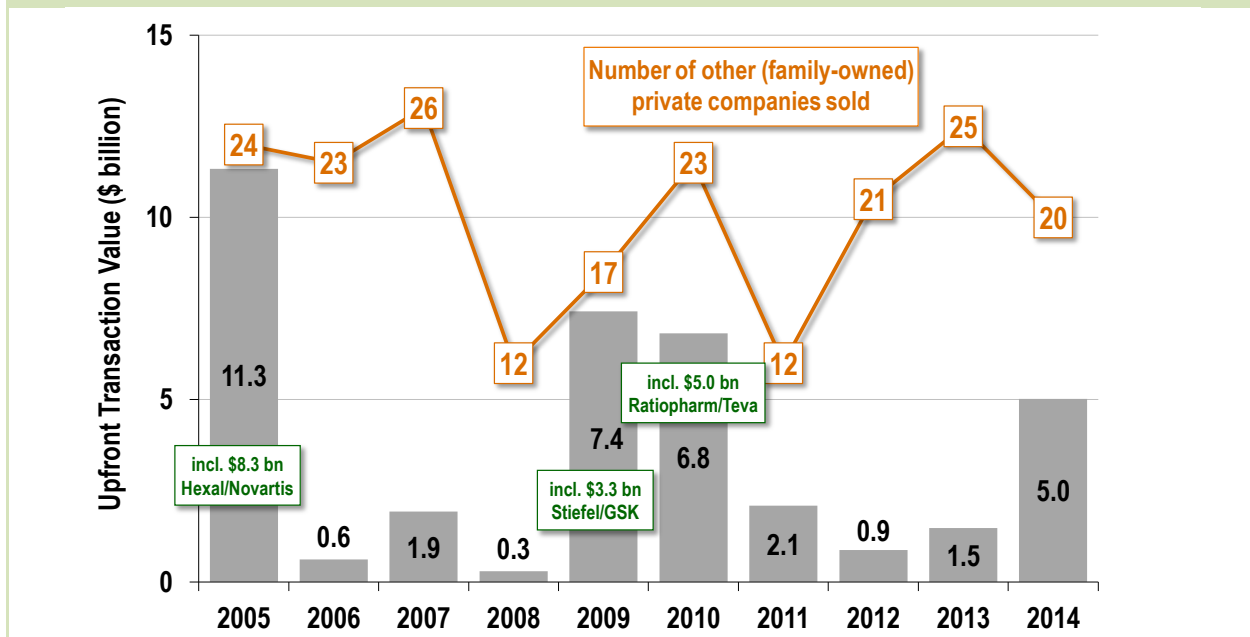
A list of the larger private transactions can be found on the next page.

Table 2: Largest US and European Private Biopharma M&A Transactions in 2014

	Target Company	VC/PE-Backed/	Buyer	Upfront Deal Value (\$ m)	Total Deal Value (\$m)	Stage of Lead Product	VC Investment (\$ m)
Europe	Omega Pharma / Belgium	PE	Perrigo / Ireland	4'500	4'500	Market	
US	Aptalis / US	PE	Forest Laboratories / US	2'900	2'900	Market	
Europe	Rottapharm / Italy		Meda / Sweden	2'670	3'100	Market	
US	Alios BioPharma / US	VC	Johnson & Johnson / US	1'750	1'750	Phase 2	73
Europe	Lumara / UK		AMAG / US	760	1'100	Market	
US	Insight Pharmaceuticals Corp / US	PE	Prestige Brands / US	750	750	Market	
US	Seragon / US	VC	Roche / Switzerland	725	1'725	Phase 1	30
US	Tower Holding / Core Pharma / US	PE	Impax Laboratories / US	700	700	Market	
US	Alvogen / US		Pamplona Capital / UK	700	700	Market	
US	Dava / US		Endo / US	575	600	Market	
US	Civitas / US	VC	Accorda / US	525	525	Phase 2	121
US	JHP Pharmaceuticals / US	PE	Par Pharmaceuticals / US	490	490	Market	
US	PreCision Dermatology / US	VC	Valeant / US	475	500	Market	140
US	VersaPharm / US	PE	Akorn / US	440	440	Market	
Europe	Archimedes / UK	PE	Kyowa Hakko Kirin / Japan	350	350	Market	
US	Aqua Pharmaceuticals / US	PE	Almirall / Spain	328	403	Market	
US	Lumena / US	VC	Shire / UK	260	260	Phase 2	84
Europe	Santaris / Denmark	VC	Roche / Switzerland	250	450	Phase 1	117
US	Innopharma / US	VC	Pfizer / US	225	360	Market	35
US	Labrys / US	VC	Teva / Israel	200	825	Phase 2	47
US	iPierian / US	VC	Bristol-Myers Squibb / US	175	725	Pre-clinical	90
Europe	Dutalys / Austria		Roche / Switzerland	134	489	Pre-clinical	
Europe	Activaero / Germany	VC	Vectura / UK	133	181	Phase 2	19
Europe	OncoEthix / Switzerland	VC	Merck & Co. / US	110	375	Phase 1	30
US	Pack Pharmaceuticals / US		Aceto / US	85	100	Market	
US	Chatham therapeutics / US	VC	Baxter / US	70	70	Phase 1	n.a
US	Aciex / US	VC	Nicox / France	65	120	Phase 3	n.a
Europe	Brabant / UK	VC	Zogenix / US	35	130	Phase 2	n.a
US	California / US	VC	NeoStem / US	34	124	Phase 3	2
Europe	Manchester Pharmaceuticals / UK		Retrophin / US	30	63	Market	
US	Pregenen (Precision genome Engineering)		Bluebird Bio / US	21	156	Pre-clinical	
US	SKS Ocular / US		Ohr Pharmaceutical / US	14	n.a.	Pre-clinical	
US	Egen / US	VC	Celsion / US	14	44	Phase 1	20
US	Shape / US		TetraLogic / US	13	13	Phase 1	
Europe	Immutep / France	VC	Prima / Australia	11	25	Phase 2	8
Europe	4-Antibody / Switzerland	VC	Agenus / US	10	50	Phase 3	20
Europe	Doliage / France		Nicox / France	7	7	Market	
Europe	Trianta / Germany		Medigene / Germany	6	13	Phase 2	

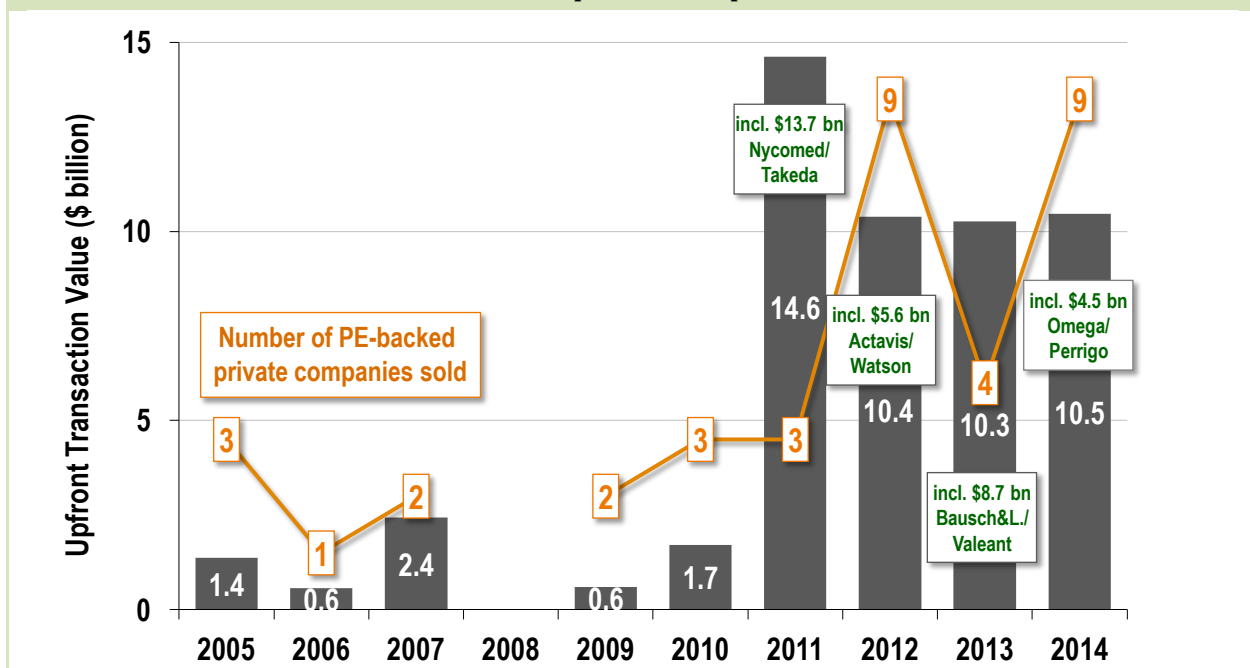
Note: Transactions ranked by upfront value

Chart 8: Trade Sales of “Other” Private Biopharma Companies



Trade sales of other private US and European biopharma companies. “Other private” companies are companies that are not mainly owned by venture or private equity funds. Such companies are often family-owned.

Chart 9: Trade Sales of Private PE-Backed Biopharma Companies



Trade sales of PE-backed private US and European biopharma companies

- Buyout funds took advantage of the good exit environment and sold 9 PE-backed pharma companies in 2014, generally with good return multiples.

More details on these transactions can be found on the next page.

Trade Sales of Private Equity-Backed Pharma Companies During 2014

(ranked by transaction value, headline: Target Company / Buyer / Transaction Value / Business)

Omega Pharma (NL) / Perrigo (Ireland) / \$4.5 billion / OTC

In November 2014, Perrigo Company plc announced the acquisition of Omega Pharma, one of the largest OTC healthcare companies in Europe for €3.6 billion or \$4.5 billion. Omega, headquartered in Belgium, generated sales of more than €1.2 billion in 2013. The company had been taken private by Marc Coucke, Belgium's Waterland Private Equity and other investors in 2010 in a €848 million (\$1.1 billion) deal. Subsequently, Omega purchased some OTC brands from GSK for €470 million. The return for investors on the sale of Omega to Perrigo is estimated to be around 4x.

Aptalis (US) / Forest (US) / \$2.9 billion / Cystic fibrosis, GI

In March 2014, Forest Laboratories acquired PE-backed Aptalis for \$2.9 billion. Aptalis was a global specialty pharma company with about 1'000 employees worldwide. Aptalis provides innovative therapies for cystic fibrosis and gastrointestinal disorders. Aptalis achieved sales of \$688 million in FY2013 ended September 2013. TPG had acquired Aptalis, formerly known as Axcen Pharma, for \$1.3 billion in 2008 and merged it with Eurand Pharmaceuticals in 2011. The return multiple for TPG is likely to be in the 3x range.

Insight Pharmaceuticals (US) / Prestige Brands (US) / OTC, women's health

In September 2014, US-listed Prestige Brands acquired Insight Pharmaceuticals for \$750 million. Insight, a seller of OTC women's health and personal care products, had been acquired in a secondary buyout in 2009 by Swander Pace and Ontario Teachers from Allied Capital, which bought the company in 2005. No terms for the secondary buyout were disclosed, but we guess the 2014 exit provided a >2x return to investors.

Tower Holding (US) / Impax (US) / \$700 million / Value-added generics

In September 2014, US-listed Impax acquired Tower Holding and its operating subsidiaries CorePharma, Amedra and Lineage for \$700 million from RoundTable Healthcare. The companies specialized in high value generic formulations including extended-release, delayed-release and DEA controlled substances and the marketing of niche brands. RoundTable had taken a controlling stake in CorePharma in 2005. The amount invested in Tower Holding by RoundTable is unknown. RoundTable likely made an attractive multiple (>3x) in this exit.

JHP Pharmaceuticals (US) / Par (US) / \$490 million / Branded generics

In January 2014, JHP Pharmaceuticals was sold for \$490 million to Par Pharmaceutical Companies, a U.S.-based specialty pharma company. Par is a portfolio company of TPG. JHP Pharmaceuticals, a seller of branded and generics injectables and founded in 2007, was acquired by private equity firm Warburg Pincus and Morgan Stanley in 2012 in a \$195 million transaction. It is estimated that investors in JHP made a 2.5x multiple on this exit.

VersaPharm (US) / Akorn (US) \$440 million / Generic anti-infectives

US niche pharmaceutical company Akorn bought VersaPharm in August 2014 for \$440 million. Akorn had been acquired in 2007 by Tailwind Capital. VersaPharm developed and sold generic products designed to treat tuberculosis and other infectious diseases. No terms of the original buyout are available, so no return estimates can be provided.

Archimedes (UK) / Kyowa Hakko Kirin (Japan) / \$350 million / Specialty pharma

Archimedes was acquired in August 2014 by Kyowa Hakko Kirin, via its UK subsidiary ProStrakan for £230 million or \$350 million. Archimedes had been founded in 2005 as a specialty pharma company with backing of Warburg Pincus. The company raised over \$150 million from Novo Foundation and Warburg Pincus, so the estimated return for PE investors is around 2x.

Acqua Pharmaceuticals (US) / Almirall (Spain) / \$400 million / Dermatology

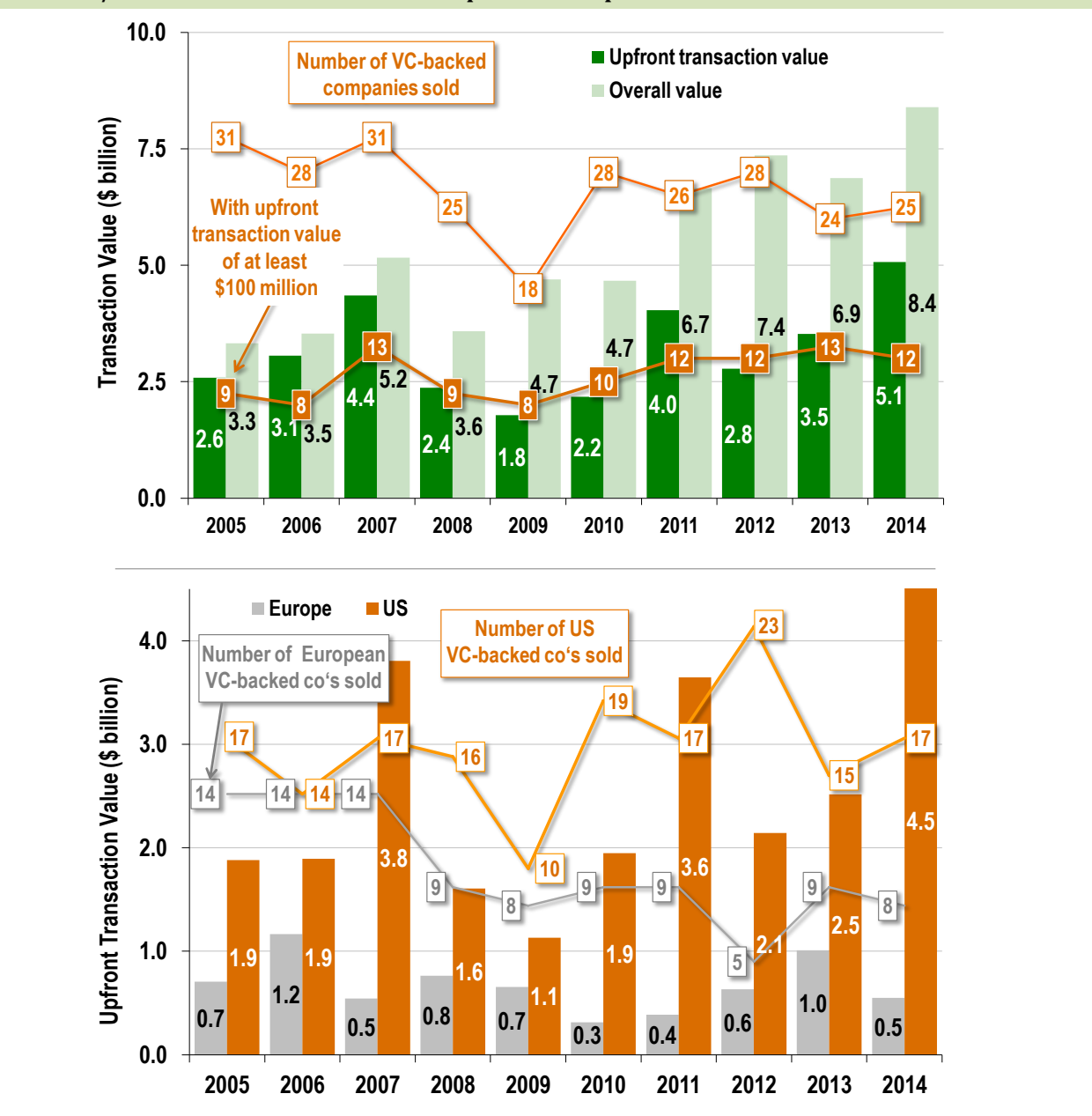
In January 2014, Spain's Almirall bought Aqua Pharmaceuticals for up to \$400 million from PE investor RoundTable Healthcare. Aqua specialised in the development and marketing of drugs for the treatment of skin conditions like acne. 2013 sales were around \$125 million. RoundTable had taken a controlling stake in Aqua in 2010 for undisclosed terms. No return estimates are available.

Focus (UK) / Amdipharm Mercury (UK) / deal value undisclosed / Generics, niche medicine

In October 2014, Amdipharm acquired UK specialty pharma Focus Pharmaceuticals. Financial terms of the transaction were not disclosed. In 2007, Matrix Private Equity Partners had financed the £6m management buyout of Focus Pharmaceuticals. No return estimates are available.

Trade Sales of VC-Backed Biopharma Companies

Chart 10/11: Trade Sales of VC-Backed Biopharma Companies

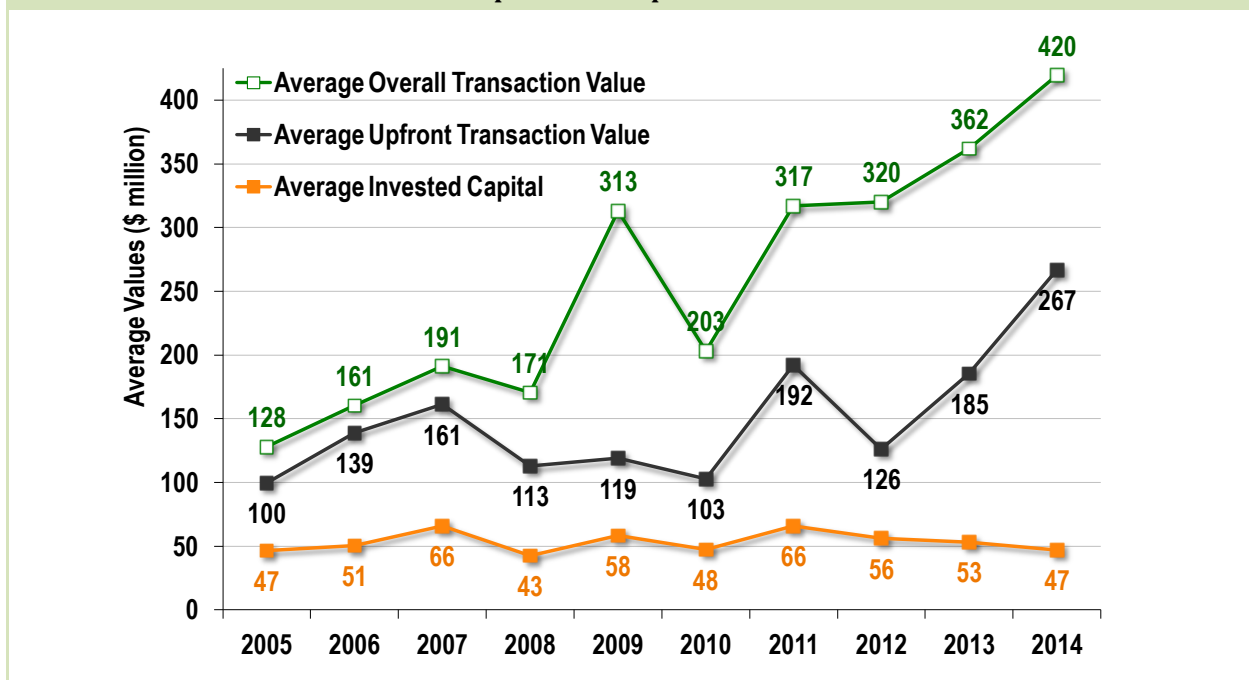


Trade sales of private VC-backed US and European biopharma companies

- Number of VC-backed exits by trade sale is in line with previous years.
- Upfront and overall “biodollar” deal values reached new highs.
- Best “exit year” for VC-backed US biopharma companies over last decade (see page 17ff).
- High total deal value in the US (\$4.5 billion upfront, \$7.2 billion including biodollars).
- European transaction volume down (\$0.5 billion upfront, \$1.1 billion including biodollars).

Average Deal Values of VC-Backed Biopharma Trade Sales

Chart 12: Trade Sales of VC-Backed Biopharma Companies



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

- Record average upfront and total deal values of VC-backed company exits.
- Slight decline of average investment amounts.

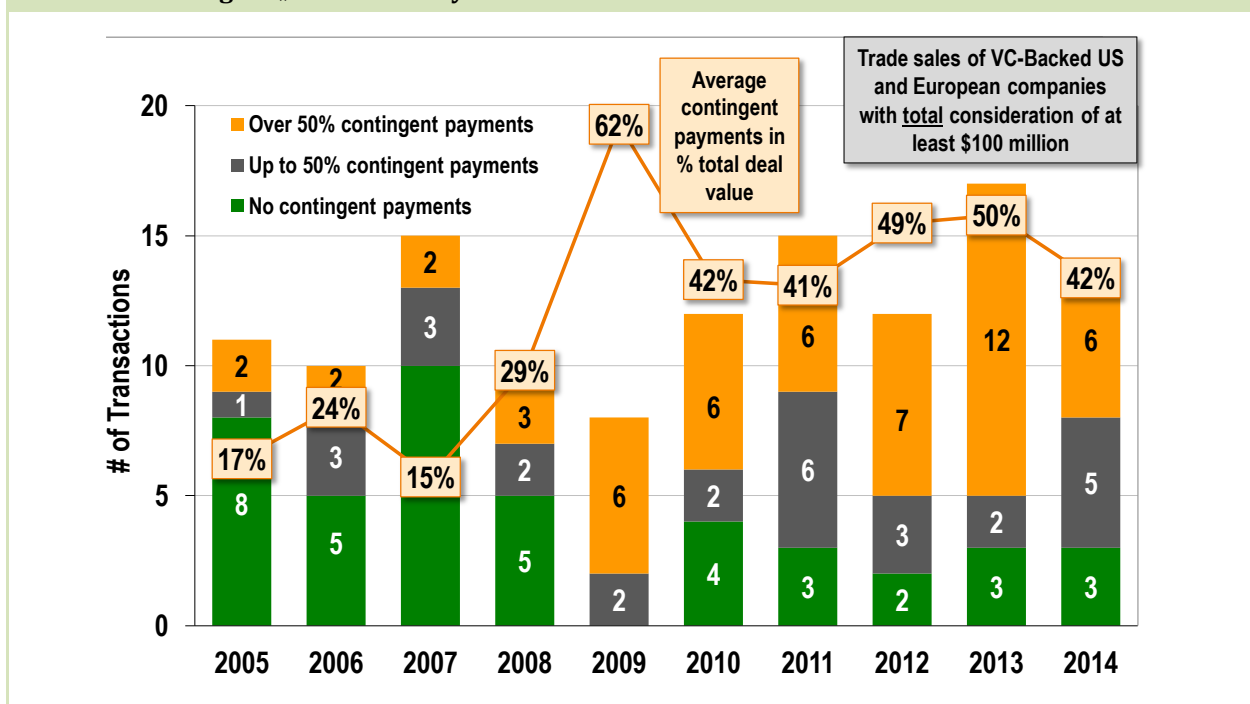
Two Exceptional Deals

There was a number of successful US and European exits in 2014. Two exceptional US deals are highlighted below:

The largest trade sale of a VC-backed biopharma company by far was the sale of Alios BioPharma to Johnson & Johnson for \$1.75 billion. Alios focused on the development of novel anti-virals and investors in the company were mainly corporate VC funds. With about \$75 million invested, the exit should have returned over 20x to investors.

Another >20x exit was the sale of Seragon to Genentech/Roche for \$725 million upfront plus up to \$1 billion in potential further payments. Seragon had only been founded in 2013 as a spin-off from Aragon and had subsequently raised \$30 million. Its selective estrogen receptor degrader (SERD) program developed for breast cancer was in phase I when the company was sold.

Chart 13: Contingent „Biodollar“ Payments as % of Overall Deal Value



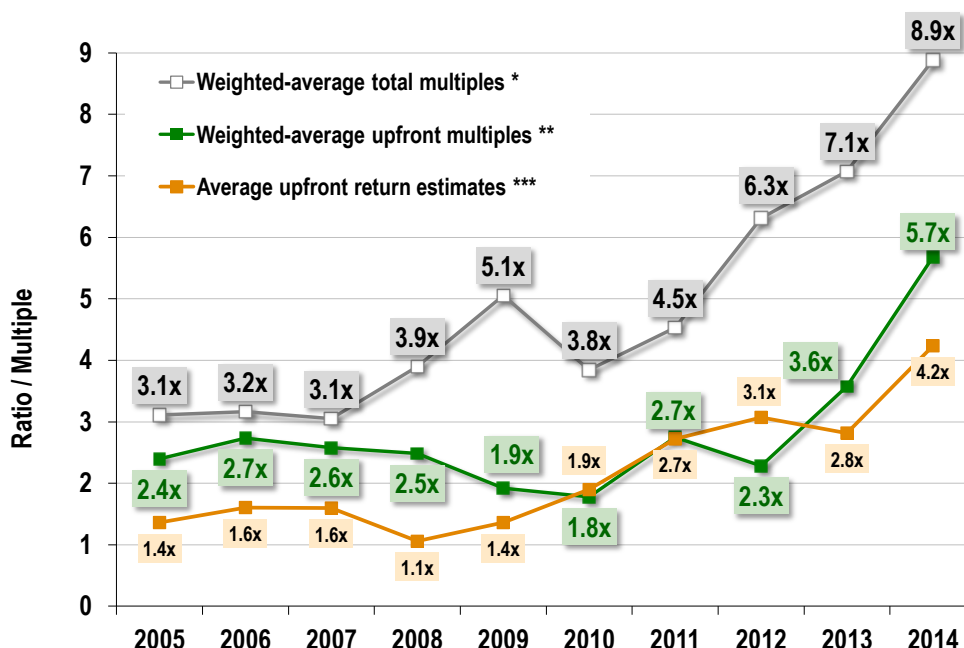
Trade sales of VC-backed private US and European biopharma companies with \geq \$100 million total deal value.

Comment: Acquisitions of VC-backed biopharma companies, especially pre-commercial ones, are often structured as staged deals, whereby a significant portion (sometimes the majority) of payments are linked to the achievement of certain milestones. Whereas in the years up to 2008, fewer deals were staged, contingent payment structures are now quite common.

- In 2012 and in 2013, contingent payments were higher than the upfront payment in over half of the transactions.
- In 2014, the number of deals with such high contingent payments has declined again, probably as a result of a “hot” exit market.
- In the period up to 2009, significant contingent payments were mostly seen in earlier clinical stage deals and in deals where investor returns were low (i.e. investors had to accept such deal structures). By contrast, additional earn-out payments are today sometimes demanded by sellers of sought-after companies, providing additional upside on top of an already attractive upfront multiple.

Returns for Venture Investors

Chart 14: Upfront & Overall Deal Values Divided by Invested Capital



Trade sales of private VC-backed US and European biopharma companies. Calculations are based on transactions where respective information is available.

* Weighted-average total multiples: Aggregate transaction values including contingent payments divided by aggregate investments.

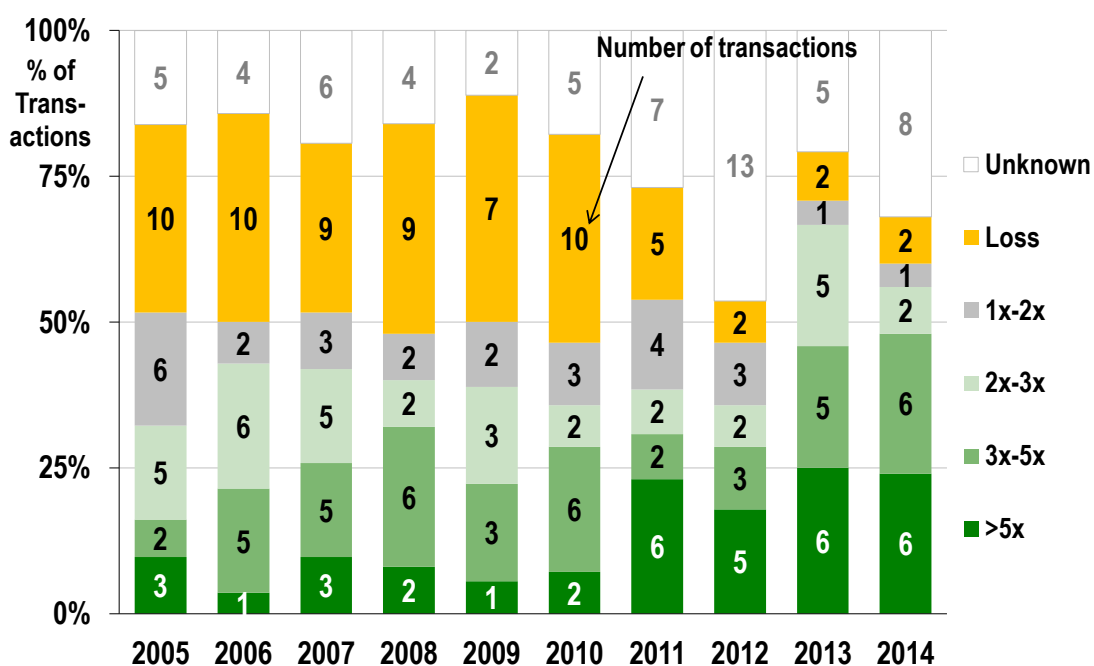
** Weighted-average upfront multiples: Aggregate upfront transaction values divided by aggregate investments.

*** Average upfront multiples: Average non-weighted return multiples for investors as estimated by HBM

- Record upfront and total exit multiples in 2014, mainly driven by some great US exits
- Steadily improving returns since 2010.
- 2014 was best “exit year” for VC-backed biopharma companies over the last decade.

Comment: We have approximated the return multiples for venture investors from biopharma trade sales using the ratio of upfront proceeds divided by invested capital as a proxy. We have also calculated the potential maximum multiples if all milestones payments were reached. 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 more meaningful indicator of the overall exit performance in a year than non-weighted averages or medians (both of which are generally lower than weighted numbers).

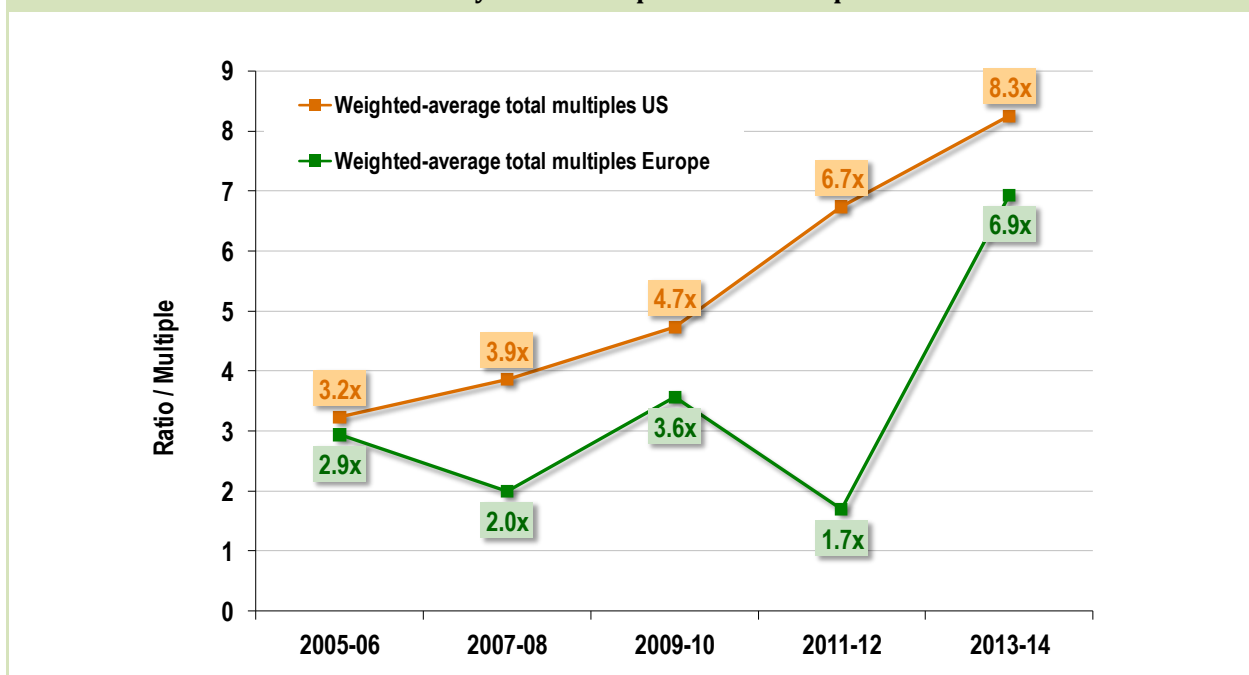
Chart 15: Estimated VC Return Multiples as Estimated by HBM (on Upfront Consideration)



Trade sales of private VC-backed US and European biopharma companies. Return multiples on upfront consideration as estimated by HBM (available for about 75% of deals).

- In 2014 (as in 2013), close to 50% of deals had estimated exit multiples of 3x on upfront proceeds or higher (even when including deals with unknown returns in the total sample).
- About 25% of deals had great returns (>5x). Before 2011, such deals were rare.
- The number of loss-making transactions appears to be decreasing.

Chart 16: Total Deal Values Divided by Invested Capital US vs. Europe



Trade sales of private US and European VC-backed pharma/biotech companies. Total multiples (including contingent payments) calculated by dividing total deal value by invested capital, i.e. averages are weighted by deal values. Due to the small number of European data points, we have combined data for two years this analysis.

- Overall multiples have been steadily increasing in the US.
- Average total multiples in Europe jumped to 6.9x in 2013/2014 from a low in 2011/2012.
- Another piece of good news is that in the US the average number of years from the company founding to a trade sale exit has dropped from a high of 8.5 years average in 2011 to 6.5 years in 2014 (in Europe from 8.6 years to 8.1 years).

Please address questions, comments or corrections to the authors of this report:

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About HBM Partners

HBM Partners is among the global leaders in healthcare-focused investing with over USD 1 billion under management. HBM focuses on development stage, growth and buy-out financings of private companies as well as investments in public companies. HBM Partners advises HBM Healthcare Investments AG, HBM BioCapital and further specialized private-equity and public-equity funds. HBM has a complementary team of experienced professionals to source, analyze, execute and exit investments in the pharma/biotech, medical devices and diagnostics industries. HBM Partners has been an active contributor to value creation in its portfolio companies, generating over 40 trade sales and IPOs since inception.

More information can be found at www.hbmpartners.com.