



EvaluatePharma®

World Preview 2015, Outlook to 2020

8th Edition – June 2015

Welcome to the EvaluatePharma® World Preview 2015, Outlook to 2020

The eighth edition of EvaluatePharma's World Preview brings together many of our analyses to provide a top level insight, from the world's financial markets, into the expected performance of the industry between now and 2020. Based on EvaluatePharma's coverage of the world's leading 5,000 pharmaceutical and biotech companies, the World Preview highlights trends in prescription drug sales, patent risk, R&D spend, global brand sales and market performance by therapy area. Also included in the report is a brief review of 2014 performance. Complimentary copies of the full report can be downloaded at:
www.evaluategroup.com/WP2015

About EvaluatePharma®

Since 1996 EvaluatePharma has been providing senior decision makers within the pharmaceutical industry with an essential service that models the sector from the viewpoint of the world's financial markets.

EvaluatePharma's forward looking view of the market is hugely influential as it displays the consensus of expectations, which influence company stock market valuations. The forecasts of equity analysts reveal their perspectives on individual company performance, industry trends and the macro economic environment.

EvaluatePharma has captured the consensus forecasts of equity analysts and seamlessly integrated them with the historic results, as reported by companies. From this comprehensive view of the industry, its past and expected future performance emerges and can be analysed using EvaluatePharma. Analyses range from total market trends and therapeutic overviews to individual company performance and product progress.

Whatever your view on the future of the industry, EvaluatePharma is the essential guide to value in the pharma and biotech sector.

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Foreword

If there was any doubt that the pharmaceutical industry is entering a period of sustained growth it should be put to rest by this year's World Preview 2015 showing prescription drug sales are set to advance at almost 5% a year until 2020.

Continued confidence in the sector is being driven by a number of positive fundamentals including the recent increase in R&D productivity, which has resulted in a big hike in drug approvals, and the emergence of breakout drugs such as Gilead's Sovaldi franchise. Excitement surrounding new products including Merck & Co's Keytruda, Bristol-Myers Squibb's Opdivo and anti-PCSK9s from Amgen and Sanofi should ensure the sales momentum continues.

The current industry feel-good factor has also been mirrored in the amount of money businesses are raising, the number of pharma and biotech companies floating on exchanges around the world, and the healthy appetite for M&A seen across the board.

The Sovaldi effect

While some things are changing in the industry, others remain the same. A strong focus on oncology has helped Novartis retain its crown as the number one pharma company in terms of prescription sales. More interesting, however, has been the rise of 'big biotech' and specialty pharma into the ranks of the industry's big players.

Actavis catapulted itself into 8th place this year, thanks entirely to its acquisitions of Allergan and Forest Laboratories, which are set to push sales to \$28.4bn in 2020. Celgene made its debut into the top 20 this year thanks in part to strong Revlimid sales, a drug that is now forecast to be the second highest selling product in 2020, after industry stalwart Humira. Celgene is now nipping at the heels of Bayer and Eli Lilly in terms of global prescription sales, a feat many would have thought impossible just a few years ago.

Gilead's presence in the top 10 is now less surprising, as hepatitis C carries on being the company's cash cow. When Gilead placed its \$11bn bet on what was essentially a one-drug company with its purchase of Pharmasset, there were concerns that it had massively overpaid. But almost four years on, and with the addition of Harvoni last year, Gilead's decision seems genius.

The franchise has significantly contributed to the 7.2% increase in US spend on prescription drugs between 2013 and 2014 to \$290.7bn.

Approvals – it just keeps getting better

US spend on prescription drugs is set to grow strongly following the unprecedented 50 new drugs approved in America during 2014.

Encouragingly for drug developers, despite the increased number of drugs approved, up from 35 in 2013, the quality of the new drugs did not slip. Eight of the top ten new drugs approved in 2014 are forecast to have sales of more than \$1bn five years after launch, and included the first crop of PD-1 drugs approved in the year. Sales averaged across all 50 came in at \$528m, slightly up on the \$522m achieved last year. This jump in productivity has interestingly come at a time when R&D spend continues to be closely scrutinised by large pharma groups.

Molecules – think big

Despite the standout success of the Sovaldi franchise, and the top four most valuable R&D products being small molecules, including Gilead's triple combination and Novartis' LCZ696, the industry as a whole is forecast to enjoy the benefits of the move towards biological drugs.

Despite setbacks from some approved and clinical biological drugs depressing the speed of change, the global sales contribution from biologic drugs is forecast to jump from 23% in 2014 to 27% in 2020. These drugs have traditionally enjoyed greater patent protection than their small molecule relatives, but the landscape is changing with the approval this year of the first US biosimilar.

Zarxio was given the green light in March, but has yet to make it into pharmacies thanks to ongoing challenges from originator Amgen. Industry and legal experts also believe that navigating a legal pathway through the less than perfect US biosimilars legislation could hold up launch for several more months if not years.

Given the legal wrangling that is set to occur for biosimilars, and unresolved issues around substitution, our analysis continues to show that the impact to branded products will be much softer than that of small molecule generics. This means that biologics still remains a very attractive space for drug developers.

Future outlook

Standing at the midpoint of 2015, the pharma and biotech industry looks as if it is in very good shape, the patent cliff is firmly in the rear view mirror, and while it might be too early to call on sustained R&D productivity, things are at least moving in the right direction.

The only clouds currently on what looks to be a sunny horizon for pharma and biotech are global pricing and market access. With many predicting that for the first time the industry could produce a series of real 'cures' for previously intractable diseases, it is clear that these innovative drugs will come at a price. What is also clear is the growing reluctance of both government and private healthcare providers to fund very expensive drug treatment regimens.


Foreword

Recent pressure from health insurers in the US has seen pricing ground lost in both diabetes and respiratory drugs, with both GlaxoSmithKline and Sanofi reporting reimbursement hits. Gilead has also seen insurers trim the amount they are willing to pay for its pioneering hep C drug. All this has led some to ask if we are seeing the end of pricing freedom in the US.

If the industry is to keep up the impressive growth it has experienced over the last couple of years, and is predicted to have in the coming years, it will either have to accept lower prices for its products, or persuade those who hold the purse strings that its products are indeed real game changers and their benefits outweigh the cost of disease.



Paul A Hills
Head of Operations, Evaluate Ltd



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Analysis Highlights

- Worldwide prescription drug sales are expected to reach almost one trillion dollars by 2020 (CAGR: 4.8% between 2014 and 2020)
 - Key prescription drug sales jumped 4.9% in 2014, driven by an 8.9% surge in USA sales; Europe returns to growth at 2.4%; Japan slumps 2.6% in yen
-
- Industry's R&D pipeline valued at \$493bn; Gilead's potential new combination hepatitis C product most valuable
 - Humira remained the top-selling product in 2014 with sales of \$13bn; Sovaldi debuts at number two with sales of \$10bn
 - A record number of new drugs were approved by the US FDA in 2014; sales potential increases by 45%
 - AbbVie's Humira continues to account for over 25% of the anti-rheumatic market in 2020
 - Gilead continues to dominate the anti-viral segment in 2020 capturing over 50% of the entire market
 - Humira is the leading product in USA in 2020 with sales of \$8bn; Celgene's Revlimid is a distant second with sales of \$6bn
 - Novartis was the number one pharmaceutical company in 2014 and is forecast to maintain its position in 2020
 - Teva remained the leading generic drug maker in 2014 with sales of \$9bn
 - The value of M&A transactions almost doubled to \$116bn in 2014; the number of transactions increased after two years of decline
 - The value of venture financing deals leapt 36% to \$8.2bn in 2014
 - Johnson & Johnson remained the most valuable pharmaceutical company and recorded the highest net income in 2014
 - Gilead Sciences achieved a net profit margin of over 50% in 2014

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Worldwide Prescription Drug Sales (2006-2020)



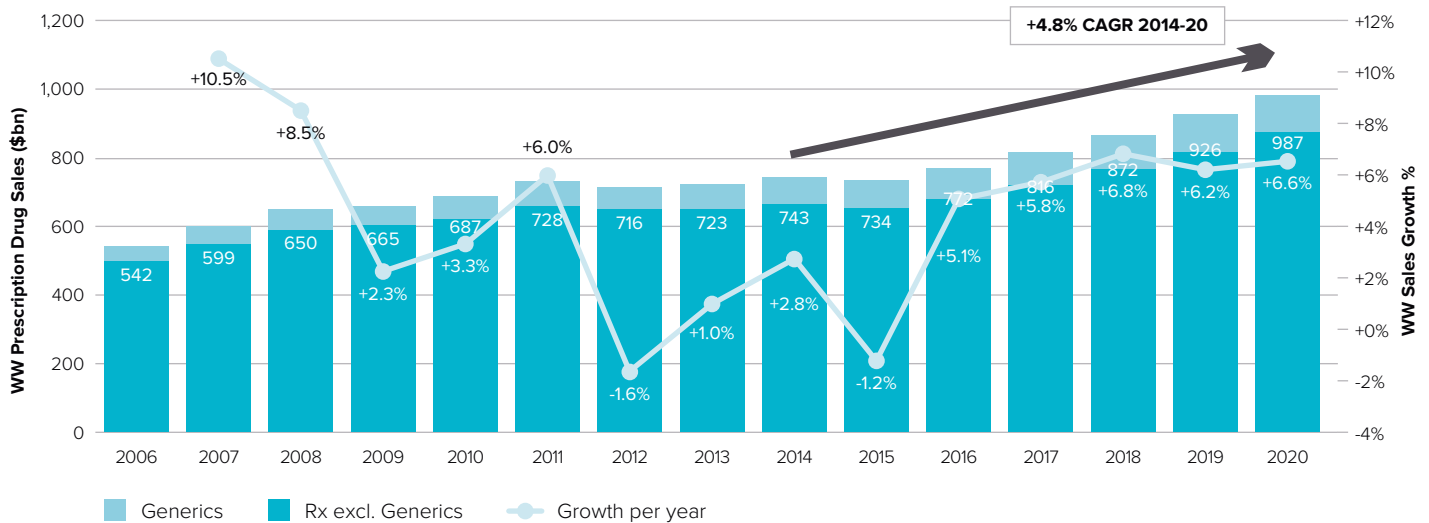
Worldwide prescription drug sales expected to reach almost one trillion dollars by 2020.

EvaluatePharma® finds that the market for prescription drugs, based on consensus forecasts for the leading 500 pharmaceutical and biotechnology companies, will grow by a robust 4.8% per year (CAGR) to reach \$987bn by 2020. This is \$30bn lower than the one trillion dollars predicted in last year's edition of the World Preview;

however, it can largely be explained by the depreciation of the euro against the dollar. Between 2015 and 2020, a total of \$215bn sales are at risk from patent expiries, but the market currently predicts only \$99bn of this will materialise. In contrast, between 2009 and 2014, \$120bn of sales were lost. The reduction in expected sales lost over the next six years is largely due to softer post-patent sales erosion of biological products.

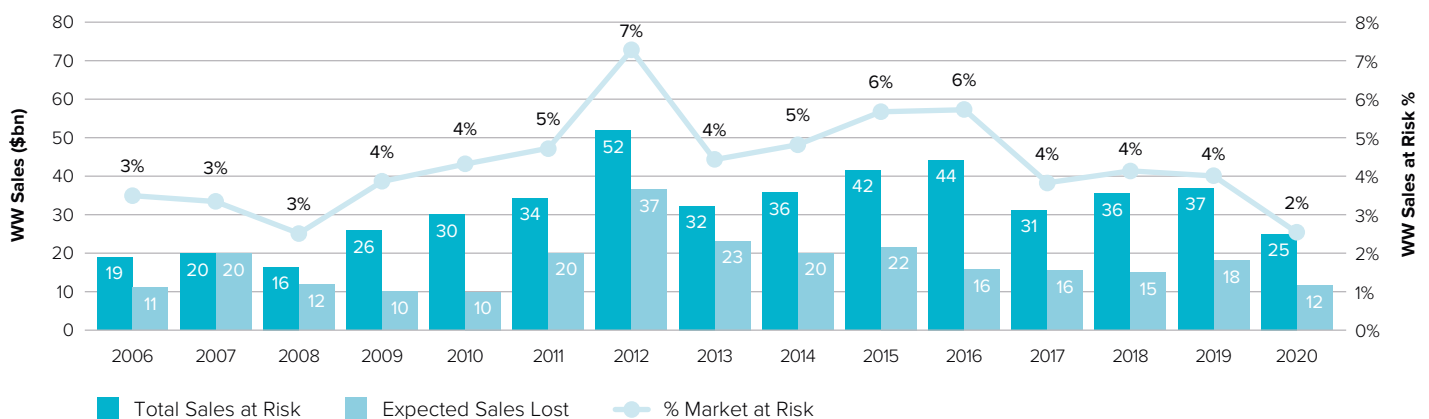
Worldwide Total Prescription Drug Sales (2006-2020)

Source: EvaluatePharma® 22 May 2015



Worldwide Sales At Risk from Patent Expiration (2006-2020)

Source: EvaluatePharma® 22 May 2015



Patent Analysis: 'Total Sales at Risk' represents the worldwide product sales in the year prior to patent expiry but allocated to the year of expiry. E.g. Plavix had sales of \$7.1bn in 2011, this is shown above as 'At Risk' in 2012.



Worldwide Prescription Drug Sales (2006-2020)

Source: EvaluatePharma[®] 22 May 2015

Year	WW Sales (\$bn)														
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Prescription (Rx)	542	599	650	665	687	728	716	723	743	734	772	816	872	926	987
Growth per Year		+10.5%	+8.5%	+2.3%	+3.3%	+6.0%	-1.6%	+1.0%	+2.8%	-1.2%	+5.1%	+5.8%	+6.8%	+6.2%	+6.6%
Change vs. June 2014 (\$bn)									-6	-55	-64	-65	-54	-46	-31
Generics	40	47	53	53	59	65	66	69	74	79	86	93	99	105	112
Generics as % of Rx	7.4%	7.8%	8.2%	7.9%	8.6%	9.0%	9.2%	9.6%	10.0%	10.8%	11.2%	11.4%	11.4%	11.4%	11.3%
Rx excl. Generics	502	552	597	612	627	662	650	654	669	655	685	724	772	821	875
Growth per Year		+10.0%	+8.0%	+2.6%	+2.5%	+5.6%	-1.9%	+0.6%	+2.3%	-2.1%	+4.6%	+5.6%	+6.7%	+6.2%	+6.6%

Prescription (Rx) incl. Generics CAGR 14-20 +4.8%

Note: Industry sales based on Top 500 pharmaceutical and biotech companies.

Sales to 2014 based on company reported sales data. Sales forecasts to 2020 based on a consensus of leading equity analysts' estimates for company product sales and segmental sales.

Regional Prescription Drug Sales: USA, Europe & Japan (2012-2014)



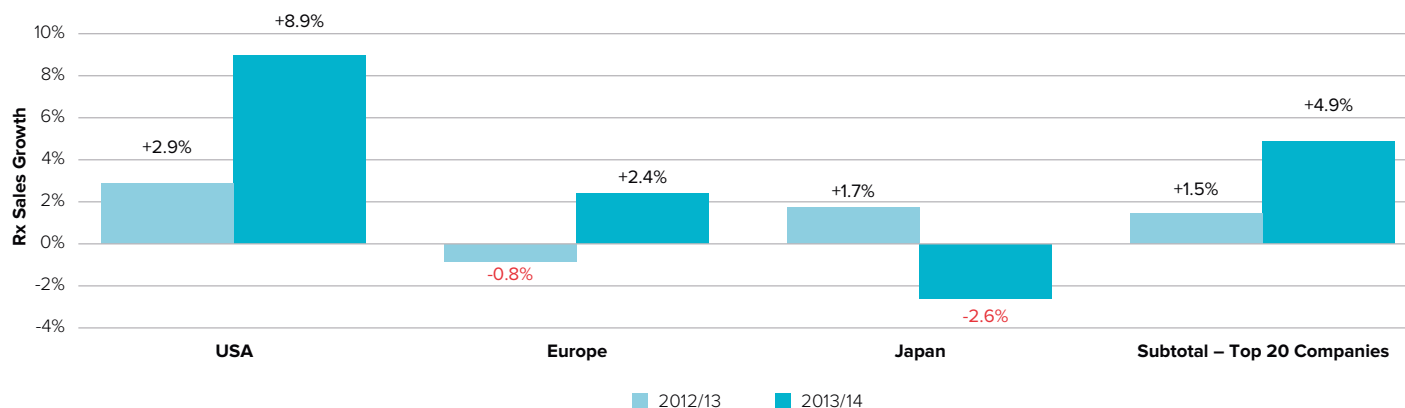
Key prescription drug sales jumped 4.9% in 2014, driven by an 8.9% surge in USA sales; Europe returned to growth at 2.4%; Japan slumped 2.6% in yen.

EvaluatePharma® finds that collective sales from the developed markets of US, Europe and Japan for the Top 20 companies jumped 4.9%, based on local currency growth. The USA market led the surge with sales from the Top 20 companies growing 8.9%, to \$224.9bn.

Europe appears to have turned the corner with local currency growth back in positive territory at 2.4%. Japan was the worst performing major market, declining 2.6% in 2014; add in a continuing yen depreciation and the translated US dollar value decline was 10%. Japan had its biennial reimbursed price cuts in April 2014, which saw prices cut by an average of 4.2%.

2013 & 2014 Regional Local Currency Rx Drug Sales Growth: Top 20 Companies in each Region

Source: EvaluatePharma® 22 May 2015



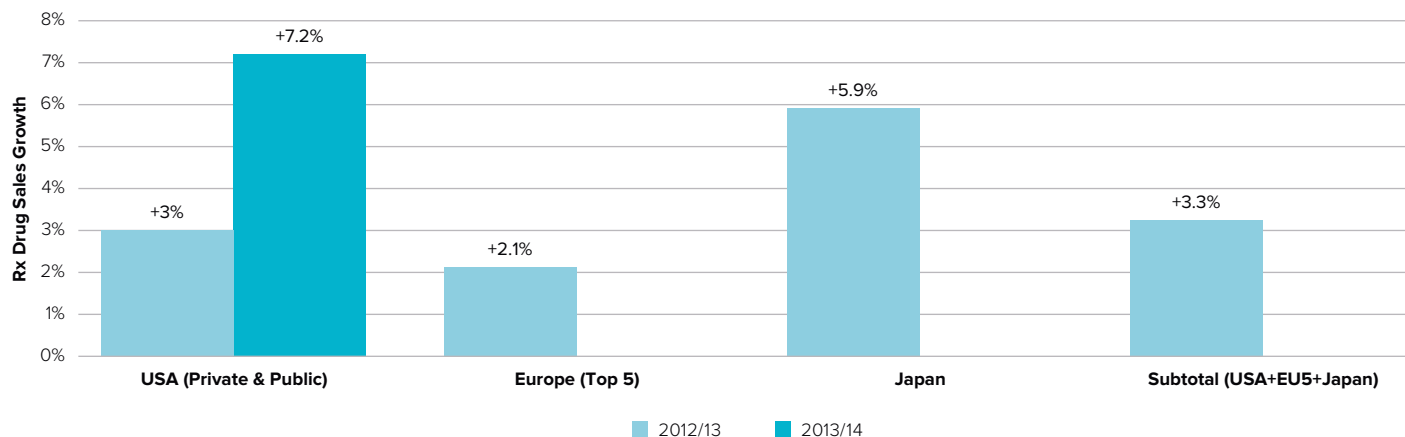
Regional Prescription Drug Sales (2012-2014): Observed Top 20 Companies in each Market

Source: EvaluatePharma® 22 May 2015

Region	Sales (\$bn)			Growth			
	2012	2013	2014	(US\$)		(Local Currency)	
				2012/13	2013/14	2012/13	2013/14
USA	200.7	206.5	224.9	+2.9%	+8.9%	+2.9%	+8.9%
Europe	124.3	127.4	130.4	+2.5%	+2.4%	-0.8%	+2.4%
Japan	78.2	65.5	58.6	-16.2%	-10.6%	+1.7%	-2.6%
Subtotal - Top 20 Companies	403.2	399.4	413.9	-0.9%	+3.6%	+1.5%	+4.9%
Unallocated	312.8	323.6	329.2				
Total Worldwide Rx Sales	716.0	723.0	743.1	+1.0%	+2.8%		



2013 Regional Local Currency Growth Based on Government Data

Source: EvaluatePharma[®] 22 May 2015

Reported Government Data for Prescription Drug Sales in USA, EU (Top 5 Countries) & Japan (2012-2014)

Source: EvaluatePharma[®] 22 May 2015

Country	Country Drug Expenditures 2012 - 14			Growth			
	2012	2013	2014	(US\$)		(Local Currency)	
		Sales (\$bn)		2012/13	2013/14	2012/13	2013/14
USA (Private & Public)	263.3	271.1	290.7	+3.0%	+7.2%	+3.0%	+7.2%
Europe (Top 5) – Germany, France, UK, Italy & Spain.	134.8	141.0	n/a	+4.6%	n/a	+2.1%	n/a
Japan	84.1	84.8	n/a	+0.7%	n/a	+5.9%	n/a
Sub-Total (USA+EU5+Japan)	482.2	496.9	n/a	+3.0%	n/a	+3.3%	n/a
Other	233.8	226.1					
Total Worldwide Rx Sales	716.0	723.0	743.1	+1.0%	+2.8%		

Currency Sensitivity Analysis

Source: EvaluatePharma[®] 22 May 2015

Currency (ending December)	2012	2013	2014	2015	2012/13	2013/14	2014/15
Euro (1€ = US \$)	1.29	1.33	1.33	1.12	+3.3%	+0.0%	-16.1%
Japan (100 ¥ = US \$)	1.25	1.03	0.95	0.84	-18.1%	-7.7%	-11.6%
China (1 RMB = US \$)	0.16	0.16	0.16	0.16	+2.6%	-0.2%	-1.0%

Analysis is based on observing the reported geographic sales from US, Europe and Japan for the top 20 companies in each market in 2014. In addition, available reported government data on pharmaceutical purchases was reviewed.

Regional Prescription Drug Sales: USA (2012-2014)



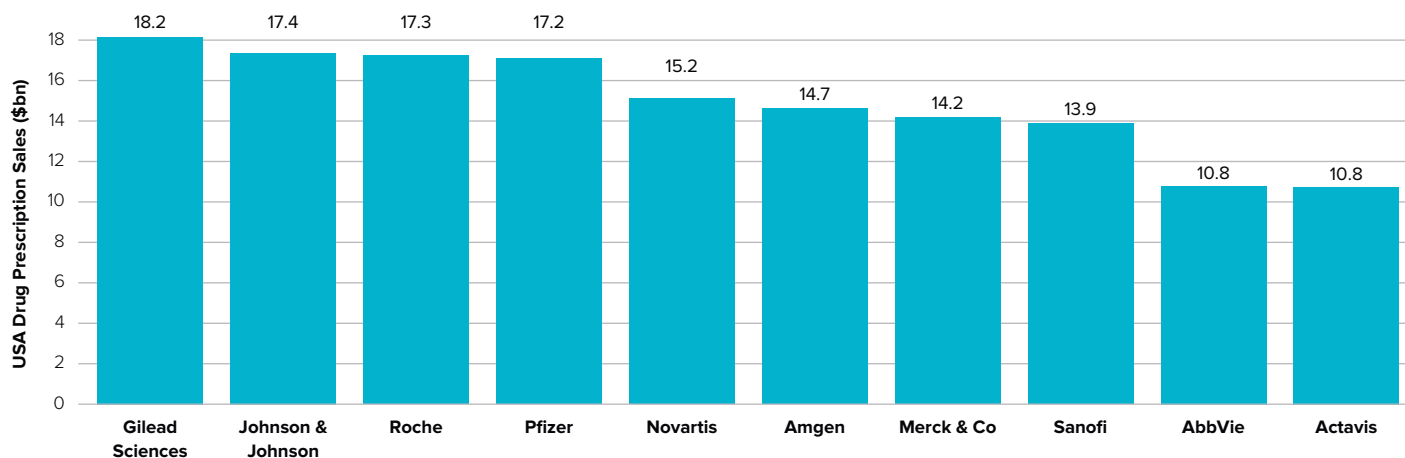
USA prescription drug market surged to 8.9% growth; Gilead stormed into number one spot in USA.

EvaluatePharma® finds that the USA prescription drug market surged by 8.9%, between 2013 and 2014, based on prescription drug sales

for the top 20 companies. Gilead stormed into the number one position, adding \$11.5bn in sales to amass \$18.2bn in sales in 2014. Pfizer, the 2013 number one dropped three positions to now be ranked fourth in the USA market.

USA Prescription Drug Sales in 2014: Top 10 Companies

Source: EvaluatePharma® 22 May 2015



USA Prescription Drug Sales (2012-2014): Top 20 Companies (Pro-forma adjusted for M&A)

Source: EvaluatePharma® 22 May 2015

Rank	Company	US Rx Sales (\$bn)			Growth (US\$)	
		2012	2013	2014	2012/13	2013/14
1.	Gilead Sciences	5.6	6.7	18.2	+19.7%	+171.6%
2.	Johnson & Johnson	12.4	13.9	17.4	+12.3%	+25.0%
3.	Roche	14.8	16.3	17.3	+10.2%	+6.2%
4.	Pfizer	19.7	18.6	17.2	-5.8%	-7.6%
5.	Novartis	15.3	15.2	15.2	-0.4%	-0.3%
6.	Amgen	12.8	14.0	14.7	+9.6%	+4.9%
7.	Merck & Co	17.0	14.9	14.2	-12.8%	-4.3%
8.	Sanofi	12.8	12.9	13.9	+0.1%	+8.4%
9.	AbbVie	10.4	10.2	10.8	-2.4%	+6.5%
10.	Actavis	8.8	9.8	10.8	+11.7%	+10.0%
11.	GlaxoSmithKline	11.1	11.3	10.8	+1.5%	-4.5%
12.	Teva Pharmaceutical	10.4	10.5	10.6	+0.2%	+1.7%
13.	AstraZeneca	10.6	9.7	10.1	-8.6%	+4.4%
14.	Eli Lilly	12.3	12.9	9.1	+4.7%	-29.1%
15.	Bristol-Myers Squibb	10.4	8.3	7.7	-19.9%	-7.2%
16.	Novo Nordisk	5.9	7.0	7.7	+17.6%	+10.6%
17.	Biogen	1.8	3.6	5.6	+99.6%	+55.5%
18.	Allergan	3.4	3.8	4.5	+13.6%	+17.7%
19.	Celgene	3.2	3.9	4.5	+21.9%	+16.1%
20.	Valeant Pharmaceuticals	1.9	3.2	4.5	+66.8%	+39.8%
	Total	200.7	206.5	224.9	+2.9%	+8.9%



Country Level Retail Expenditures on Prescription Drug Sales (2012-2014)

Source: EvaluatePharma[®] 22 May 2015

Country	Sales (\$bn)			Growth (US\$)	
	2012	2013	2014	2012/13	2013/14
USA ¹	263.3	271.1	290.7	+3.0%	+7.2%

1: Source: USA CMS.

2014 is a CMS forecast.

Analysis is based on observing the reported geographical prescription drug sales in the US for the top 20 companies in 2014. In addition, available government data (CMS) on pharmaceutical purchases of drugs was reviewed.

Regional Prescription Drug Sales: Europe (2012-2014)



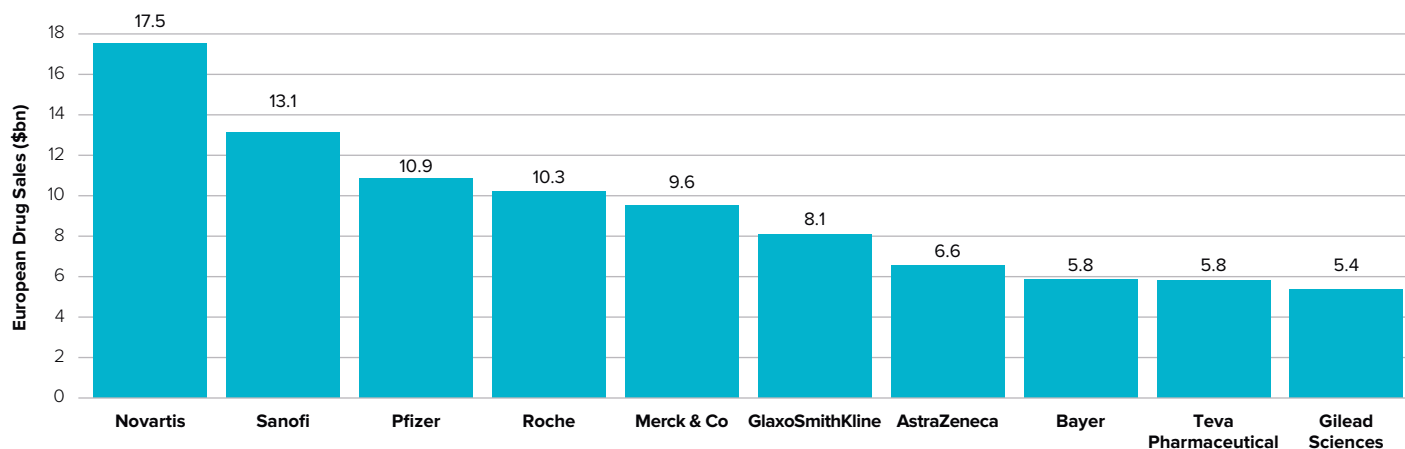
Sales in Europe rebounded to grow 2.4% in 2014; Novartis remained number one in Europe; Gilead entered Top 10 for the first time.

EvaluatePharma® finds that European drug sales, for the Top 20 companies, rebounded to 2.4% growth in local currency, after

recording a 0.8% decline in 2013. Novartis remained the biggest player in Europe with sales of \$17.5bn in 2014. Gilead Sciences entered the top 10 for the first time, with sales growing 50% to reach €4.1bn in 2014.

European Prescription Drug Sales in 2014: Top 10 Companies

Source: EvaluatePharma® 22 May 2015



Europe Prescription Drug Sales (2012-2014): Top 20 Companies

Source: EvaluatePharma® 22 May 2015

Rank	Company	EU Rx Sales (\$bn)			Growth (US\$)		EU Rx Sales (€bn)			Growth (€)	
		2012	2013	2014	2012/13	2013/14	2012	2013	2014	2012/13	2013/14
1.	Novartis	16.0	17.2	17.5	+7.4%	+1.8%	12.4	12.9	13.2	+3.9%	+1.8%
2.	Sanofi	13.5	13.3	13.1	-1.7%	-1.1%	10.5	10.0	9.9	-4.9%	-1.1%
3.	Pfizer	11.8	11.0	10.9	-6.2%	-0.9%	9.2	8.3	8.2	-9.2%	-0.9%
4.	Roche	9.6	10.0	10.3	+4.6%	+3.2%	7.4	7.5	7.8	+1.2%	+3.2%
5.	Merck & Co	9.8	9.6	9.6	-1.3%	-0.4%	7.6	7.2	7.2	-4.5%	-0.4%
6.	GlaxoSmithKline	7.9	8.1	8.1	+2.1%	+0.1%	6.2	6.1	6.1	-1.2%	+0.1%
7.	AstraZeneca	7.1	6.7	6.6	-6.8%	-0.3%	5.6	5.0	5.0	-9.8%	-0.3%
8.	Bayer	4.7	5.2	5.8	+10.1%	+12.2%	3.7	3.9	4.4	+6.6%	+12.2%
9.	Teva Pharmaceutical	5.8	6.0	5.8	+3.3%	-2.8%	4.5	4.5	4.4	-0.0%	-2.8%
10.	Gilead Sciences	3.3	3.6	5.4	+8.4%	+50.6%	2.6	2.7	4.1	+4.9%	+50.6%
11.	Eli Lilly	4.3	4.3	4.5	+1.8%	+3.9%	3.3	3.3	3.4	-1.4%	+3.9%
12.	Menarini	4.1	4.4	4.4	+5.8%	+0.2%	3.2	3.3	3.3	+2.4%	+0.2%
13.	Amgen	3.6	3.9	4.3	+8.4%	+11.9%	2.8	2.9	3.2	+4.9%	+11.9%
14.	AbbVie	3.5	3.9	4.3	+9.8%	+10.7%	2.7	2.9	3.2	+6.3%	+10.7%
15.	Boehringer Ingelheim	3.6	3.9	3.6	+6.9%	-6.4%	2.8	2.9	2.7	+3.5%	-6.4%
16.	Bristol-Myers Squibb	3.7	3.9	3.6	+6.0%	-8.6%	2.9	3.0	2.7	+2.6%	-8.6%
17.	Novo Nordisk	3.4	3.6	3.6	+5.0%	+0.5%	2.6	2.7	2.7	+1.6%	+0.5%
18.	Merck KGaA	3.2	3.3	3.2	+2.5%	-2.3%	2.5	2.5	2.4	-0.8%	-2.3%
19.	Astellas Pharma	2.4	2.6	2.9	+11.1%	+8.5%	1.8	2.0	2.2	+7.5%	+8.5%
20.	Takeda	3.0	3.0	2.8	-0.4%	-6.9%	2.3	2.2	2.1	-3.6%	-6.9%
Total*		124.3	127.4	130.4	+2.5%	+2.4%	96.7	95.9	98.2	-0.8%	+2.4%
Currency Impact (\$bn) at 2012 rates:			4.1	4.2							

Note: Johnson & Johnson does not disclose European pharmaceutical sales.

Menarini 2014 sales figure is an estimate of total revenue.

Novartis's sales based on actual and estimated segment sales.



Country Level Expenditures on Prescription Drugs (Government Disclosed)

Source: EvaluatePharma[®] 22 May 2015

Country	Gov Purchases (\$bn)			Growth (US\$)		Gov Purchases (€; £bn)			Growth (LC)	
	2012	2013	2014	2012/13	2013/14	2012	2013	2014	2012/13	2013/14
Germany (€)	43.8	47.6		+8.5%		34.1	35.8		+5.0%	
France (€)	35.0	35.6		+1.8%		27.2	26.8		-1.5%	
Italy (€)	22.2	23.1		+4.2%		17.3	17.4		+0.9%	
UK (England) (£)	21.2	22.5		+6.3%		13.4	14.4		+7.6%	
Spain (€)	12.6	12.2	12.4	-2.9%	+1.9%	9.8	9.2	9.4	-6.0%	+1.9%
Top 5 EU Countries	134.8	141.0		+4.6%					+2.1%	
Currency Impact (\$bn) at 2012 rates:		3.5								

Source: EvaluatePharma[®] 22 May 2015

Currency Rate	2012	2013	2014	2012/13	2013/14
1€ = US \$	1.29	1.33	1.33	+3%	+0%
1£ = US \$	1.58	1.56	1.65	-1%	+5%

Analysis is based on observing the reported geographic sales for the top 20 companies in Europe in 2014. In addition, available reported government data on pharmaceutical purchases for 2012, 2013 and 2014 was reviewed.

Regional Prescription Drug Sales: Japan (2012-2014)

part 1 of 2



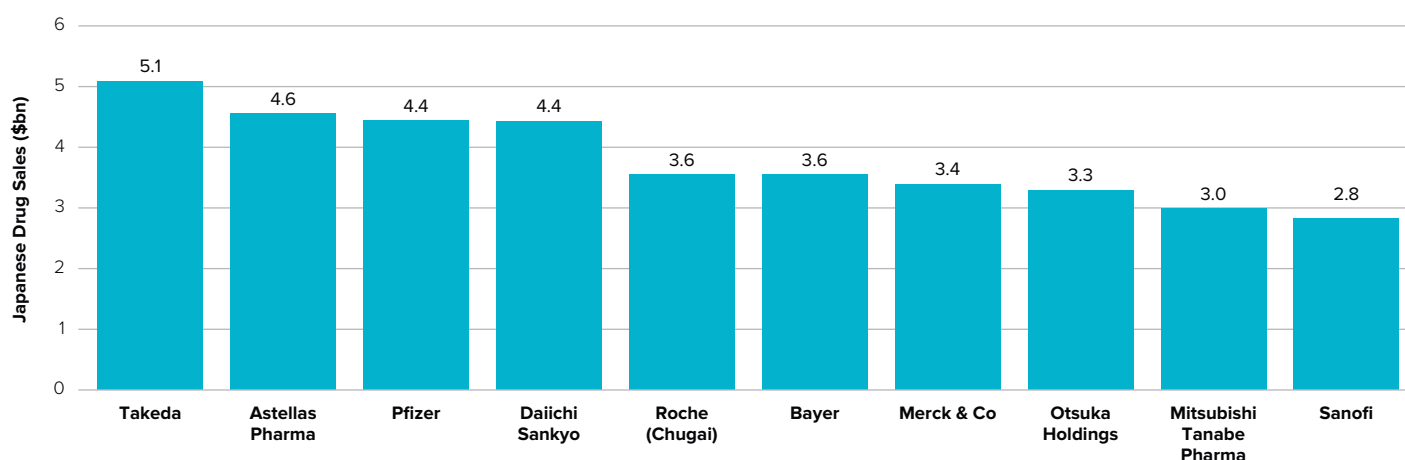
Japanese market contracted 10% in dollar-terms due to depreciation of the yen; Takeda remained number one.

EvaluatePharma® finds that Japanese prescription drug sales, in yen, declined 2.6% in 2014; however, due to the continuing depreciation

of the yen, sales declined 10.6% when expressed in terms of US dollars. Japan had its biennial reimbursed price cuts in April 2014, which saw prices cut by an average of 4.2%.

Japanese Prescription Drug Sales in 2014: Top 10 Companies

Source: EvaluatePharma® 22 May 2015



Japanese Prescription Drug Sales (2012-2014): Top 20 Companies

Source: EvaluatePharma® 22 May 2015

Rank	Company	Japan Rx Sales (\$bn)			Growth (US\$)		Japan Rx Sales (¥bn)			Growth (¥)	
		2012	2013	2014	2012/13	2013/14	2012	2013	2014	2012/13	2013/14
1.	Takeda	7.1	5.8	5.1	-18.3%	-11.7%	591	582	564	-1.4%	-3.2%
2.	Astellas Pharma	6.7	5.3	4.6	-21.4%	-14.0%	560	531	501	-5.2%	-5.6%
3.	Pfizer	6.5	5.1	4.4	-21.6%	-13.6%	521	499	467	-4.2%	-6.4%
4.	Daiichi Sankyo	5.4	4.9	4.4	-9.2%	-9.6%	445	487	483	+9.5%	-0.8%
5.	Roche (Chugai)	4.4	3.7	3.6	-16.1%	-1.8%	350	358	381	+2.5%	+6.4%
6.	Bayer	3.1	3.3	3.6	+6.0%	+8.7%	247	319	376	+29.5%	+17.8%
7.	Merck & Co	5.0	3.9	3.4	-20.7%	-14.2%	397	385	358	-3.1%	-7.0%
8.	Otsuka Holdings	4.3	3.7	3.3	-12.5%	-11.2%	353	373	363	+5.6%	-2.6%
9.	Mitsubishi Tanabe Pharma	4.3	3.4	3.0	-20.9%	-13.2%	358	342	325	-4.6%	-4.8%
10.	Sanofi	4.2	3.3	2.8	-20.9%	-15.5%	336	325	297	-3.3%	-8.4%
11.	Novartis	4.0	3.3	2.7	-17.5%	-18.2%	319	322	285	+0.8%	-11.4%
12.	Eisai	3.7	3.1	2.5	-16.6%	-18.1%	309	311	280	+0.6%	-10.1%
13.	Kyowa Hakko Kirin	3.3	2.7	2.4	-17.6%	-11.0%	259	261	252	+0.6%	-3.5%
14.	GlaxoSmithKline	3.1	2.6	2.4	-16.9%	-8.3%	249	253	251	+1.6%	-0.6%
15.	AstraZeneca	2.9	2.5	2.2	-14.4%	-10.4%	232	242	235	+4.5%	-2.9%
16.	Eli Lilly	2.2	2.1	2.0	-8.1%	-1.8%	179	201	214	+12.3%	+6.4%
17.	Boehringer Ingelheim	2.3	2.0	1.9	-9.5%	-5.3%	180	199	204	+10.5%	+2.6%
18.	Shionogi	2.0	1.7	1.5	-16.2%	-12.2%	166	168	162	+1.1%	-3.7%
19.	Sumitomo Dainippon Pharma	2.1	1.7	1.4	-18.7%	-16.6%	175	172	157	-1.9%	-8.5%
20.	Meiji Holdings	1.6	1.4	1.3	-13.2%	-3.5%	133	139	147	+4.8%	+5.9%
Total		78.2	65.5	58.6	-16.2%	-10.6%	6,359	6,469	6,304	+1.7%	-2.6%
Currency Impact (\$bn) at 2012 rates:			-12.4	-17.3							



Government Purchases

Source: EvaluatePharma[®] 22 May 2015

Country	Gov Purchases (\$bn)			Growth (US\$)		Gov Purchases (¥bn)			Local % Growth	
	2012	2013	2014	2012/13	2013/14	2012	2013	2014	2012/13	2013/14
Japan	84.1	84.8		+0.7%		6,643	7,038		+5.9%	

Currency Rate (Ending 31 March)	2012	2013	2014	2015	May				
Fiscal year	2011	2012	2013	2014	2015	2011/12	2012/13	2013/14	2014/15
1 ¥ = \$	0.0127	0.0120	0.0100	0.0091	0.0083	-5%	-17%	-9%	-9%
1 \$ = ¥	79.0	83.0	100.2	109.9	120.4				

NOV 2012: Yen depreciation due to change in monetary policy after Shinzo Abe elected Prime Minister.

Analysis is based on observing the reported geographical prescription drug sales in Japan for the top 20 companies in 2014. In addition, available government data on pharmaceutical purchases of drugs was reviewed.

Worldwide Prescription Drug Sales in 2020: Top 20 Companies



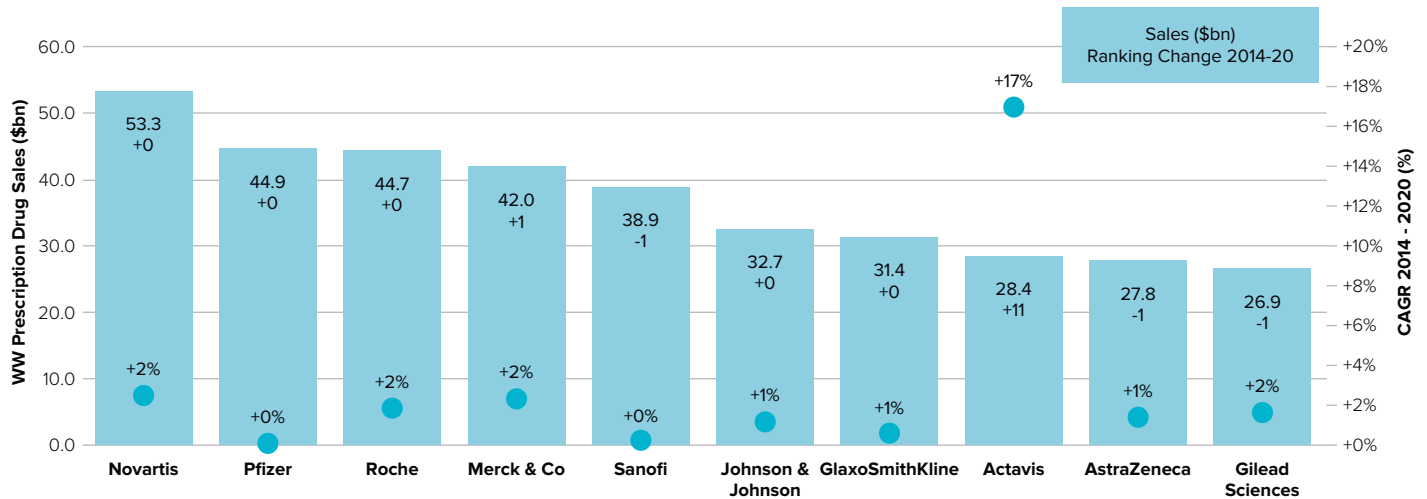
Novartis forecast to record highest worldwide sales of prescription drugs in 2020.

EvaluatePharma® finds that Novartis will remain the number one pharmaceutical company through to 2020 with total prescription drug sales of \$53.3bn, representing a 5.4% share of the entire world market. Actavis's prescription drug sales are forecast to almost triple between 2014 and 2020, primarily as a result of its acquisition of Allergan in March 2015, which is expected to add over \$10.3bn to its

2020 worldwide prescription drug sales, and of Forest Laboratories in July 2014. Celgene is forecast to make its debut in the top 20, rising nine places, by 2020 with its anti-cancer therapeutic Revlimid and its immunosuppressant Otezla adding a combined \$6.6bn to its 2020 prescription drug sales. Overall, global prescription drug sales are expected to grow, on average, 5% per year between 2014 and 2020 and reaching almost one trillion dollars by 2020.

Worldwide Prescription Drug Sales in 2020: Top 10 Companies

Source: EvaluatePharma® 22 May 2015



Worldwide Prescription Drug Sales (2014 - 2020): Top 20 Companies & Total Market

Source: EvaluatePharma® 22 May 2015

Rank	Company	WW Rx Sales (\$bn)			2020 Change vs. Jun 14	WW Market Share			Rank Chg. (+/-)
		2014	2020	CAGR		2014	2020	Chg. (+/-)	
1.	Novartis	46.1	53.3	+2%	-1.1	6.2%	5.4%	-0.8pp	+0
2.	Pfizer	44.5	44.9	+0%	-3.0	6.0%	4.5%	-1.4pp	+0
3.	Roche	40.1	44.7	+2%	-7.7	5.4%	4.5%	-0.9pp	+0
4.	Merck & Co	36.6	42.0	+2%	+2.5	4.9%	4.3%	-0.7pp	+1
5.	Sanofi	38.2	38.9	+0%	-11.1	5.1%	3.9%	-1.2pp	-1
6.	Johnson & Johnson	30.7	32.7	+1%	-3.2	4.1%	3.3%	-0.8pp	+0
7.	GlaxoSmithKline	30.3	31.4	+1%	-9.8	4.1%	3.2%	-0.9pp	+0
8.	Actavis	11.1	28.4	+17%	+18.0	1.5%	2.9%	+1.4pp	+11
9.	AstraZeneca	25.7	27.8	+1%	+1.9	3.5%	2.8%	-0.6pp	-1
10.	Gilead Sciences	24.5	26.9	+2%	+3.2	3.3%	2.7%	-0.6pp	-1

Top 11-20 continued over...

Worldwide Prescription Drug Sales in 2020: Top 20 Companies

part 2 of 2



Source: EvaluatePharma® 22 May 2015

Rank	Company	WW Rx Sales (\$bn)			2020 Change vs. Jun 14	WW Market Share			Rank Chg. (+/-)
		2014	2020	CAGR		2014	2020	Chg. (+/-)	
11.	AbbVie	19.9	26.0	+5%	+2.8	2.7%	2.6%	-0.0pp	-1
12.	Amgen	19.3	22.8	+3%	+1.9	2.6%	2.3%	-0.3pp	-1
13.	Novo Nordisk	15.8	22.6	+6%	-3.2	2.1%	2.3%	+0.2pp	+2
14.	Bristol-Myers Squibb	12.0	22.0	+11%	+0.4	1.6%	2.2%	+0.6pp	+4
15.	Eli Lilly	16.3	18.9	+2%	+0.9	2.2%	1.9%	-0.3pp	-2
16.	Bayer	16.3	18.0	+2%	-4.5	2.2%	1.8%	-0.4pp	-2
17.	Celgene	7.5	16.8	+14%	+4.5	1.0%	1.7%	+0.7pp	+9
18.	Teva Pharmaceutical	17.5	15.3	-2%	+0.1	2.4%	1.6%	-0.8pp	-6
19.	Boehringer Ingelheim	13.4	15.2	+2%	-0.4	1.8%	1.5%	-0.3pp	-3
20.	Takeda	13.0	14.9	+2%	-3.4	1.7%	1.5%	-0.2pp	-3
	Total Top 20	478.9	563.4	+3%		64.4%	57.1%	-7.3pp	
	Other	264.2	423.4	+8%		35.6%	42.9%		
	Total	743.1	986.8	+5%		100.0%	100.0%		

Note: Prescription drug sales include generic drug sales. Excludes alliance revenue and royalties where possible.

Worldwide Prescription Drug & OTC Sales by Technology (2006-2020)



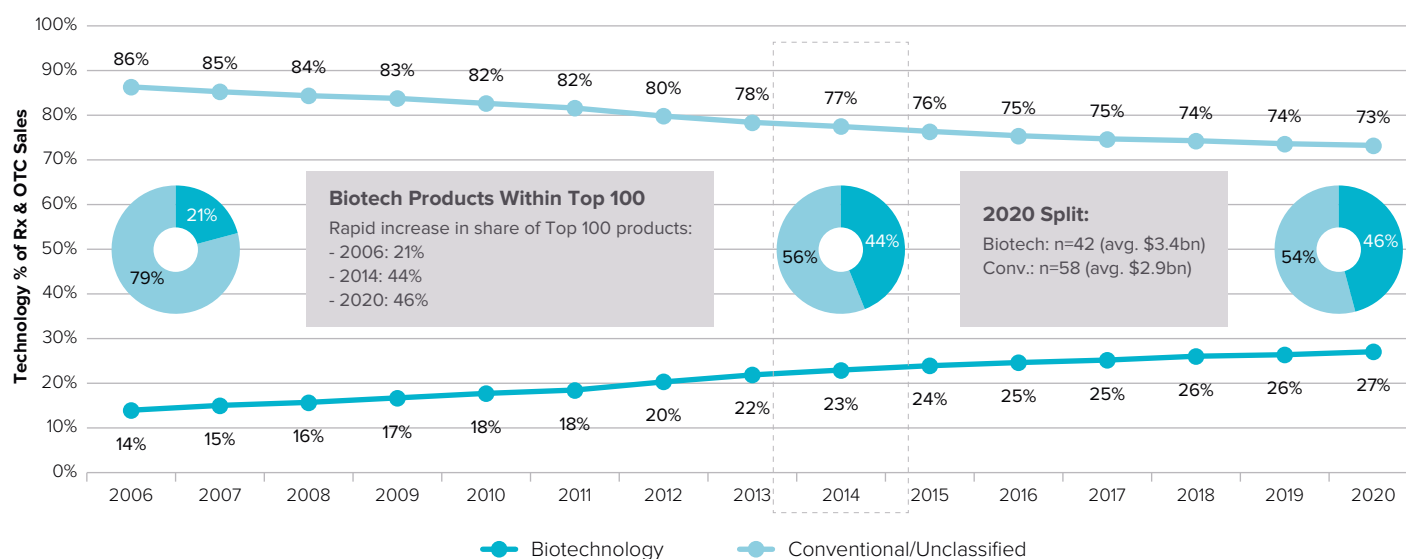
Resurgent small molecule drugs take majority of top 100 sales in 2020.

EvaluatePharma® finds that, although the percentage sales from biotechnology products (bioengineered vaccines & biologics), within the world's top 100, is set to increase from 44% in 2014 to 46% in 2020, this is lower than the 52% predicted in last year's World Preview. This is partly due to a number of key biotechnology products, such as Sanofi's Lantus and Roche's Kadcyla, falling out of

the top 100 after suffering significant forecast downgrades over the course of the year. Concurrently, a number of conventional drugs, such as Celgene's Revlimid and Gilead's hepatitis C franchise, have had their forecasts upgraded, thereby increasing their contribution to the total value of the top 100 drugs in 2020. In the broader market, sales from biotechnology products are expected to account for 27% of the world's pharmaceutical sales by 2020 versus the current share of 23% in 2014.

Worldwide Prescription Drug & OTC Pharmaceutical Sales: Biotech vs. Conventional Technology (2006-2020)

Source: EvaluatePharma® 22 May 2015



Worldwide Prescription Drug & OTC Sales by Technology (2006-2020)

Source: EvaluatePharma® 22 May 2015

Technology	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Biotechnology	14%	15%	16%	17%	18%	18%	20%	22%	23%	24%	25%	25%	26%	26%	27%
Conventional/Unclassified	86%	85%	84%	83%	82%	82%	80%	78%	77%	76%	75%	75%	74%	74%	73%
Total Rx & OTC Sales	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Technology	WW Sales (\$bn)														
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Biotechnology	78	94	108	116	127	141	152	165	179	183	199	216	235	255	278
Conventional	371	399	422	435	444	463	442	432	442	428	441	459	486	509	538
Other Unclassified Sales	118	134	151	146	150	161	159	164	160	159	168	179	190	202	213
Total Rx & OTC Sales	568	627	681	697	721	765	753	761	781	769	808	854	911	966	1029



Worldwide Prescription Drug Sales from Biotechnology in 2020: Top 10 Companies

Source: EvaluatePharma¹ 22 May 2015

Rank	Company	WW Sales (\$bn)			WW Market Share			Rank Chg.
		2014	2020	% CAGR 14-20	2014	2020	Chg. (+/-)	
1.	Roche	30.8	35.8	+3%	17.2%	12.9%	-4.3pp	+0
2.	Novo Nordisk	15.0	21.3	+6%	8.4%	7.7%	-0.7pp	+2
3.	Sanofi	16.0	20.8	+4%	9.0%	7.5%	-1.5pp	+0
4.	Amgen	17.6	20.2	+2%	9.9%	7.3%	-2.6pp	-2
5.	AbbVie	13.4	15.3	+2%	7.5%	5.5%	-2.0pp	+0
6.	Pfizer	10.8	14.0	+4%	6.0%	5.0%	-1.0pp	+0
7.	Johnson & Johnson	10.6	13.7	+4%	6.0%	4.9%	-1.0pp	+0
8.	Bristol-Myers Squibb	3.7	12.8	+23%	2.1%	4.6%	+2.5pp	+6
9.	Merck & Co	8.2	12.6	+7%	4.6%	4.6%	-0.0pp	-1
10.	Eli Lilly	6.0	12.0	+12%	3.4%	4.3%	+1.0pp	-1

Note: Company drug sales from undisclosed products are presumed to be from conventional (small molecule) technology.

Top 20 Most Valuable R&D Projects (Ranked by Net Present Value)

part 1 of 2



Industry's R&D pipeline valued at \$493bn; Gilead's combination hepatitis C product most valuable.

EvaluatePharma's NPV Analyzer finds the total value (NPV) of the industry's R&D pipeline increased 18% to \$492.8bn from \$418.5bn. Gilead Sciences's follow-on triple-combination hepatitis C product, GS-9857/SOF/GS-5816, is the world's most valuable R&D product

valued at \$24.8bn. Eight of last year's top 20 have since been approved and have collectively seen their NPVs increase 85% since June 2014, releasing \$129.2bn of value from the industry's pipeline. The increase in value of the industry's pipeline to \$493bn, plus the release of \$129bn from last year's pipeline, is another indication of improved industry R&D productivity.

Top 20 Most Valuable R&D Projects (Ranked by Net Present Value)

Source: EvaluatePharma¹ 22 May 2015

Rank	Product	Company	Phase Current	Pharmacological Class	WW Product Sales (\$m) 2020		Today's NPV (\$m)
1.	GS-9857/ SOF/ GS-5816	Gilead Sciences	Phase II	Hepatitis C NS3 protease, Hepatitis C nucleoside NS5A & NS5B polymerase inhibitor	4,578	new entry	24,801
2.	LCZ696	Novartis	Filed	Angiotensin II receptor (AT1) antagonist & neprilysin inhibitor (ARNI)	4,156		16,246
3.	Orkambi	Vertex Pharmaceuticals	Filed	Cystic fibrosis transmembrane conductance regulator (CFTR) corrector	5,082		16,037
4.	Tenofovir Alafenamide	Gilead Sciences	Phase III	Nucleoside reverse transcriptase inhibitor (NRTI)	3,126	new entry	10,638
5.	MPDL3280A	Roche	Phase III	Anti-programmed death-1 ligand-1 (PD-L1) MAb	2,049		9,619
6.	Repatha	Amgen	Filed	Anti-proprotein convertase subtilisin-like kexin type 9 (PCSK9) MAb	2,236		8,213
7.	Obeticholic acid²	Intercept Pharmaceuticals	Phase III	Farnesoid X receptor (FXR) agonist	1,811		7,755
8.	Ozanimod²	Receptos	Phase III	Sphingosine-1-phosphate (S1P) 1 receptor modulator	1,020	new entry	7,586
9.	PB272²	Puma Biotechnology	Phase III	pan-HER inhibitor	2,956	new entry	6,742
10.	MEDI4736	AstraZeneca	Phase III	Anti-programmed death-1 ligand-1 (PD-L1) MAb	1,201		6,545
11.	Grazoprevir/ Elbasvir	Merck & Co	Phase III	Hepatitis C NS3/4A protease inhibitor & hepatitis C nucleoside NS5A polymerase inhibitor	3,055	new entry	5,491
12.	Lampalizumab	Roche	Phase III	Anti-complement factor D MAb	1,099		5,391
13.	AZD9291	AstraZeneca	Phase III	Epidermal growth factor receptor (EGFR) tyrosine kinase inhibitor	1,196	new entry	5,376
14.	Praluent	Sanofi	Filed	Anti-proprotein convertase subtilisin-like kexin type 9 (PCSK9) MAb	1,859		4,967
15.	Venetoclax	AbbVie	Phase III	B-cell lymphoma 2 (Bcl-2) inhibitor	1,132	new entry	4,386
16.	Fovista²	Ophthotech	Phase III	Anti-platelet derived growth factor (PDGF)-B aptamer	1,118	new entry	4,217
17. ¹	NeoFuse²	Mesoblast	Phase III	Mesenchymal stem cell	-		4,056
18.	Solanezumab	Eli Lilly	Phase III	Anti-beta-amyloid (Abeta) MAb	951	new entry	3,790
19.	Dupilumab	Sanofi	Phase III	Anti-interleukin-4 (IL-4) & interleukin-13 (IL-13) MAb	1,141	new entry	3,790
20.	Ixazomib Oral	Takeda	Phase III	Proteasome inhibitor	1,137	new entry	3,534
Top 20					40,904		159,180
Other					101,443		333,647
Total					142,347		492,827 18%

NPV of R&D Pipeline June 2014: 418,525

¹ NeoFuse: Mesoblast expected to receive royalties

² Obeticholic acid, Ozanimod, PB272, Fovista & NeoFuse assumed to be forecast on "best-case" basis and not fully adjusted for development risk.



**Most Valuable R&D Projects (Ranked by NPV) in June 2014
Which Have Since Been Approved or Suffered Setbacks**

Source: EvaluatePharma¹ 22 May 2015

Change vs. Jun '14	Product	Company	Status (June 2014)	Status Change Since June 2014	June 2014 NPV (\$m)	Today's NPV (\$m)	Change vs. Jun 14 (%)
Approved	Opdivo	Bristol-Myers Squibb	Phase III	Marketed	23,150	41,864	81%
	Keytruda	Merck & Co	Filed	Marketed	16,747	26,803	60%
	Harvoni	Gilead Sciences	Filed	Marketed	9,876	32,037	224%
	Ibrance	Pfizer	Phase III	Marketed	7,925	8,877	12%
	Zydelig	Gilead Sciences	Filed	Marketed	3,615	2,861	-21%
	Opdivo	Ono Pharmaceutical	Filed	Marketed	2,996	6,105	104%
	Plegridy	Biogen	Filed	Marketed	2,931	4,731	61%
	Cosentyx	Novartis	Filed	Marketed	2,735	5,878	115%
				Sub-Total	69,975	129,156	85%
Setback¹					0	0	n/m
				Sub-Total	0	0	n/m
Total					69,975	129,156	85%

Note:

¹ None of the top R&D projects listed June 2014 have suffered a setback over the past twelve months

Worldwide R&D Spend by Pharma & Biotech Companies (2006-2020)



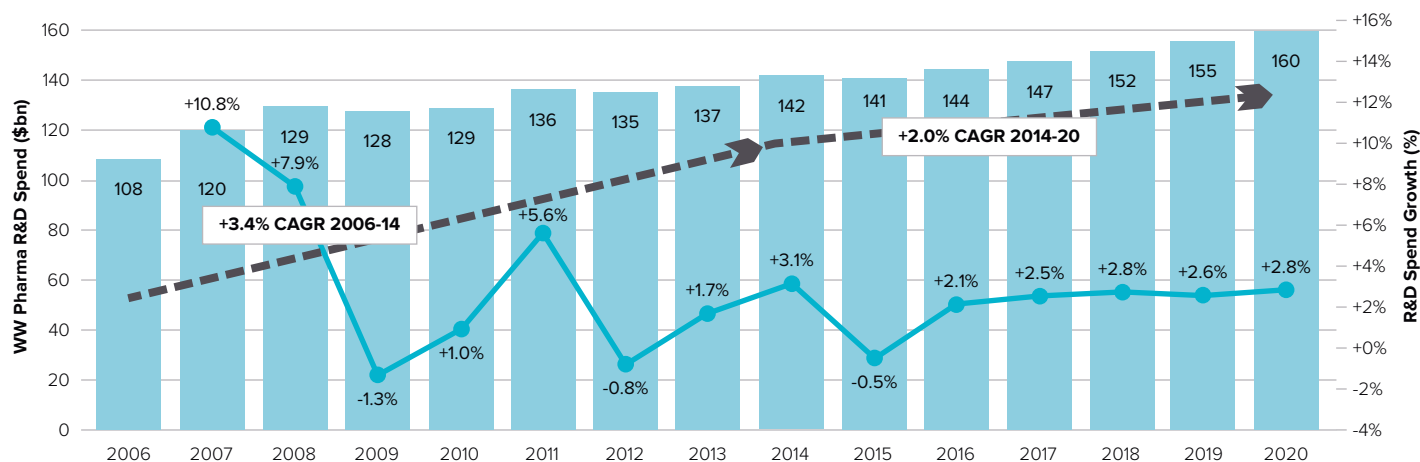
Worldwide pharmaceutical R&D spend to grow by 2.0% (CAGR) to \$160bn in 2020.

EvaluatePharma® finds that worldwide pharmaceutical R&D totalled \$141.6bn in 2014 representing an increase of 3.1% on the previous year. Looking forward, R&D spend is forecast to grow at a rate of 2.0% per year, compared with the compound annual growth rate of 3.4% between 2006 and 2014. The spend per NME, based

on a three-year lag period between R&D expenditure and NME approval*, was \$2.7bn per NME in 2014, the lowest for at least the past seven years. This fall in spend per NME indicates increased productivity within the industry: essentially, companies are containing R&D spend whilst at the same time achieving greater regulatory success.

Worldwide Total Pharmaceutical R&D Spend in 2006-2020

Source: EvaluatePharma® 22 May 2015



Worldwide R&D Spend by Pharma & Biotech Companies (2006-2020)

Source: EvaluatePharma® 22 May 2015

Year	WW Prescription Sales (\$bn)														
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Pharma R&D Spend	108.2	119.9	129.3	127.6	128.8	136.0	135.0	137.3	141.6	140.8	143.8	147.4	151.5	155.4	159.8
Growth per Year		+10.8%	+7.9%	-1.3%	+1.0%	+5.6%	-0.8%	+1.7%	+3.1%	-0.5%	+2.1%	+2.5%	+2.8%	+2.6%	+2.8%
WW Prescription (Rx) Sales	542	599	650	665	687	728	716	723	743	734	772	816	872	926	987
R&D as % of WW Rx Sales	20.0%	20.0%	19.9%	19.2%	18.8%	18.7%	18.9%	19.0%	19.1%	19.2%	18.6%	18.1%	17.4%	16.8%	16.2%
Generics	40	47	53	53	59	65	66	69	74	79	86	93	99	105	112
Rx excl. Generics	502	552	597	612	627	662	650	654	669	655	685	724	772	821	875
R&D as % of Rx excl. Generics	21.5%	21.7%	21.7%	20.8%	20.5%	20.5%	20.8%	21.0%	21.2%	21.5%	21.0%	20.4%	19.6%	18.9%	18.3%

CAGR 2014-20 on Pharma R&D Spend +2%. Cumulative 10 year R&D Spend (2005-14) \$1,260bn.

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of NMEs	38	28	29	26	31	34	26	35	43	35	50
Spend per NME (\$bn)	2.3	3.4	3.7	4.6	4.2	3.8	5.0	3.9	3.1	3.9	2.8
Spend per NME (\$bn) (3 year lag)*				3.4	3.1	3.2	4.6	3.7	3.0	3.7	2.7

Note: Industry sales based on Top 500 pharmaceutical and biotech companies.

Forecast pharmaceutical research and development spend based on a consensus of leading equity analysts' estimates for company level R&D spend, extrapolated to pharmaceutical R&D when a company has non-pharmaceutical R&D activity.

*Spend per NME (\$bn) (3 year lag) uses the R&D expense for 3 years prior to the NME approval instead of the same year. e.g. the 2014 figure of \$2.7bn is the R&D expense in 2011 divided by the number of NMEs in 2014.

Pharmaceutical R&D Spend in 2020: Top 20 Companies

part 1 of 2



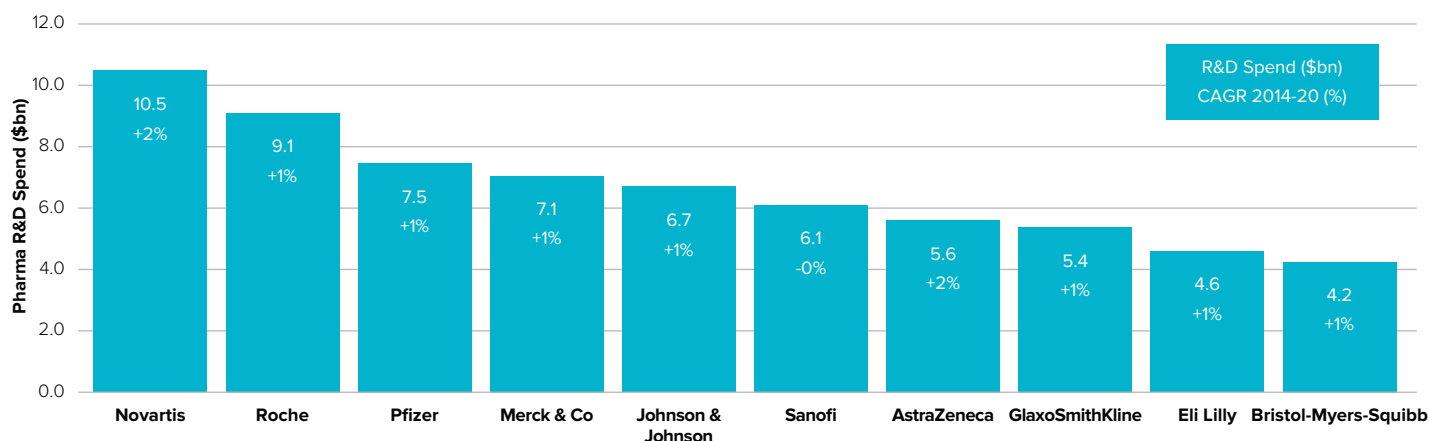
Novartis remains the biggest spender on pharmaceutical R&D in 2020.

EvaluatePharma® finds that Novartis will continue to spend the most on research and development in 2020, with a spend of \$10.5bn in

2020. Of the top 20, Celgene is forecast to grow its R&D expense the most rapidly, with R&D forecast to increase 10% per year from \$1.8bn to \$3.3bn in 2020. Overall, total R&D spend is expected to increase by 2.0% each year, reaching \$159.8bn in 2020.

Pharmaceutical R&D in 2020: Top 10 Companies

Source: EvaluatePharma® 22 May 2015



Pharmaceutical R&D Spend (2014 & 2020): Top 20 Companies & Total Market

Source: EvaluatePharma® 22 May 2015

Rank	Company	Pharma R&D (\$bn)			2020 Change vs. Jun 14	R&D As a % of Rx Sales		
		2014	2020	CAGR 14-20		2014	2020	Chg. (+/-)
1.	Novartis	9.3	10.5	+2%	+0.0	20.2%	19.7%	-0.5pp
2.	Roche	8.6	9.1	+1%	-1.2	21.5%	20.4%	-1.1pp
3.	Pfizer	7.2	7.5	+1%	+0.6	16.1%	16.6%	+0.6pp
4.	Merck & Co	6.5	7.1	+1%	+0.5	17.8%	16.8%	-1.1pp
5.	Johnson & Johnson	6.2	6.7	+1%	+0.0	20.2%	20.5%	+0.3pp
6.	Sanofi	6.2	6.1	-0%	-1.0	16.2%	15.6%	-0.6pp
7.	AstraZeneca	4.9	5.6	+2%	+0.9	19.2%	20.1%	+0.9pp
8.	GlaxoSmithKline	5.1	5.4	+1%	-0.6	16.9%	17.1%	+0.2pp
9.	Eli Lilly	4.4	4.6	+1%	-0.0	26.8%	24.3%	-2.5pp
10.	Bristol-Myers Squibb	3.9	4.2	+1%	+0.1	32.7%	19.2%	-13.6pp
11.	Amgen	4.1	4.0	-1%	-0.1	21.3%	17.5%	-3.9pp
12.	AbbVie	3.3	3.7	+2%	+0.2	16.4%	14.1%	-2.3pp
13.	Gilead Sciences	2.7	3.4	+4%	+0.4	11.2%	12.7%	+1.6pp
14.	Boehringer Ingelheim	3.1	3.4	+2%	-0.1	23.1%	22.3%	-0.8pp
15.	Celgene	1.8	3.3	+10%	+0.3	24.7%	20.0%	-4.7pp
16.	Takeda	3.5	3.3	-1%	-0.1	27.0%	22.0%	-5.0pp
17.	Novo Nordisk	2.5	3.0	+4%	-0.3	15.5%	13.5%	-2.0pp
18.	Biogen	1.9	2.8	+7%	+0.0	23.1%	19.7%	-3.4pp
19.	Bayer	2.5	2.7	+2%	-1.1	15.3%	15.3%	+0.0pp
20.	Astellas Pharma	1.9	2.3	+3%	-0.5	18.1%	17.9%	-0.2pp
Total Top 20		89.7	98.7	+1.6%		21.1%	19.9%	-1.2pp
Other		51.9	61.1	+2.8%				
Total		141.6	159.8	+2.0%		14.4%	16.3%	+1.9pp

Note: Forecast pharmaceutical R&D spend based on a consensus of leading equity analysts' estimates for company-level R&D spend.

FDA New Drug Approval Analysis NMEs & Biologicals: (2000-2014)



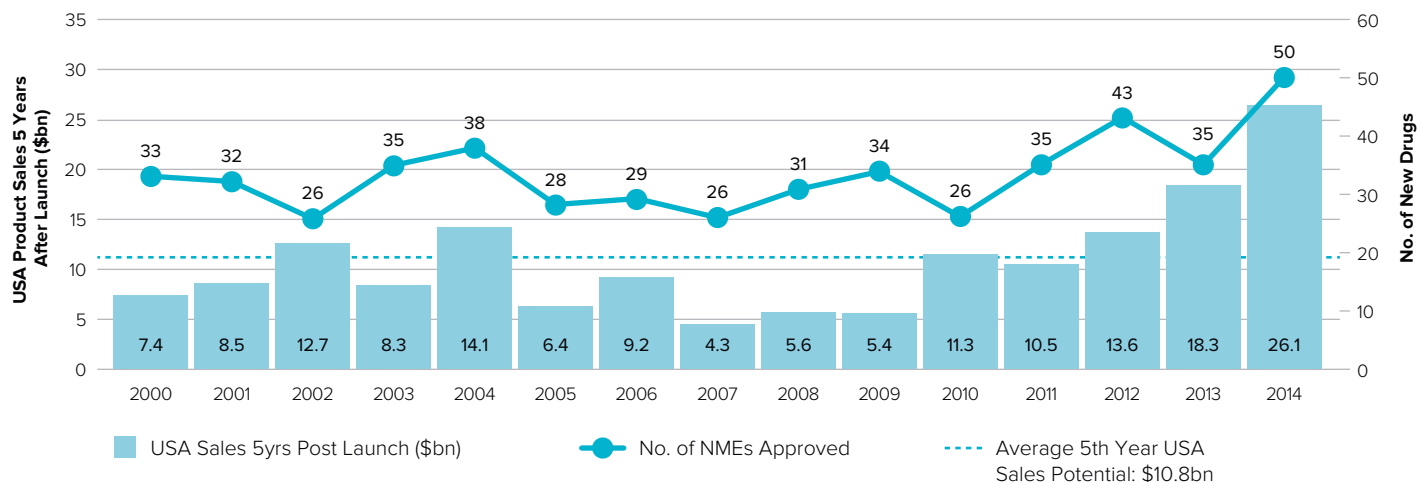
Record number of new drugs approved by US FDA; Sales potential increases by 43%

EvaluatePharma® finds that the FDA approved 50 new drugs in 2014 composed of 30 new molecular entities and 20 new biologicals. Total USA sales five-years post launch increased

by 43% to \$26.1bn, or an average of \$522m per approval and extends the positive performance of the past two years. Bristol-Myers Squibb's Opdivo was the number one approval of 2014 with forecast sales of \$4.3bn in 2019 accounting for over 16% of the total.

FDA Approval Count vs. Total USA Product Sales 5 Years After Launch

Source: EvaluatePharma® 22 May 2015



Key Approvals in Top 5 Years

- 2002** – Neulasta (AMGN), Abilify (Otsuka/BMS), Zetia (MRK/SGP), Humira (ABT)
- 2004** – Avastin (Roche), Cymbalta (LLY), Spiriva (BI/PFE), Lyrica (PFE)
- 2012** – Eliquis (BMY/PFE), Strilbid (GILD), Xtandi (Astellas), Xeljanz (PFE)
- 2013** – Sovaldi (GILD), Tecfidera (BIIB)
- 2014** – Opdivo (BMY), Harvoni (GILD), Keytruda (MRK), Viekira Pak (ABV)

FDA Approval Count NMEs & Biologicals (2000-2014) vs. 5th Year After Launch USA Product Sales

Source: EvaluatePharma® 22 May 2015

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
No. of NMEs Approved	27	24	17	21	31	18	18	16	21	19	15	24	33	25	30
No. of Biologicals Approved	6	8	9	14	7	10	11	10	10	15	11	11	10	10	20
Total NMEs + Biologicals	33	32	26	35	38	28	29	26	31	34	26	35	43	35	50
% Chg.		-3%	-19%	+35%	+9%	-26%	+4%	-10%	+19%	+10%	-24%	+35%	+23%	-19%	+43%
USA Sales 5yrs Post Launch \$bn	7.4	8.5	12.7	8.3	14.1	6.4	9.2	4.3	5.6	5.4	11.3	10.5	13.6	18.3	26.1
% Chg.		+14%	+50%	-34%	+69%	-55%	+44%	-53%	+28%	-3%	+109%	-7%	+30%	+34%	+43%
5yr USA Sales per Approval \$m	224	264	487	238	371	228	316	167	180	159	435	300	317	522	522
% Chg.		+18%	+84%	-51%	+56%	-39%	+39%	-47%	+8%	-11%	+173%	-31%	+6%	+65%	+0%

Note: The number of biologicals approved include biologicals from both CDER and CBER. In 2014 there were 11 CDER biologicals approved and EvaluatePharma estimates that there were 9 CBER biologicals approved: Gardasil 9, Trumenba, Obizur, Ruconest, Eloctate, Ragwitek, Grastek, Oralair and Alprolix.



Top 10 New Molecular Entities in 2014: Ranked on USA Consensus Sales in 2019

Source: EvaluatePharma[®] 22 May 2015

Rank	Product	Company	Approved	2014	2019
1.	Opdivo	Bristol-Myers Squibb	Dec 2014	1	4,279
2.	Harvoni	Gilead Sciences	Oct 2014	2,001	3,855
3.	Keytruda	Merck & Co	Sep 2014	48	2,647
4.	Viekira Pak	AbbVie	Dec 2014	48	1,286
5.	Otezla	Celgene	Mar 2014	70	1,138
6.	Ofev	Boehringer Ingelheim	Oct 2014	5	1,085
7.	Cyramza	Eli Lilly	Apr 2014	76	922
8.	Plegridy	Biogen	Aug 2014	28	871
9.	Entyvio	Takeda	May 2014	184	863
10.	Esbriet	Roche	Oct 2014	5	812
	Other			521	8,324
	Total			2,986	26,081

Note: Sales forecasts based on a consensus of leading equity analysts' estimates.

5th year USA sales for products approved up to the end of 2009 are based on actual company reported sales.

Ofev USA sales figure for 2014 is estimated.

Worldwide Prescription Drug & OTC Sales by Therapy Area in 2020

part 1 of 2



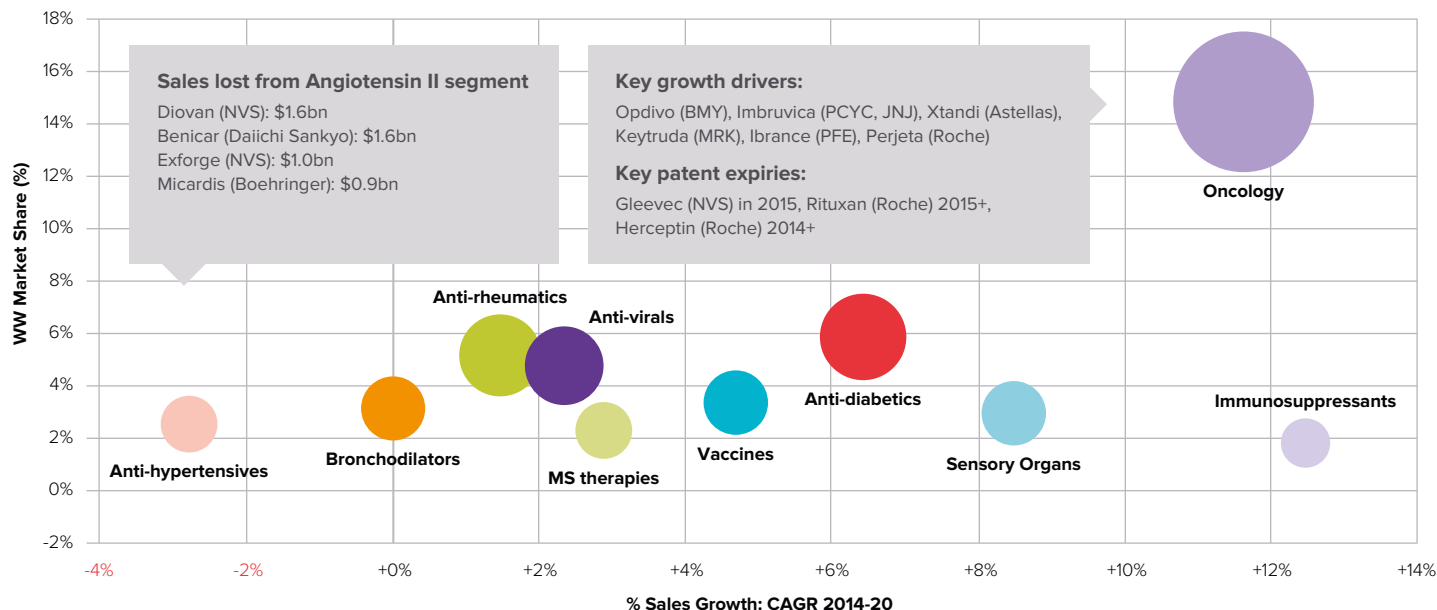
Oncology Remains the Largest Segment in 2020.

EvaluatePharma® finds that oncology will remain the largest segment in 2020 with an expected annual growth of 11.6% per year and reaching \$153.1bn in 2020. Growth from in-line products, and potential new entrants such as new drugs targeting the PD-1

pathway, is expected to more than compensate for a number of key patent expiries between 2014 and 2020. Anti-diabetics is forecast to be the second biggest therapy area with sales of \$60.5bn in 2020, less than half that of oncology.

Top 10 Therapy Areas in 2020, Market Share & Sales Growth

Source: EvaluatePharma® 22 May 2015



Worldwide Prescription Drug & OTC Sales by EvaluatePharma® Therapy Area (2014 & 2020): Top 15 Categories & Total Market

Source: EvaluatePharma® 22 May 2015

Rank	Therapy Area	WW Sales (\$bn)		CAGR % Growth	2020 Change vs. Jun 14	WW Market Share			Rank Chg. (+/-)
		2014	2020			2014	2020	Chg. (+/-)	
1.	Oncology	79.2	153.1	+11.6%	+0.0	10.1%	14.9%	+4.7pp	+0
2.	Anti-diabetics	41.6	60.5	+6.4%	-8.4	5.3%	5.9%	+0.5pp	+2
3.	Anti-rheumatics	48.8	53.2	+1.5%	-3.9	6.2%	5.2%	-1.1pp	-1
4.	Anti-virals	43.1	49.6	+2.3%	+4.0	5.5%	4.8%	-0.7pp	-1
5.	Vaccines	26.7	34.7	+4.4%	-6.6	3.4%	3.4%	-0.0pp	+2
6.	Bronchodilators	32.5	32.5	+0.0%	-3.4	4.2%	3.2%	-1.0pp	-1
7.	Sensory Organs	18.6	30.4	+8.5%	+2.2	2.4%	3.0%	+0.6pp	+2
8.	Anti-hypertensives	30.5	25.8	-2.8%	-0.3	3.9%	2.5%	-1.4pp	-2
9.	MS therapies	19.4	23.1	+2.9%	+1.3	2.5%	2.2%	-0.2pp	-1
10.	Immunosuppressants	9.2	18.6	+12.5%	+3.8	1.2%	1.8%	+0.6pp	+9

Top 11-15 continued over...



Source: EvaluatePharma[®] 22 May 2015

Rank	Therapy Area	WW Sales (\$bn)		CAGR % Growth	2020 Change vs. Jun 14	WW Market Share			Rank Chg. (+/-)
		2014	2020			2014	2020	Chg. (+/-)	
11.	Anti-coagulants	10.8	18.3	+9.2%	+0.5	1.4%	1.8%	+0.4pp	+6
12.	Dermatologicals	12.8	17.3	+5.2%	-1.9	1.6%	1.7%	+0.0pp	+0
13.	Anti-hyperlipidaemics	17.8	15.1	-2.6%	+2.1	2.3%	1.5%	-0.8pp	-3
14.	Anti-fibrinolytics	11.4	14.7	+4.3%	-1.8	1.5%	1.4%	-0.0pp	+1
15.	Anti-bacterials	13.4	14.5	+1.4%	-3.2	1.7%	1.4%	-0.3pp	-4
	Top 15	416	561	+5.1%		53.2%	54.6%	+1.3pp	
	Other	365	468	+4.2%		46.8%	45.4%	-1.3pp	
	Total WW Rx & OTC Sales	781	1,029	+4.7%		100.0%	100.0%		
	Total 'Rx & OTC Sales' includes:								
	WW Generic Sales	74.2	111.9	+7.1%		9.5%	10.9%	+1.4%	
	OTC Pharmaceuticals	37.7	42.1	+1.8%		4.8%	4.1%	-0.7%	

Note: Industry sales based on Top 500 pharmaceutical and biotech companies. Sales in 2014 based on company reported data. Sales forecasts to 2020 based on a consensus of leading equity analysts' estimates for product sales and segmental sales.



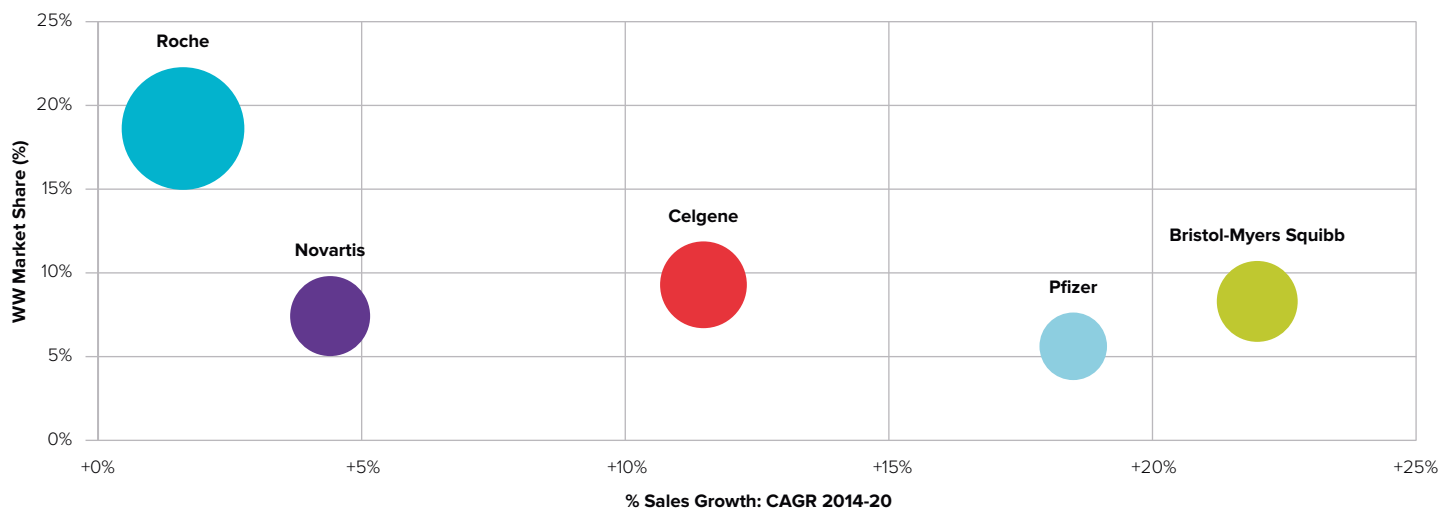
Roche expected to remain largest oncology player in 2020.

EvaluatePharma® finds that Roche continued to dominate the oncology sector in 2014 with sales of \$25.8bn, representing almost one-third of the entire market. Although Roche is expected to remain the market-leader through 2020, the company's market share is forecast to decline by 14 percentage points as competitor products

targeting the programmed death-1 (PD-1) pathways come online and Roche's mature products (Avastin, Herceptin, Rituxan) experience sales' cannibalisation from biosimilars. Overall, the cancer market is expected to expand by an average 10% per year between 2014 and 2020 to \$153.1bn, with worldwide sales of the new PD-1 products accounting for over \$17bn, or 23%, of this growth.

Worldwide Sales, Market Share & Sales Growth (2014-2020)

Source: EvaluatePharma® 22 May 2015



Note: Bubble = WW Sales in 2020

Top 10 Companies & Total Worldwide Oncology Sales (2014-2020)

Source: EvaluatePharma® 22 May 2015

Rank	Company	WW Sales (\$m)		CAGR 2014-20	WW Market Share		Rank Chg. 2014-20
		2014	2020		2014	2020	
1.	Roche	25,828	28,467	+2%	32.6%	18.6%	-
2.	Celgene	7,407	14,197	+11%	9.4%	9.3%	+1
3.	Bristol-Myers Squibb	3,833	12,614	+22%	4.8%	8.2%	+2
4.	Novartis	8,729	11,314	+4%	11.0%	7.4%	-2
5.	Pfizer	3,046	8,388	+18%	3.8%	5.5%	+1
6.	Johnson & Johnson	4,158	6,812	+9%	5.2%	4.4%	-2
7.	AstraZeneca	2,997	6,725	+14%	3.8%	4.4%	-
8.	Astellas Pharma	1,459	5,332	+24%	1.8%	3.5%	+5
9.	Merck & Co	448	5,167	+50%	0.6%	3.4%	+13
10.	Eli Lilly	2,986	4,964	+9%	3.8%	3.2%	-2
	Top 10	60,888	103,979	+8%	76.9%	67.9%	
	Other	18,317	49,115	+15%	23.1%	32.1%	
	Total Industry	79,206	153,094	+10%	100.0%	100.0%	



Top 5 Oncology Products Worldwide in 2020

Source: EvaluatePharma[®] 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	WW Sales (\$m)		CAGR	WW Market Share		Current Status
					2014	2020	2014-20	2014	2020	
1.	Revlimid	lenalidomide	Celgene	Immunomodulator	4,980	9,640	+12%	6.3%	6.3%	Marketed
2.	Opdivo	nivolumab	Bristol-Myers Squibb + Ono	Anti-programmed death-1 (PD-1) MAb	29	8,182	+156%	0.0%	5.3%	Marketed
3.	Avastin	bevacizumab	Roche	Anti-VEGF MAb	7,018	6,202	-2%	8.9%	4.1%	Marketed
4.	Imbruvica	ibrutinib	JNJ + Pharmacyclis	Bruton's tyrosine kinase (BTK) inhibitor	547	5,586	+47%	0.7%	3.6%	Marketed
5.	Herceptin	trastuzumab	Roche	Anti-HER2 (ErbB-2) MAb	6,863	5,313	-4%	8.7%	3.5%	Marketed

Note: Oncology includes: Alkaloids, Alkylating agents, Anti-metabolites, Anti-neoplastic MABs, Cancer vaccines, Cytotoxic antibiotics, Hormone therapies, Platinum compounds and other anti-cancer.

Excludes anti-emetics and anti-anaemics used in chemotherapy-induced anaemia.

Also excludes: Interferons, Immunostimulants & Immunosuppressants.



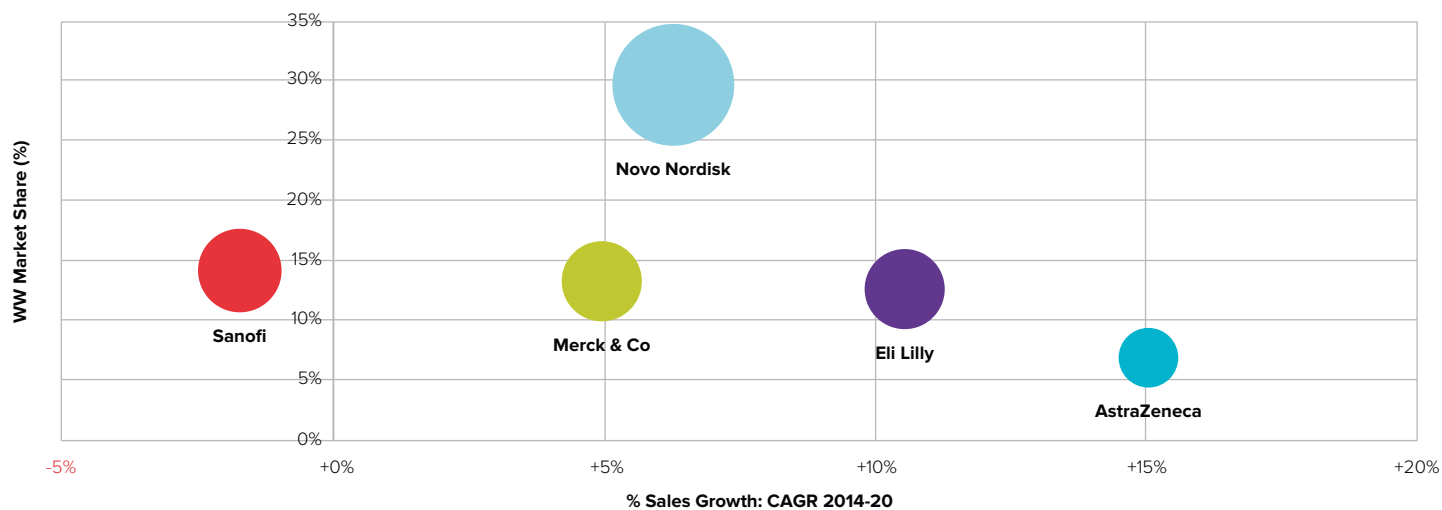
Novo Nordisk expected to remain largest diabetes player in 2020; Sanofi forecast to lose market share.

EvaluatePharma® finds that Novo Nordisk is expected to maintain its dominance in the anti-diabetic market through 2020. Novo's sales are forecast to grow by 6% per annum to \$18.0bn in 2020,

representing a 29.1% share of the market. Sanofi, with anti-diabetic sales of \$8.6bn in 2020, is a long way behind in second place as biosimilar competition to its long-acting insulin Lantus and the entry of new competitors into the space is expected to reduce its market share from 23.0% in 2014 to 14.3% in 2020.

Worldwide Sales, Market Share & Sales Growth (2014-2020)

Source: EvaluatePharma® 22 May 2015



Note: Bubble = WW Sales in 2020

Top 10 Companies & Total Worldwide Anti-Diabetic Sales (2014-2020)

Source: EvaluatePharma® 22 May 2015

Rank	Company	WW Sales (\$m)		CAGR 2014-20	WW Market Share		Rank Chg. 2014-20
		2014	2020		2014	2020	
1.	Novo Nordisk	12,488	17,980	+6%	30.0%	29.7%	+0
2.	Sanofi	9,571	8,617	-2%	23.0%	14.3%	+0
3.	Merck & Co	6,032	8,044	+5%	14.5%	13.3%	+0
4.	Eli Lilly	4,196	7,646	+11%	10.1%	12.6%	+0
5.	AstraZeneca	1,792	4,152	+15%	4.3%	6.9%	+0
6.	Boehringer Ingelheim	756	3,346	+28%	1.8%	5.5%	+2
7.	Johnson & Johnson	586	2,167	+24%	1.4%	3.6%	+4
8.	Novartis	1,304	1,564	+3%	3.1%	2.6%	-2
9.	Takeda	913	945	+1%	2.2%	1.6%	-2
10.	Merck KGaA	502	587	+3%	1.2%	1.0%	+2
	Top 10	38,139	55,048	+6%	91.6%	91.0%	
	Other	3,477	5,413	+8%	8.4%	9.0%	
	Total Industry	41,616	60,462	+6%	100.0%	100.0%	



Top 5 Anti-Diabetic Products Worldwide in 2020

Source: EvaluatePharma[®] 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	WW Sales (\$m)		CAGR	WW Market Share		Current Status
					2014	2020	2014-20	2014	2020	
1.	Januvia/ Janumet	sitagliptin phosphate	Merck & Co + Ono + Daewoong + Sigma-Tau + Almirall	Dipeptidyl peptidase IV inhibitor	6,358	7,525	+3%	15.3%	12.4%	Marketed
2.	Lantus	insulin glargine recombinant	Sanofi	Insulin analogue	8,428	4,935	-9%	20.3%	8.2%	Marketed
3.	NovoRapid	insulin aspart recombinant	Novo Nordisk	Insulin analogue	3,109	3,848	+4%	7.5%	6.4%	Marketed
4.	Victoza	liraglutide [rDNA origin]	Novo Nordisk	Glucagon-like peptide 1 (GLP-1) agonist	2,393	3,486	+6%	5.7%	5.8%	Marketed
5.	Humalog	insulin lispro recombinant	Eli Lilly	Insulin analogue	2,785	2,908	+1%	6.7%	4.8%	Marketed



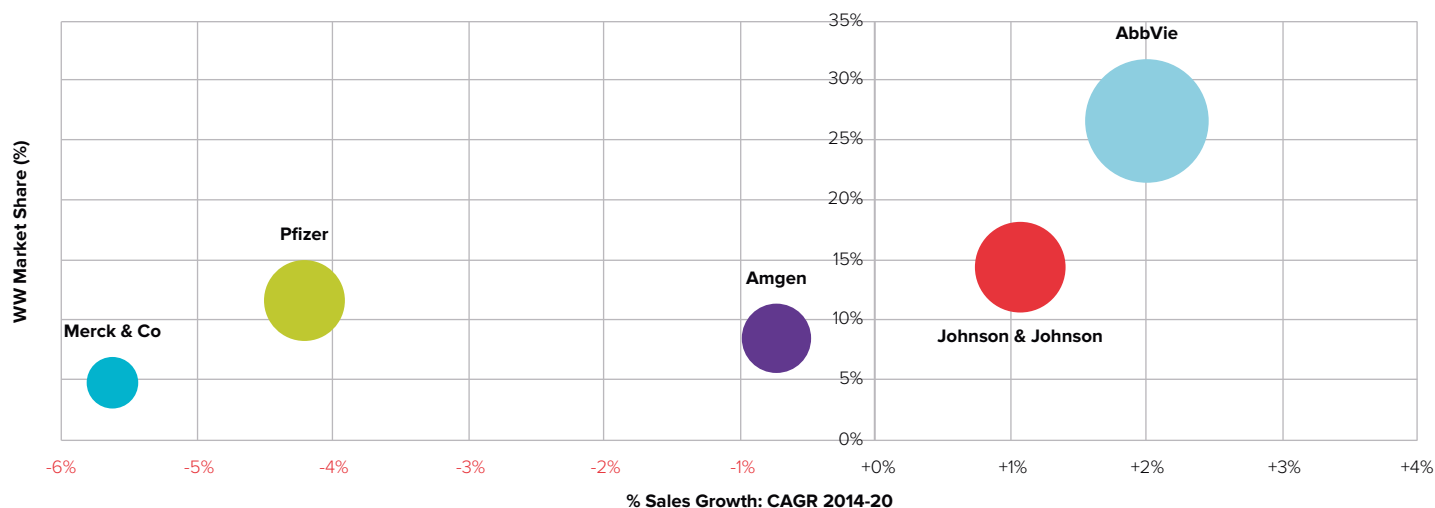
AbbVie's Humira continues to account for over 25% of anti-rheumatic market in 2020.

EvaluatePharma® finds that AbbVie was the number one anti-rheumatic company in 2014 with sales of \$14.1bn, representing over 25% of the entire market. By 2020, AbbVie is forecast to remain number one, but with its key anti-rheumatic product, Humira,

potentially facing biosimilar competition from 2016, this position may be at risk. Celgene's recently launched product, Otezla, is expected to sell over \$2bn by 2020 and pushes Celgene up 27 places to number six. Overall, the entire global anti-rheumatic market is expected to experience minimal growth of 1% year-on-year over the next six years.

Worldwide Sales, Market Share & Sales Growth (2014-2020)

Source: EvaluatePharma® 22 May 2015



Note: Bubble = WW Sales in 2020

Top 10 Companies & Total Worldwide Anti-Rheumatic Sales (2014-2020)

Source: EvaluatePharma® 22 May 2015

Rank	Company	WW Sales (\$m)		CAGR 2014-20	WW Market Share		Rank Chg. 2014-20
		2014	2020		2014	2020	
1.	AbbVie	12,543	14,113	+2%	25.7%	26.5%	+0
2.	Johnson & Johnson	7,179	7,654	+1%	14.7%	14.4%	+1
3.	Pfizer	7,995	6,170	-4%	16.4%	11.6%	-1
4.	Amgen	4,688	4,489	-1%	9.6%	8.4%	+0
5.	Merck & Co	3,580	2,531	-6%	7.3%	4.8%	+0
6.	Celgene	70	2,095	+76%	0.1%	3.9%	+27
7.	Bristol-Myers Squibb	1,652	1,899	+2%	3.4%	3.6%	-1
8.	Roche	1,105	1,737	+8%	2.3%	3.3%	-1
9.	UCB	1,059	1,696	+8%	2.2%	3.2%	-1
10.	Bayer	1,051	1,082	+0%	2.2%	2.0%	+0
	Top 10	40,921	43,466	+1%	83.9%	81.7%	
	Other	7,855	9,742	+4%	16.1%	18.3%	
	Total Industry	48,776	53,208	+1%	100.0%	100.0%	



Top 5 Anti-Rheumatic Products Worldwide in 2020

Source: EvaluatePharma[®] 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	WW Sales (\$m)		CAGR	WW Market Share		Current Status
					2014	2020	2014-20	2014	2020	
1.	Humira	adalimumab	AbbVie + Eisai	Anti-tumour necrosis factor alpha (TNFa) MAb	12,890	13,934	+1%	26.4%	26.2%	Marketed
2.	Enbrel	etanercept	Pfizer + Amgen + Takeda	Tumour necrosis factor alpha (TNFa) inhibitor	8,915	7,219	-3%	18.3%	13.6%	Marketed
3.	Remicade	infliximab	JNJ + Merck + Mitsubishi	Anti-tumour necrosis factor alpha (TNFa) MAb	8,807	6,511	-5%	18.1%	12.2%	Marketed
4.	Simponi	golimumab	JNJ + Merck	Anti-tumour necrosis factor alpha (TNFa) MAb	1,876	3,388	+10%	3.8%	6.4%	Marketed
5.	Otezla	apremilast	Celgene	Phosphodiesterase IV (PDE4) inhibitor	70	2,095	+76%	0.1%	3.9%	Marketed

Note: Anti-tumour necrosis factor alpha (TNFa) inhibitor sales include RA, Crohn's and Psoriasis.

*Combined Remicade and Simponi sales \$9.9bn in 2020. Simponi (golimumab) is Merck & Co and J&J's next generation product to Remicade (infliximab).



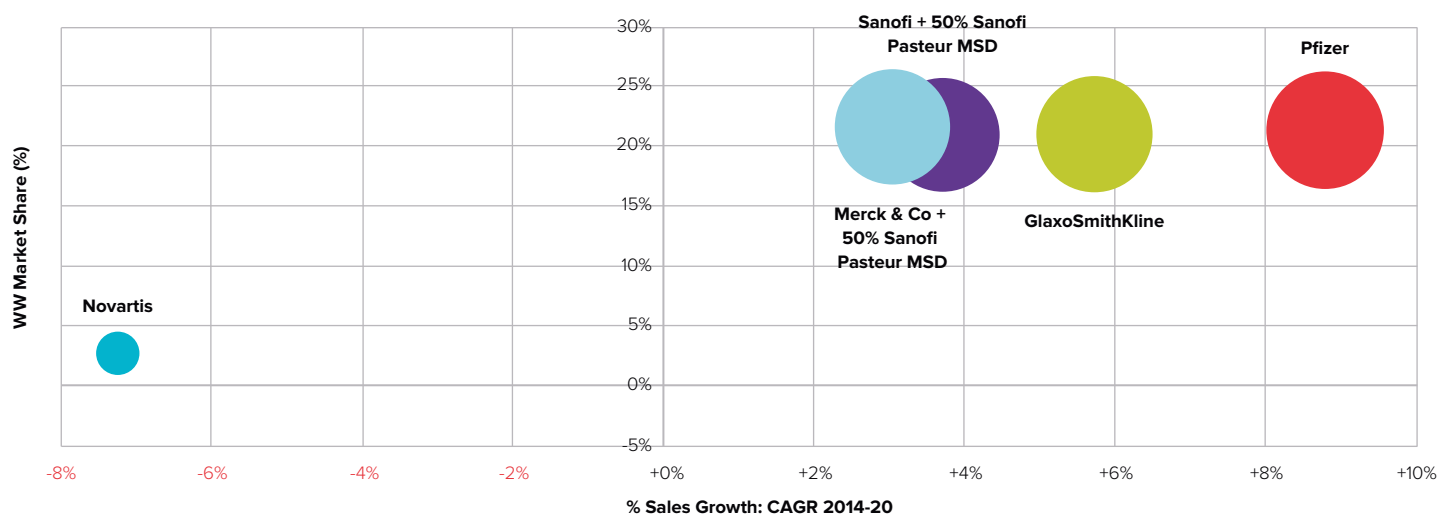
Merck & Co, GSK, Sanofi and Pfizer battle for the number one spot in 2020.

EvaluatePharma® finds that Merck & Co, GlaxoSmithKline, Sanofi and Pfizer are all expected to capture around 21% of the worldwide vaccine market by 2020. GlaxoSmithKline is forecast to grow its vaccine business by an average 6% per year over the period, with

its recent acquisition of Novartis's vaccine (excluding flu) business adding over \$1.6bn in worldwide sales by 2020. Following its disposal of its vaccine business to GlaxoSmithKline, Novartis's share of the global market is forecast to fall to 2.8% in 2020 and will fall further if it successfully disposes of its flu vaccines to CSL.

Worldwide Sales, Market Share & Sales Growth (2014-2020)

Source: EvaluatePharma® 22 May 2015



Note: Bubble = WW Sales in 2020

Top 10 Companies & Total Worldwide Vaccine Sales (2014-2020)

Source: EvaluatePharma® 22 May 2015

Rank	Company	WW Sales (\$m)		CAGR 2014-20	WW Market Share		Rank Chg. 2014-20
		2014	2020		2014	2020	
1.	Merck & Co + 50% Sanofi Pasteur MSD	6,246	7,497	+3%	23.4%	21.6%	+0
2.	Pfizer	4,480	7,440	+9%	16.8%	21.4%	+2
3.	GlaxoSmithKline	5,258	7,343	+6%	19.7%	21.1%	+0
4.	Sanofi + 50% Sanofi Pasteur MSD	5,845	7,253	+4%	21.9%	20.9%	-2
5.	Novartis	1,537	979	-7%	5.7%	2.8%	+0
6.	Emergent BioSolutions	246	506	+13%	0.9%	1.5%	+6
7.	Takeda	315	377	+3%	1.2%	1.1%	+1
8.	Astellas Pharma	355	369	+1%	1.3%	1.1%	-2
9.	AstraZeneca	295	318	+1%	1.1%	0.9%	+1
10.	Mitsubishi Tanabe	272	276	+0%	1.0%	0.8%	+1
Top 10		24,848	32,359	+5%	92.9%	93.2%	
Other		1,897	2,368	+4%	7.1%	6.8%	
Total Industry		26,746	34,727	+4%	100.0%	100.0%	



Top 5 Vaccine Products Worldwide in 2020

Source: EvaluatePharma[®] 22 May 2015

Rank	Product	Generic Name	Company	WW Sales (\$m)		CAGR	WW Market Share		Current Status
				2014	2020	2014-20	2014	2020	
1.	Pevnar 13	pneumococcal vaccine	Pfizer + Daewoong	4,297	5,833	+5%	16.3%	16.8%	Marketed
2.	Gardasil	human papillomavirus (HPV) vaccine	Merck + Sanofi Pasteur MSD + CSL	2,029	2,523	+4%	7.7%	7.3%	Marketed
3.	Fluzone/Vaxigrip	influenza vaccine	Sanofi + Sanofi Pasteur MSD	1,724	2,026	+3%	6.5%	5.8%	Marketed
4.	Pentacel	DTPa, Hib & polio vaccine	Sanofi	1,533	1,683	+2%	5.8%	4.8%	Marketed
5.	Pediarix	DTP, hepatitis B & polio vaccine	GlaxoSmithKline	1,364	1,543	+2%	5.2%	4.4%	Marketed

Note: Sanofi Pasteur MSD is a European joint venture between Merck & Co and Sanofi. Sales for NVS do not reflect proposed disposal of NVS's influenza vaccine business to CSL.



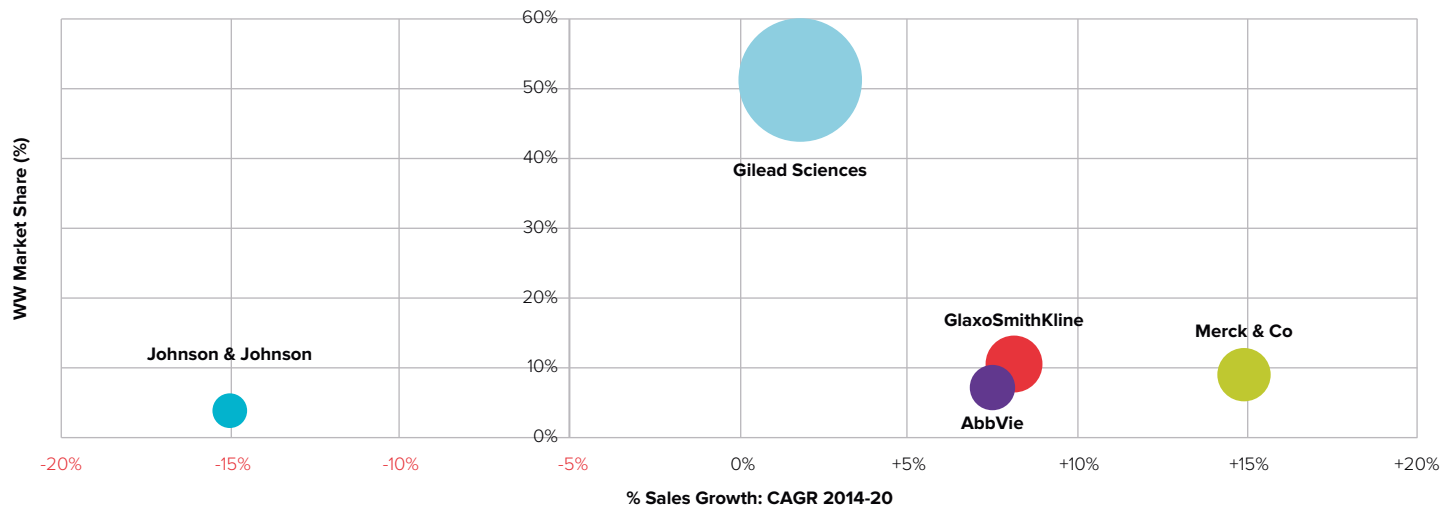
Gilead continues to dominate anti-viral market in 2020.

EvaluatePharma® finds that Gilead will continue to command over 50% of the anti-virals market in 2020 with sales set to increase 2% per year between 2014 and 2020. Gilead's success in this area is largely due to its hepatitis C franchise, which is collectively

forecast to contribute over \$13bn to 2020 worldwide anti-viral sales. Johnson & Johnson's anti-viral sales are expected to fall by an average 15% per year between 2014 and 2020 primarily due to its hepatitis C product, Olysio, experiencing increased competition from Gilead's Harvoni and AbbVie's Viekira Pak.

Worldwide Sales, Market Share & Sales Growth (2014-2020)

Source: EvaluatePharma® 22 May 2015



Note: Bubble = WW Sales in 2020

Top 10 Companies & Total Worldwide Anti-viral Sales (2014-2020)

Source: EvaluatePharma® 22 May 2015

Rank	Company	WW Sales (\$m)		CAGR 2014-20	WW Market Share		Rank Chg. 2014-20
		2014	2020		2014	2020	
1.	Gilead Sciences	22,790	25,411	+2%	52.8%	51.3%	-
2.	GlaxoSmithKline	3,318	5,305	+8%	7.7%	10.7%	+1
3.	Merck & Co	1,974	4,539	+15%	4.6%	9.2%	+3
4.	AbbVie	2,180	3,366	+8%	5.1%	6.8%	+1
5.	Johnson & Johnson	5,131	1,933	-15%	11.9%	3.9%	-3
6.	Bristol-Myers Squibb	3,252	1,678	-10%	7.5%	3.4%	-2
7.	Sino Biopharmaceutical	723	1,411	+12%	1.7%	2.8%	+1
8.	Achillion Pharmaceuticals	-	1,201	n/m	-	2.4%	new
9.	Roche	1,930	603	-18%	4.5%	1.2%	-2
10.	Arrowhead Research	-	599	n/m	-	1.2%	new
Top 10		41,298	46,046	+2%	95.7%	92.9%	
Other		1,833	3,519	+11%	4.3%	7.1%	
Total Industry		43,132	49,566	+2%	100.0%	100.0%	



Top 5 Anti-viral Products Worldwide in 2020

Source: EvaluatePharma[®] 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	WW Sales (\$m)		CAGR 2014-20	WW Market Share		Current Status
					2014	2020		2014	2020	
1.	Harvoni	ledipasvir; sofosbuvir	Gilead Sciences	Hep C nucleoside NS5A & NS5B polymerase inhibitor	2,127	5,751	+18%	4.9%	11.6%	Marketed
2.	GS-9857/ SOF/ GS-5816	-	Gilead Sciences	Hep C NS3 protease, Hep C nucleoside NS5A & NS5B polymerase inhibitor	-	4,578	n/m	-	9.2%	R&D
3.	Tivicay	dolutegravir	GlaxoSmithKline	HIV integrase inhibitor	558	3,647	+37%	1.3%	7.4%	Marketed
4.	Stribild	cobicistat; elvitegravir; emtricitabine; tenofovir disoproxil fumarate	Gilead + Torii	NRTI, HIV integrase inhibitor & CYP3A inhibitor	1,215	3,524	+19%	2.8%	7.1%	Marketed
5.	Tenofovir Alafenamide	tenofovir alafenamide fumarate	Gilead Sciences	NRTI	-	3,126	n/m	-	6.3%	R&D

Note: GlaxoSmithKline consolidates 100% of the revenues from ViiV Healthcare, a joint venture with Pfizer for the marketing of the two companies' HIV anti-virals.

2020: Top 50 Selling Products in the World

part 1 of 2



Humira remains number one in 2020; Opdivo jumps to number three position.

EvaluatePharma® finds that AbbVie's Humira will remain the number one worldwide product in 2020 with sales of \$13.9bn; however, the threat of biosimilars has tempered the growth of the product with sales forecast to peak in 2017 at \$16.0bn. Opdivo, Bristol-Myers

Squibb's anti-PD-1 monoclonal antibody, leaps to third place in 2020 following its launch in 2014. Six products currently in R&D are present in the top 50, the biggest of which is Vertex's Orkambi, a combination product for the treatment of cystic fibrosis, which is forecast to have sales of \$5.1bn in 2020. Collectively, Gilead's hepatitis C franchise is forecast to sell \$13.4bn in 2020.

Source: EvaluatePharma® 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	WW Product Sales (\$m)			Market Status
					2014	2020	CAGR	
1.	Humira	adalimumab	AbbVie + Eisai	Anti-tumour necrosis factor alpha (TNFα) MAb	12,890	13,934	+1%	Marketed
2.	Revlimid	lenalidomide	Celgene	Immunomodulator	4,980	9,640	+12%	Marketed
3.	Opdivo	nivolumab	Bristol-Myers Squibb + Ono	Anti-programmed death-1 (PD-1) MAb	29	8,182	+156%	Marketed
4.	Januvia/Janumet	sitagliptin phosphate	Merck & Co + Ono + Daewoong + Sigma-Tau + Almirall	Dipeptidyl peptidase IV (DPP-IV) inhibitor	6,358	7,525	+3%	Marketed
5.	Xarelto	rivaroxaban	Bayer + JNJ	Factor Xa inhibitor	3,366	7,466	+14%	Marketed
6.	Enbrel	etanercept	Amgen + Pfizer + Takeda	Tumour necrosis factor alpha (TNFα) inhibitor	8,915	7,219	-3%	Marketed
7.	Tecfidera	dimethyl fumarate	Biogen	Nuclear factor erythroid 2-related factor (Nrf2) pathway activator	2,909	6,804	+15%	Marketed
8.	Remicade	infliximab	JNJ + Merck & Co + Mitsubishi	Anti-tumour necrosis factor alpha (TNFα) MAb	8,807	6,511	-5%	Marketed
9.	Avastin	bevacizumab	Roche	Anti-VEGF MAb	7,018	6,202	-2%	Marketed
10.	Pprevnar 13	pneumococcal vaccine	Pfizer + Daewoong	Pneumococcal vaccine	4,297	5,833	+5%	Marketed
11.	Eylea	aflibercept	Regeneron + Bayer + Santen	VEGFR kinase inhibitor	2,972	5,826	+12%	Marketed
12.	Harvoni	ledipasvir; sofosbuvir	Gilead Sciences	Hepatitis C nucleoside NS5A & NS5B polymerase inhibitor	2,127	5,751	+18%	Marketed
13.	Imbruvica	ibrutinib	Pharmacyclics + JNJ	Bruton's tyrosine kinase (BTK) inhibitor	547	5,586	+47%	Marketed
14.	Soliris	eculizumab	Alexion Pharmaceuticals	Anti-complement factor C5 MAb	2,234	5,462	+16%	Marketed
15.	Herceptin	trastuzumab	Roche	Anti-HER2 (ErbB-2) MAb	6,863	5,313	-4%	Marketed
16.	Xtandi	enzalutamide	Astellas Pharma	Androgen receptor antagonist	1,254	5,147	+27%	Marketed
17.	Rituxan	rituximab	Roche	Anti-CD20 MAb	7,547	5,096	-6%	Marketed
18.	Orkambi	ivacaftor; lumacaftor	Vertex Pharmaceuticals	Cystic fibrosis transmembrane conductance regulator (CFTR) corrector	-	5,082		R&D
19.	Keytruda	pembrolizumab	Merck & Co	Anti-programmed death-1 (PD-1) MAb	55	4,988	+112%	Marketed
20.	Lantus	insulin glargine recombinant	Sanofi	Insulin analogue	8,428	4,935	-9%	Marketed
21.	GS-9857/ SOF/ GS-5816	-	Gilead Sciences	Hepatitis C NS3 protease, Hepatitis C nucleoside NS5A & NS5B polymerase inhibitor	-	4,578		R&D
22.	Botox	onabotulinumtoxinA	Actavis + GSK	Botulinum toxin	2,496	4,518	+10%	Marketed
23.	Xgeva/Prolia	denosumab	Amgen + Daiichi Sankyo	Anti-RANKL MAb	2,411	4,438	+11%	Marketed
24.	LCZ696	sacubitril; valsartan	Novartis	Angiotensin II receptor (AT1) antagonist & neprilysin inhibitor (ARNI)	-	4,156		R&D
25.	Victoza/Saxenda	liraglutide [rDNA origin]	Novo Nordisk	Glucagon-like peptide 1 (GLP-1) agonist	2,393	4,040	+9%	Marketed

Top 26-50 continued over...

Source: EvaluatePharma[®] 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	WW Product Sales (\$m)			Market Status
					2014	2020	CAGR	
26.	NovoRapid	insulin aspart recombinant	Novo Nordisk	Insulin analogue	3,109	3,848	+4%	Marketed
27.	Ibrance	palbociclib	Pfizer	Cyclin-dependent kinase (CDK) 4 & 6 inhibitor	-	3,830		Marketed
28.	Eliquis	apixaban	Bristol-Myers Squibb	Factor Xa inhibitor	774	3,730	+30%	Marketed
29.	Tivicay	dolutegravir	GlaxoSmithKline	HIV integrase inhibitor	558	3,647	+37%	Marketed
30.	Stelara	ustekinumab	Johnson & Johnson	Anti-interleukin-12 (IL-12) & interleukin-23 (IL-23) MAb	2,072	3,531	+9%	Marketed
31.	Stribild	cobicistat; elvitegravir; emtricitabine; tenofovir disoproxil fumarate	Gilead + Torii	Nucleoside reverse transcriptase inhibitor (NRTI), HIV integrase inhibitor & CYP3A inhibitor	1,215	3,524	+19%	Marketed
32.	Lucentis	ranibizumab	Novartis + Roche	Anti-VEGF MAb	4,301	3,507	-3%	Marketed
33.	Perjeta	pertuzumab	Roche	Anti-HER2 (ErbB-2) MAb	918	3,427	+25%	Marketed
34.	Simponi	golimumab	Merck & Co + JNJ	Anti-tumour necrosis factor alpha (TNFa) MAb	1,876	3,388	+10%	Marketed
35.	Spiriva	tiotropium bromide monohydrate	Boehringer Ingelheim	Long-acting muscarinic antagonist (LAMA)	4,300	3,231	-5%	Marketed
36.	Gammagard Liquid¹	immune globulin (human)	Baxter International	Immunoglobulin	2,224	3,169	+6%	Marketed
37.	Tenofovir Alafenamide	tenofovir alafenamide fumarate	Gilead Sciences	Nucleoside reverse transcriptase inhibitor (NRTI)	-	3,126		R&D
38.	Neulasta	pegfilgrastim	Amgen + Kyowa Hakko	Granulocyte colony-stimulating factor (G-CSF)	4,599	3,113	-6%	Marketed
39.	Grazoprevir/Elbasvir	elbasvir; grazoprevir	Merck & Co	Hepatitis C NS3/4A protease inhibitor & hepatitis C nucleoside NS5A polymerase inhibitor	-	3,055		R&D
40.	PB272	neratinib	Puma Biotechnology	pan-HER inhibitor	-	2,956		R&D
41.	Tysabri	natalizumab	Biogen	Anti-VLA-4 MAb	1,960	2,928	+7%	Marketed
42.	Sovaldi	sofosbuvir	Gilead Sciences	Hepatitis C nucleoside NS5B polymerase inhibitor	10,283	2,926	-19%	Marketed
43.	Humalog	insulin lispro recombinant	Eli Lilly	Insulin analogue	2,785	2,908	+1%	Marketed
44.	Gilenya	fingolimod hydrochloride	Novartis + Mitsubishi	Sphingosine-1-phosphate (S1P) receptor modulator	2,506	2,897	+2%	Marketed
45.	Levemir	insulin detemir recombinant	Novo Nordisk	Insulin analogue	2,533	2,794	+2%	Marketed
46.	Seretide/Advair	fluticasone propionate; salmeterol xinafoate	GlaxoSmithKline + Almirall + Faes	Beta 2 adrenoreceptor agonist & corticosteroid	7,058	2,793	-14%	Marketed
47.	Privigen¹	immune globulin (human)	CSL	Immunoglobulin	1,986	2,665	+5%	Marketed
48.	Symbicort Turbuhaler	budesonide; formoterol fumarate dihydrate	AstraZeneca	Beta 2 adrenoreceptor agonist & corticosteroid	3,820	2,652	-6%	Marketed
49.	Vyvanse	lisdexamfetamine dimesylate	Shire + Shionogi	Psychostimulant	1,449	2,554	+10%	Marketed
50.	Gardasil	human papillomavirus (HPV) vaccine	Merck & Co + CSL + Sanofi Pasteur MSD	Human papillomavirus (HPV) vaccine	2,029	2,523	+4%	Marketed
Total					161,252	232,952	+6%	
Total WW Individual Products Forecast in EvaluatePharma[®]					598,484	796,525	+5%	

Note: Sales represent company reported sales where available, otherwise based on an average of equity analyst estimates.

¹ Includes entire Immunoglobulin/IVIg sales for company.

2020: Top 50 Selling Products in the USA

part 1 of 2



Humira leading product in USA in 2020; Celgene's Revlimid a distant second.

EvaluatePharma® finds that AbbVie's Humira is forecast to be the leading product in the USA in 2020, with sales of \$8.0bn. Celgene's Revlimid will be in second place with sales growing an average 11%

per year to \$5.6bn in 2020. As in the worldwide rankings, Bristol-Myers Squibb's anti-PD-1 monoclonal antibody Opdivo jumps to third place in 2020, with sales forecast to reach \$5.0bn. Collectively, Gilead's hepatitis C franchise is forecast to sell \$8.3bn in 2020.

Source: EvaluatePharma® 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	USA Product Sales (\$m)			US Market Status
					2014	2020	CAGR	
1.	Humira	adalimumab	AbbVie	Anti-tumour necrosis factor alpha (TNFa) MAb	6,524	8,026	+4%	Marketed
2.	Revlimid	lenalidomide	Celgene	Immunomodulator	2,916	5,593	+11%	Marketed
3.	Opdivo	nivolumab	Bristol-Myers Squibb	Anti-programmed death-1 (PD-1) MAb	1	5,023	+314%	Marketed
4.	Tecfidera	dimethyl fumarate	Biogen	Nuclear factor erythroid 2-related factor (Nrf2) pathway activator	2,427	4,762	+12%	Marketed
5.	Remicade	infliximab	Johnson & Johnson	Anti-tumour necrosis factor alpha (TNFa) MAb	4,155	4,282	+1%	Marketed
6.	Enbrel	etanercept	Amgen	Tumour necrosis factor alpha (TNFa) inhibitor	4,404	4,231	-1%	Marketed
7.	Januvia/Janumet	sitagliptin phosphate	Merck & Co	Dipeptidyl peptidase IV (DPP-IV) inhibitor	3,054	3,937	+4%	Marketed
8.	Harvoni	ledipasvir; sofosbuvir	Gilead Sciences	Hepatitis C nucleoside NS5A & NS5B polymerase inhibitor	2,001	3,729	+11%	Marketed
9.	Imbruvica	ibrutinib	Pharmacyclics	Bruton's tyrosine kinase (BTK) inhibitor	492	3,501	+39%	Marketed
10.	Eylea	aflibercept	Regeneron Pharmaceuticals	VEGFR kinase inhibitor	1,736	3,475	+12%	Marketed
11.	GS-9857/ SOF/ GS-5816	-	Gilead Sciences	Hepatitis C NS3 protease, Hepatitis C nucleoside NS5A & NS5B polymerase inhibitor	-	3,262		R&D
12.	Orkambi	ivacaftor; lumacaftor	Vertex Pharmaceuticals	Cystic fibrosis transmembrane conductance regulator (CFTR) corrector	-	3,222		R&D
13.	Xarelto	rivaroxaban	Johnson & Johnson	Factor Xa inhibitor	1,522	3,191	+11%	Marketed
14.	Keytruda	pembrolizumab	Merck & Co	Anti-programmed death-1 (PD-1) MAb	48	3,114	+81%	Marketed
15.	Victoza/Saxenda	liraglutide [rDNA origin]	Novo Nordisk	Glucagon-like peptide 1 (GLP-1) agonist	1,612	3,036	+9%	Marketed
16.	Lantus	insulin glargine recombinant	Sanofi	Insulin analogue	5,613	3,003	-9%	Marketed
17.	Xtandi	enzalutamide	Astellas Pharma	Androgen receptor antagonist	783	2,835	+20%	Marketed
18.	Pprevnar 13	pneumococcal vaccine	Pfizer	Pneumococcal vaccine	2,154	2,713	+3%	Marketed
19.	Avastin	bevacizumab	Roche	Anti-VEGF MAb	2,933	2,651	-1%	Marketed
20.	Xgeva/Prolia	denosumab	Amgen	Anti-RANKL MAb	1,482	2,637	+9%	Marketed
21.	Stribild	cobicistat; elvitegravir; emtricitabine; tenofovir disoproxil fumarate	Gilead Sciences	Nucleoside reverse transcriptase inhibitor (NRTI), HIV integrase inhibitor & CYP3A inhibitor	1,014	2,525	+14%	Marketed
22.	Tenofovir Alafenamide	tenofovir alafenamide fumarate	Gilead Sciences	Nucleoside reverse transcriptase inhibitor (NRTI)	-	2,477		R&D
23.	Neulasta	pegfilgrastim	Amgen	Granulocyte colony-stimulating factor (G-CSF)	3,649	2,439	-6%	Marketed
24.	Rituxan	rituximab	Roche	Anti-CD20 MAb	3,646	2,437	-6%	Marketed
25.	Soliris	eculizumab	Alexion Pharmaceuticals	Anti-complement factor C5 MAb	730	2,367	+18%	Marketed

Top 26-50 continued over...

Source: EvaluatePharma[®] 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	USA Product Sales (\$m)			US Market Status
					2014	2020	CAGR	
26.	Botox	onabotulinumtoxinA	Actavis	Botulinum toxin	1,398	2,350	+8%	Marketed
27.	Stelara	ustekinumab	Johnson & Johnson	Anti-interleukin-12 (IL-12) & interleukin-23 (IL-23) MAb	1,334	2,333	+8%	Marketed
28.	Vyvanse	lisdexamfetamine dimesylate	Shire	Psychostimulant	1,334	2,252	+8%	Marketed
29.	LCZ696	sacubitril; valsartan	Novartis	Angiotensin II receptor (AT1) antagonist & neprilysin inhibitor (ARNI)	-	2,167		R&D
30.	Eliquis	apixaban	Bristol-Myers Squibb	Factor Xa inhibitor	404	2,132	+27%	Marketed
31.	NovoRapid	insulin aspart recombinant	Novo Nordisk	Insulin analogue	1,816	2,106	+2%	Marketed
32.	Ibrance	palbociclib	Pfizer	Cyclin-dependent kinase (CDK) 4 & 6 inhibitor	-	2,084		Marketed
33.	Gammagard Liquid¹	immune globulin (human)	Baxter International	Immunoglobulin	1,516	2,001	+4%	Marketed
34.	Xifaxan 550	rifaximin	Valeant Pharmaceuticals International	Hepatoprotectant	405	1,966	+25%	Marketed
35.	Invokana	canagliflozin	Johnson & Johnson	Sodium-glucose cotransporter-2 (SGLT2) inhibitor	569	1,938	+19%	Marketed
36.	PB272	neratinib	Puma Biotechnology	pan-HER inhibitor	-	1,931		R&D
37.	Tivicay	dolutegravir	GlaxoSmithKline	HIV integrase inhibitor	329	1,914	+29%	Marketed
38.	Levemir	insulin detemir recombinant	Novo Nordisk	Insulin analogue	1,673	1,906	+2%	Marketed
39.	Tysabri	natalizumab	Biogen	Anti-VLA-4 MAb	1,025	1,902	+9%	Marketed
40.	Herceptin	trastuzumab	Roche	Anti-HER2 (ErbB-2) MAb	2,151	1,837	-2%	Marketed
41.	Humalog	insulin lispro recombinant	Eli Lilly	Insulin analogue	1,628	1,835	+2%	Marketed
42.	Grazoprevir/Elbasvir	elbasvir; grazoprevir	Merck & Co	Hepatitis C NS3/4A protease inhibitor & hepatitis C nucleoside NS5A polymerase inhibitor	-	1,815		R&D
43.	Gardasil	human papillomavirus (HPV) vaccine	Merck & Co	Human papillomavirus (HPV) vaccine	1,319	1,779	+4%	Marketed
44.	Epogen/Procrit	epoetin alfa	Amgen + JNJ	Erythropoietin	2,746	1,638	-7%	Marketed
45.	H.P. Acthar Gel	repository corticotropin	Mallinckrodt	Adrenal corticotropin hormone (ACTH)	746	1,600	+12%	Marketed
46.	Perjeta	pertuzumab	Roche	Anti-HER2 (ErbB-2) MAb	591	1,555	+15%	Marketed
47.	Lucentis	ranibizumab	Roche	Anti-VEGF MAb	1,860	1,514	-3%	Marketed
48.	Complera	emtricitabine; rilpivirine hydrochloride; tenofovir disoproxil fumarate	Gilead Sciences	Nucleoside & non-nucleoside reverse transcriptase inhibitor (NRTI & NNRTI)	663	1,489	+12%	Marketed
49.	Xyrem	sodium oxybate	Jazz Pharmaceuticals	CNS depressant	779	1,476	+10%	Marketed
50.	Jakafi	ruxolitinib phosphate	Incyte	Janus kinase (JAK)-1/2 inhibitor	358	1,377	+21%	Marketed
Total					77,540	135,361	+8%	
Total USA Individual Products Forecast in EvaluatePharma[®]					252,447	395,145	+7%	

Note: Sales represent company reported sales where available, otherwise based on an average of equity analyst estimates.

¹ Includes entire Immunoglobulin/IVIg sales for company

Worldwide Prescription Drug & OTC Sales by Therapy Area in 2014



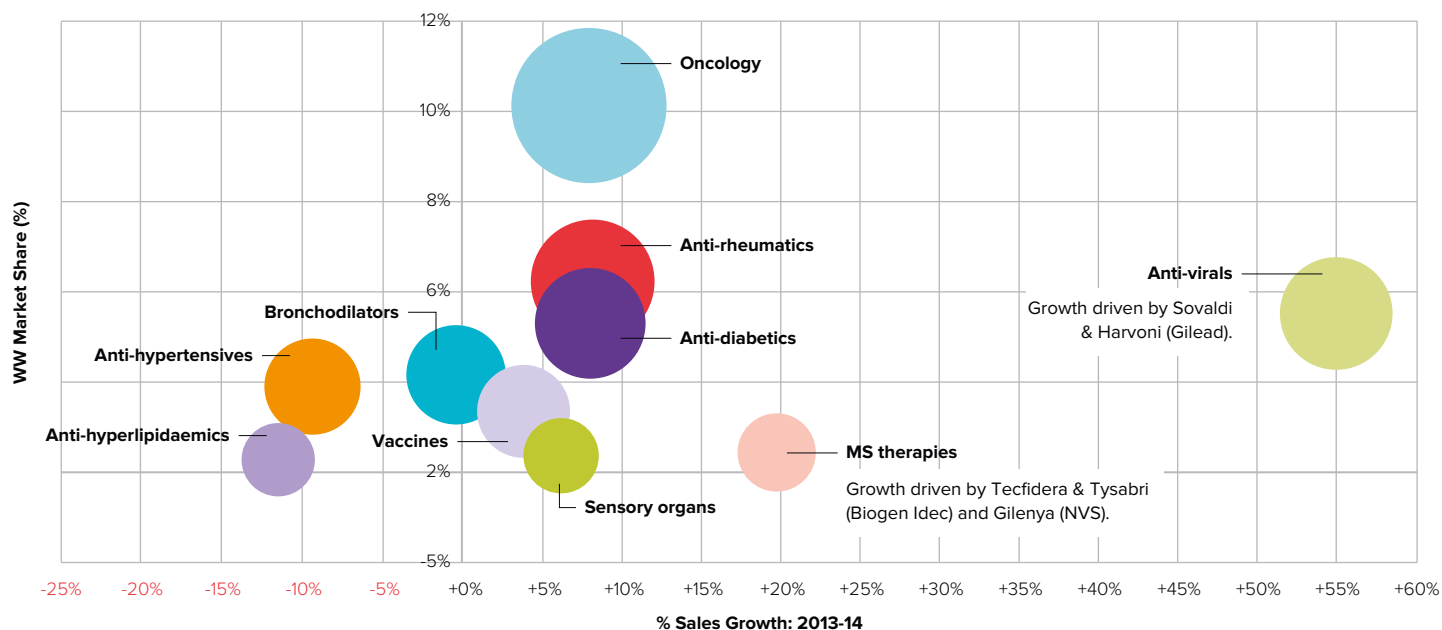
Oncology is the largest segment in 2014.

EvaluatePharma® finds that oncology remained the largest therapeutic category in 2014 with sales growing by 8% to \$79.2bn and accounting for 10.1% of the total Rx and OTC market. The anti-virals segment expanded the most, by 55% to \$48.8bn, in 2014 largely due to the recently launched hepatitis C products from

Gilead (Sovaldi and Harvoni) and Johnson & Johnson (Olysio), which collectively recorded sales of over \$14.5bn in 2014. The MS therapies segment also performed well with 20% growth over the year driven by Biogen's Tecfidera & Tysabri and Novartis's Gilenya.

Top 10 Therapy Sales in 2014, Market Share & Sales Growth (2013-2014)

Source: EvaluatePharma® 22 May 2015



Worldwide Prescription Drug & OTC Sales by Therapy Area: Top 15 Categories

Source: EvaluatePharma® 22 May 2015

Rank	Therapy Area	WW Sales (\$bn)			WW Market Share			Rank Chg. (+/-)
		2013	2014	% Growth	2013	2014	Chg. (+/-)	
1.	Oncology	73.3	79.2	+8%	9.6%	10.1%	+0.5pp	-
2.	Anti-rheumatics	45.0	48.8	+8%	5.9%	6.2%	+0.3pp	-
3.	Anti-virals	27.8	43.1	+55%	3.7%	5.5%	+1.9pp	+1
4.	Anti-diabetics	38.3	41.4	+8%	5.0%	5.3%	+0.3pp	-1
5.	Bronchodilators	32.6	32.5	-0%	4.3%	4.2%	-0.1pp	-
6.	Anti-hypertensives	33.7	30.5	-9%	4.4%	3.9%	-0.5pp	-
7.	Vaccines	25.7	26.7	+4%	3.4%	3.4%	+0.0pp	-
8.	MS therapies	16.2	19.4	+20%	2.1%	2.5%	+0.4pp	-
9.	Sensory Organs	17.5	18.6	+6%	2.3%	2.4%	+0.1pp	-
10.	Anti-hyperlipidaemics	20.1	17.8	-11%	2.6%	2.3%	-0.4pp	+2

Top 11-15 continued over...



Source: EvaluatePharma® 22 May 2015

Rank	Therapy Area	WW Sales (\$bn)			WW Market Share			Rank
		2013	2014	% Growth	2013	2014	Chg. (+/-)	Chg. (+/-)
11.	Anti-bacterials	14.7	13.4	-9%	1.9%	1.7%	-0.2pp	-
12.	Dermatologicals	13.0	12.8	-2%	1.7%	1.6%	-0.1pp	-2
13.	Anti-psychotics	13.8	12.7	-8%	1.8%	1.6%	-0.2pp	-
14.	Antacids & anti-ulcerants	13.1	12.0	-9%	1.7%	1.5%	-0.2pp	-
15.	Anti-fibrinolytics	11.1	11.4	+3%	1.5%	1.5%	+0.0pp	+1
	Top 15	396.0	420.5	+6%	52.0%	53.8%	+1.8pp	
	Other	365.2	360.4	-1%	48.0%	46.2%		
	Total WW Rx & OTC Sales	761.3	780.8	+3%	100.0%	100.0%		
	Total 'Rx & OTC Sales' includes:							
	WW Generic Sales	69.4	74.2	+7%	9.1%	9.5%	+0.4pp	
	OTC Pharmaceuticals	38.3	37.7	-1%	5.0%	4.8%	-0.2pp	

Note: Industry sales based on Top 500 pharmaceutical and biotech companies.

Sales in 2014 based on company reported data.

Worldwide Prescription Drug Sales in 2014



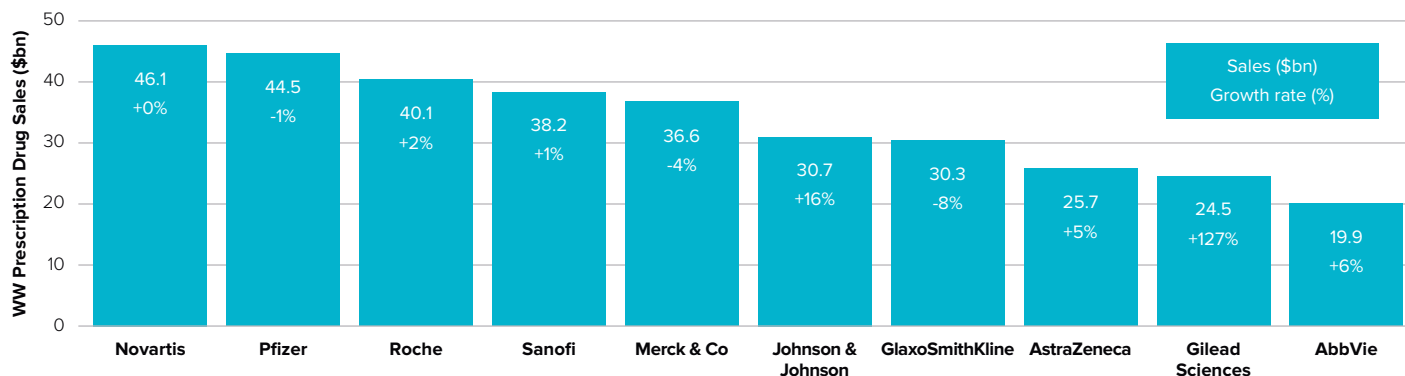
Novartis number one pharmaceutical company in 2014.

EvaluatePharma® finds that Novartis remained the number one global pharmaceutical company in 2014, in terms of worldwide prescription drug sales, even after a year of minimal growth. Gilead had an unprecedented year adding \$13.7bn to its total prescription

sales in 2014. Overall, industry-wide prescription drug sales grew by 2.8% between 2013 and 2014, which is a 2.5 percentage point improvement on the lacklustre 0.3% growth reported in last year's edition of the World Preview report.

Global Ranking on Worldwide Prescription Drug Sales in 2014

Source: EvaluatePharma® 22 May 2015



Worldwide Prescription Drug Sales in 2014: Top 20 Companies

Source: EvaluatePharma® 22 May 2015

Rank	Company	WW Rx Sales (\$bn)			WW Market Share			Rank Chg. (+/-)
		2013	2014	% Growth	2013	2014	Chg. (+/-)	
1.	Novartis	46.0	46.1	+0%	6.4%	6.2%	-0.2pp	-
2.	Pfizer	45.0	44.5	-1%	6.2%	6.0%	-0.2pp	-
3.	Roche	39.1	40.1	+2%	5.4%	5.4%	-0.0pp	-
4.	Sanofi	37.7	38.2	+1%	5.2%	5.1%	-0.1pp	+1
5.	Merck & Co	38.0	36.6	-4%	5.3%	4.9%	-0.3pp	-1
6.	Johnson & Johnson	26.5	30.7	+16%	3.7%	4.1%	+0.5pp	+1
7.	GlaxoSmithKline	33.1	30.3	-8%	4.6%	4.1%	-0.5pp	-1
8.	AstraZeneca	24.5	25.7	+5%	3.4%	3.5%	+0.1pp	-
9.	Gilead Sciences	10.8	24.5	+127%	1.5%	3.3%	+1.8pp	+9
10.	AbbVie	18.8	19.9	+6%	2.6%	2.7%	+0.1pp	-
11.	Amgen	18.2	19.3	+6%	2.5%	2.6%	+0.1pp	-
12.	Teva Pharmaceutical Industries	17.5	17.5	+0%	2.4%	2.4%	-0.1pp	-
13.	Eli Lilly	20.1	16.3	-19%	2.8%	2.2%	-0.6pp	-4
14.	Bayer	15.5	16.3	+5%	2.1%	2.2%	+0.0pp	-1
15.	Novo Nordisk	14.9	15.8	+6%	2.1%	2.1%	+0.1pp	-1
16.	Boehringer Ingelheim	14.5	13.4	-7%	2.0%	1.8%	-0.2pp	-1
17.	Takeda	13.2	13.0	-2%	1.8%	1.7%	-0.1pp	-1
18.	Bristol-Myers Squibb	12.3	12.0	-3%	1.7%	1.6%	-0.1pp	-1
19.	Actavis	7.2	11.1	+54%	1.0%	1.5%	+0.5pp	+5
20.	Astellas Pharma	10.3	10.4	+1%	1.4%	1.4%	-0.0pp	-1
Total Top 20		463.3	481.8	+4%	64.1%	64.8%	+0.8pp	
Other		259.7	261.3	+1%	35.9%	35.2%		
Total		723.0	743.1	+2.8%	100.0%	100.0%		

Note: Sales in 2014 based on company reported data. Excludes alliance revenue and royalties where possible.



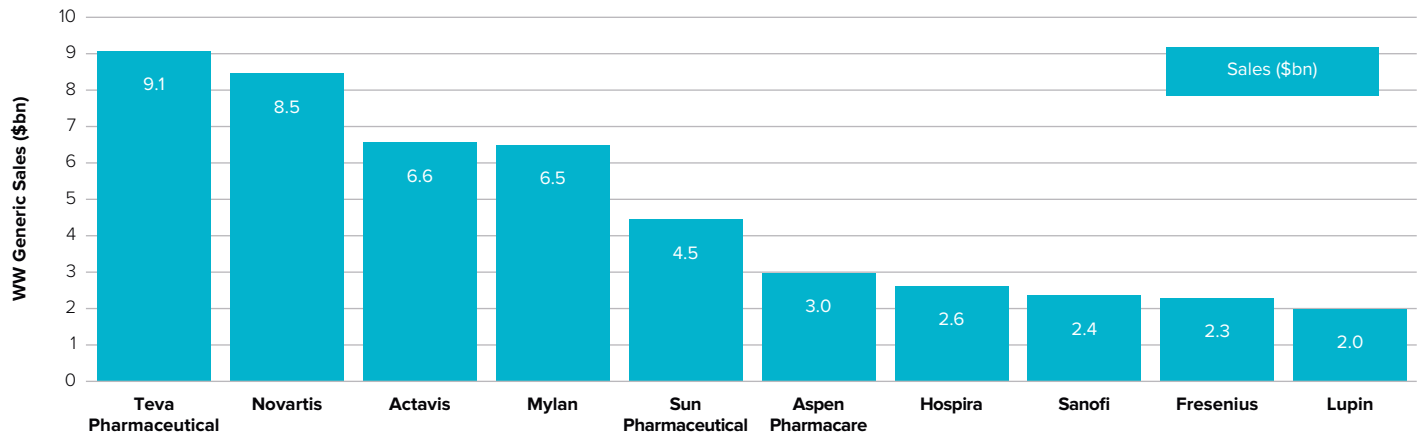
Teva remained top generic company in 2014.

EvaluatePharma® finds that, despite a second year of declining sales, Teva continued to be the top manufacturer of generic products in 2014 with a total \$9.1bn or 12.2% of the total worldwide market. Sun Pharmaceutical Industries began to consolidate all

of Ranbaxy Laboratories's sales in 2014, which resulted in a 68% increase in its global generic sales. Overall, the generic market expanded by 7% in 2014 (versus 5% in 2013) to \$74.2bn, based on EvaluatePharma® coverage*.

Global Ranking on Worldwide Generic Drug Sales in 2014

Source: EvaluatePharma® 22 May 2015



Worldwide Unbranded Generic Drug Sales in 2014: Top 20 Companies

Source: EvaluatePharma® 22 May 2015

Rank	Company	WW Generic Sales (\$bn)			WW Market Share			Rank Chg. (+/-)
		2013	2014	% Growth	2013	2014	Chg. (+/-)	
1.	Teva Pharmaceutical Industries	9.2	9.1	-1%	13.3%	12.2%	-1.0pp	-
2.	Novartis	8.2	8.5	+4%	11.8%	11.5%	-0.3pp	-
3.	Actavis	6.3	6.6	+6%	9.0%	8.9%	-0.1pp	-
4.	Mylan	5.9	6.5	+10%	8.5%	8.8%	+0.3pp	-
5.	Sun Pharmaceutical Industries	2.7	4.5	+68%	3.8%	6.0%	+2.2pp	+1
6.	Aspen Pharmacare	2.7	3.0	+13%	3.9%	4.1%	+0.2pp	-1
7.	Hospira	2.4	2.6	+12%	3.4%	3.6%	+0.2pp	-
8.	Sanofi	2.2	2.4	+11%	3.1%	3.2%	+0.1pp	+1
9.	Fresenius	2.3	2.3	+0%	3.3%	3.1%	-0.2pp	-1
10.	Lupin	1.7	2.0	+19%	2.4%	2.7%	+0.3pp	+1

Top 11-20 continued over...



Source: EvaluatePharma[®] 22 May 2015

Rank	Company	WW Generic Sales (\$bn)			WW Market Share			Rank
		2013	2014	% Growth	2013	2014	Chg. (+/-)	Chg. (+/-)
11.	Dr. Reddy's Laboratories	1.6	1.8	+10%	2.4%	2.4%	+0.1pp	+1
12.	Apotex	1.7	1.7	-2%	2.5%	2.3%	-0.2pp	-2
13.	STADA Arzneimittel	1.6	1.6	-1%	2.3%	2.2%	-0.2pp	-
14.	Aurobindo Pharma	0.9	1.6	+75%	1.3%	2.1%	+0.8pp	+9
15.	Cipla	1.2	1.4	+17%	1.7%	1.9%	+0.2pp	+1
16.	Krka Group	1.3	1.3	+1%	1.9%	1.8%	-0.1pp	-1
17.	Valeant Pharmaceuticals International	1.5	1.2	-17%	2.1%	1.6%	-0.5pp	-3
18.	Zydus Cadila	0.9	1.2	+28%	1.3%	1.6%	+0.3pp	+1
19.	Par Pharmaceutical Companies	1.0	1.2	+20%	1.4%	1.6%	+0.2pp	-1
20.	Nichi-Iko Pharmaceutical	1.0	1.2	+12%	1.5%	1.6%	+0.1pp	-3
Total Top 20		56.1	61.7	+10%	80.9%	83.1%	+2.2pp	
Other		13.3	12.6	-6%	19.1%	16.9%		
Total		69.4	74.2	+7%	100.0%	100.0%		

Note: Sales in 2014 based on company reported data (Aspen Pharmacare, Lupin, Dr. Reddy's Laboratories, Apotex, Aurobindo Pharma, Cipla and Zydus Cadila based on forecast data for 2014).

* EvaluatePharma[®] coverage: 60 generic companies.

** Sun sales consolidate Ranbaxy in 2014.



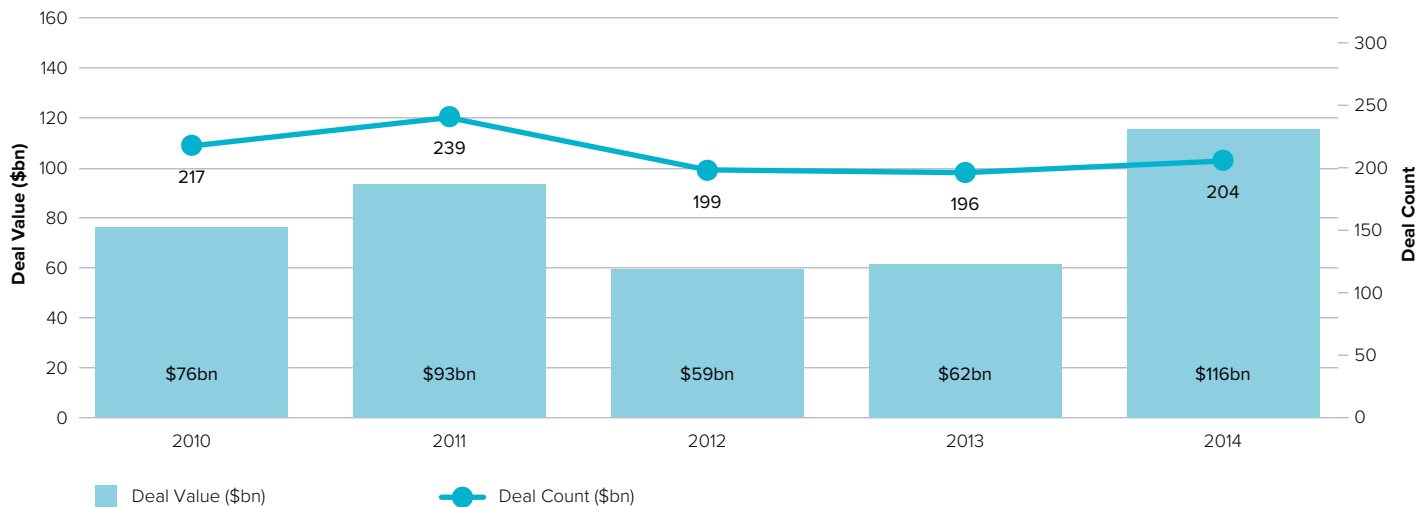
Value of M&A transactions almost doubled to \$116bn; number of transactions increased after two years of decline.

EvaluatePharma® finds that the total number of deals involving pharmaceutical companies increased after two consecutive years of decline. In 2014, a total of 204 transactions completed, representing

a year-on-year increase of 4%. This increase in volume was accompanied by an 88% increase in deal value, representing a total value of \$116bn versus \$62bn a year ago. The largest deal of the year saw Actavis acquire Forest Laboratories for \$28bn in July 2014.

No. of Pharma M&A Deals vs. Total Pharma M&A Value

Source: EvaluatePharma® 22 May 2015



Key M&A Deals

Target [Acquiror]: Deal Value

2010 – Alcon [NVS]: \$28.1bn (majority stake)

2011 – GENZ [Sanofi]: \$20.1bn, NYC [Takeda]: \$13.1bn, Alcon [NVS]: \$9.6bn

2012 – Pharmasset [GILD]: \$11.0bn, Amylin [BMY]: \$7bn

2013 – Onyx [AMGN]: \$10.4bn, Bausch + Lomb [VRX]: \$8.7bn, Elan [PRGO]: \$8.6bn

2014 – Forest [ACT]: \$28.0bn, InterMune [Roche]: \$8.3bn, Questcor [MNK]: \$5.6bn

Count of Pharma M&A Deals vs. Total Pharma M&A Value (2005-2014)

Source: EvaluatePharma® 22 May 2015

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Deal Count	153	154	180	187	177	217	239	199	196	204
% Chg.		1%	17%	4%	-5%	23%	10%	-17%	-2%	4%
Deal Value (\$bn)	70	96	88	71	189	76	93	59	62	116
% Chg.		37%	-8%	-19%	167%	-60%	23%	-37%	5%	88%



Top M&A Deals in 2014: Ranked on Deal Value

Source: EvaluatePharma[®] 22 May 2015

Rank	Target	Target Location	Target Focus	Acquirer	Completion Date	Deal Value (\$bn)
1.	Forest Laboratories	USA	Specialty	Actavis	01 Jul 14	28.0
2.	InterMune	USA	Biotechnology	Roche	29 Sep 14	8.3
3.	Questcor Pharmaceuticals	USA	Specialty	Mallinckrodt	14 Aug 14	5.6
4.	BMS Diabetes Business*	USA	Specialty	AstraZeneca	01 Feb 14	4.3
5.	ViroPharma	USA	Biotechnology	Shire	24 Jan 14	4.2
6.	Idenix Pharmaceuticals	USA	Biotechnology	Merck & Co	05 Aug 14	3.9
7.	Galderma	Switzerland	Specialty	Nestlé	08 Jul 14	3.6
8.	Rottapharm	Italy	Regional Major	Meda	10 Oct 14	3.1
9.	Algeta	Norway	Biotechnology	Bayer	06 Mar 14	2.9
10.	Aptalis Holdings	USA	Specialty	Forest Laboratories	03 Feb 14	2.9
11.	CFR Pharmaceuticals	Chile	Specialty	Abbott Laboratories	26 Sep 14	2.9
	Other					49.0
	Total					115.8

* Bristol-Myers Squibb's diabetes business

Note: Analysis based on closing date of deal.

Venture Financing Analysis (2007-2014)



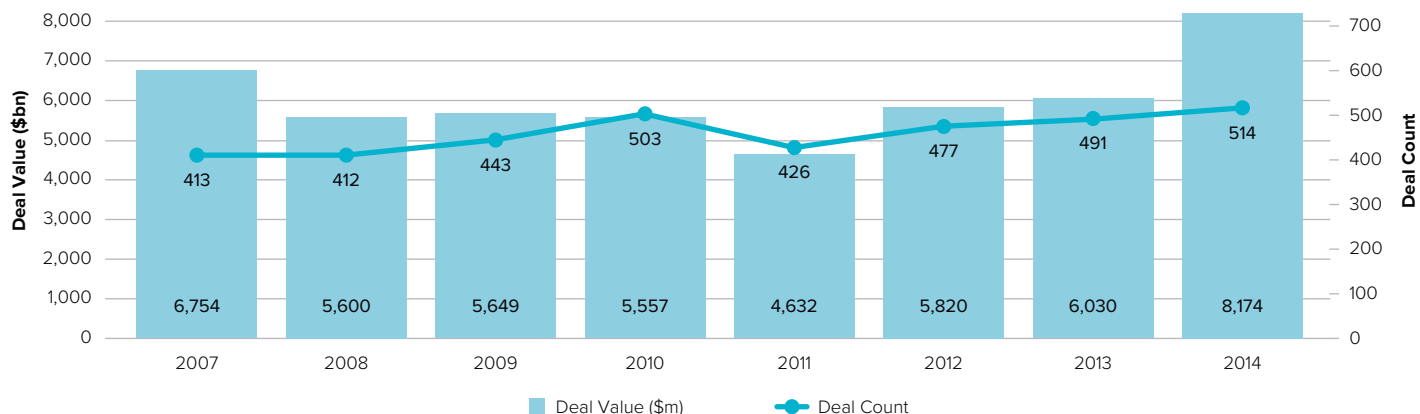
Value of venture financing deals leapt 36% to \$8.2bn in 2014.

EvaluatePharma® finds that the total value of pharmaceutical venture financing deals leaped by 36% to reach \$8.2bn in 2014. Three of the top ten deals in 2014 were Private Investment in Public Equity (PIPE), with private investment in Alkermes, Lexicon and Idenix. Despite the

massive increase in the total value of deals in 2014, there was only a 5% increase in the number of deals, up from 491 in 2013 to 514 in 2014. Of the top ten deals, all involved biotechnology companies and all but three were located in the USA.

No. of Venture Financing Deals vs. Total Venture Financing Value

Source: EvaluatePharma® 22 May 2015



Count of Pharma Venture Financing Deals vs. Total Pharma Venture Financing Value (2007-2014)

Year	2007	2008	2009	2010	2011	2012	2013	2014
Deal Count	413	412	443	503	426	477	491	514
% Chg.		0%	8%	14%	-15%	12%	3%	5%
Deal Value (\$m)	6,754	5,600	5,649	5,557	4,632	5,820	6,030	8,174
% Chg.		-17%	1%	-2%	-17%	26%	4%	36%

Top 10 Venture Financing Deals in 2014: Ranked on Deal Value

Source: EvaluatePharma® 22 May 2015

Rank	Company	Listed / Private	Country	Company Type	Financing Round	Date	Deal Value (\$m)
1.	Alkermes	Listed	Ireland	Biotechnology	PIPE	13 Jan 14	250
2.	NantWorks	Private	USA	Biotechnology; MedTech	Series B	01 Oct 14	250
3.	Intarcia Therapeutics	Private	USA	Biotechnology	Series H	01 Apr 14	200
4.	Lexicon Pharmaceuticals	Listed	USA	Biotechnology	PIPE	26 Nov 14	150
5.	Juno Therapeutics	Listed	USA	Biotechnology	Series B	05 Aug 14	134
6.	Idenix Pharmaceuticals	Listed	USA	Biotechnology	PIPE	28 Jan 14	107
7.	Adaptimmune	Listed	UK	Biotechnology	Series A	25 Sep 14	104
8.	Paratek Pharmaceuticals	Listed	USA	Biotechnology	Series I	14 Jul 14	93
9.	Cell Medica	Private	UK	Biotechnology	Series B	25 Nov 14	80
10.	Naurex	Private	USA	Biotechnology	Series C	03 Dec 14	80
	Other						6,726
	Total						8,174

Note: Includes investments in pharmaceutical and biotech companies. Does not include pure-play genomics or medical device companies. Includes Private Investment in Public Equity (PIPE). Deal value represents the total disclosed value. Deal count includes all deals regardless of whether the value was disclosed.

Key Product Events Positively Impacting Shareholder Value in 2014

part 1 of 2



Positive trial results adds \$8bn to Bristol-Myers Squibb's market capitalisation.

The analysis below highlights the top 15 product events that positively impacted shareholder value on the day of the announcement (as measured by a change in market capitalisation) in 2014. Positive

results from Bristol-Myers's NSCLC trial in October 2014 translated to a 9% increase in its share price, adding \$8bn to the company's market capitalisation. Vertex saw the value of its shares increase by 40% following favourable results from its cystic fibrosis combination therapy, adding over \$6bn to the company's value.

Source: EvaluatePharma[®] 22 May 2015

Rank	Company	Event Type	Product	Therapy Area	Date	Commentary on Share Price Change	% Share Price Change	Market Cap Change
1.	Bristol-Myers Squibb	Phase II Trial Results	Opdivo	Oncology & Immunomodulators	30 Oct 14	30 Oct: Company reports positive results from the Checkpoint-063 study of its anti-PD-1 MAb Opdivo in heavily pre-treated squamous cell NSCLC.	+9%	+7,996
2.	Vertex Pharmaceuticals	Phase III Trial Results	VX-809 + ivacaftor	Respiratory	24 Jun 14	24 Jun: Company announces results from two phase III studies of cystic fibrosis treatment, VX-809, in combination with Kalydeco (ivacaftor), in which the treatment meets its primary endpoint of statistically significant improvements in lung function; US and EU filings due Q4'14.	+40%	+6,358
3.	Puma Biotechnology	Phase III Trial Results	PB272 (neratinib)	Oncology & Immunomodulators	23 Jul 14	22 Jul [post market]: Company reports phase III results for its breast cancer drug, neratinib, in which the drug meets its primary and secondary endpoints, demonstrating a 33% improvement in disease-free survival compared to placebo; US filing due H1'15. 23 Jul: Citigroup maintains a "buy" rating and raises price target to \$292 from \$99, citing the company's phase III results for neratinib, and stating that the company is a likely acquisition target.	+295%	+5,252
4.	Intercept Pharmaceuticals	Phase II Trial Results	Obeticholic acid	Gastro-intestinal	09 Jan 14	9 Jan: A data safety monitoring board recommends halting a phase IIb trial early for company's nonalcoholic steatohepatitis treatment, obeticholic acid, as the drug demonstrates highly statistically significant improvement in the primary histological endpoint. BMO Capital Markets reiterates an "outperform" rating and raises price target to \$270 from \$107.	+281%	+3,934
5.	Intercept Pharmaceuticals	Phase II Trial Results	Obeticholic acid	Gastro-intestinal	10 Jan 14	10 Jan: Multiple analysts raise their price targets following news on 9 Jan that a phase IIb trial for the company's nonalcoholic steatohepatitis treatment, obeticholic acid, is halted early after the drug demonstrates a highly statistically significant improvement in the primary histological endpoint.	+62%	+3,287
6.	Regeneron Pharmaceuticals	Licensing Announcement	Eylea	Sensory Organs	14 Jan 14	13 Jan [post market]: Company signs a deal with Bayer to develop an innovative antibody to PDGFR-beta as a potential combination therapy with Eylea for the treatment of wet AMD, under which Regeneron will receive an upfront payment of \$25.5m and up to \$40m in option and milestone payments. 14 Jan: Company discloses in an SEC filing that it anticipates higher Q4'13 sales of its age-related macular degeneration treatment, Eylea.	+12%	+3,081
7.	AbbVie	Broker Upgrade	Viekira Pak	Systemic Anti-infectives	07 May 14	7 May: Morgan Stanley upgrades rating to "overweight" from "equal weight" and raises price target to \$60 from \$47, citing potential for the company's hepatitis C cure regimen which is due to launch in late 2014.	+4%	+3,000
8.	Regeneron Pharmaceuticals	Phase IV Trial Results	Eylea	Sensory Organs	17 Oct 14	17 Oct: NIH-sponsored study shows that company's treatment for diabetic macular oedema, Eylea, demonstrates greater improvement in visual acuity than Roche's rival drugs, Avastin and Lucentis.	+8%	+2,867
9.	Eli Lilly	Phase III Trial Results	Cyramza (ramucirumab)	Oncology & Immunomodulators	19 Feb 14	19 Feb: Company announces the result of phase III study, evaluating ramucirumab plus chemotherapy in patients with 2nd-line non-small cell lung cancer, met its primary endpoint of overall survival compared with a placebo.	+5%	+2,797
10.	Alexion Pharmaceuticals	New Company Financial Guidance	Soliris	Blood	10 Mar 14	10 Mar: Company revises upwards its profit and sales outlook for the year after the French government agrees to raise reimbursement payments for the company's lead drug, Soliris.	+7%	+2,364

Key Product Events Positively Impacting Shareholder Value in 2014

part 2 of 2



Rank	Company	Event Type	Product	Therapy Area	Date	Commentary on Share Price Change	% Share Price Change	Market Cap Change
11.	InterMune	Phase III Trial Results	Esbriet	Respiratory	25 Feb 14	25 Feb: Company reports top-line phase III data for its idiopathic pulmonary fibrosis treatment, Esbriet, in which the drug meets both its primary and secondary endpoints, improving lung function and significantly reducing disease progression; NDA resubmission due Q3'14. Multiple analysts raise price targets.	+171%	+2,139
12.	Astellas Pharma	Results	Xtandi	Oncology & Immunomodulators	04 Nov 14	4 Nov: Shares rise for a second day after company reports strong Xtandi sales in its Q3'14 results, and raises forecasts for the prostate cancer treatment (Note: No trading 3 Nov due to public holiday).	+5%	+2,030
13.	Actelion	Phase III Trial Results	Upravi (selexipag)	Cardiovascular	16 Jun 14	16 Jun: Company announces phase III results for pulmonary arterial hypertension treatment, selexipag, in which the drug meets its primary endpoints.	+15%	+1,851
14.	Astellas Pharma	Phase III Trial Results	Xtandi	Oncology & Immunomodulators	29 Jan 14	28 Jan [post market]: Company and partner, Medivation, report phase III data for prostate cancer treatment, Xtandi, in which the drug significantly delays progression of the disease and extends survival in chemotherapy-naive patients, raising hopes for expanded approval of the drug for pre-chemotherapy use.	+6%	+1,760
15.	Merck & Co	Broker Upgrade	Keytruda (MK-3475, pembrolizumab)	Oncology & Immunomodulators	27 Jan 14	27 Jan: Morgan Stanley upgrades rating to "overweight" from "underweight" with a price target of \$60, stating that the company's prospects for its new cancer drug, MK-3475, have improved and could bring more than \$6bn in annual sales by 2020, and citing the company's decision to file for approval of the drug one year earlier than expected.	+1%	+1,607
Top 15 Total								+50,323

Note: EvaluatePharma's EventAnalyzer contains a back catalogue of events which had the greatest impact on company valuations dating back to December 2007. Events can be viewed by Company, Product, Therapy Area and Peer Group to see instantly the impact of events on company valuation and the news flow driving share price movement. Events are categorised into 100 unique Event Type classifications, allowing you to track the market impact of key types of news flow (e.g. regulatory approvals, financial results, patent litigation, broker sentiment and competitor announcements, etc).

Key Product Events Negatively Impacting Shareholder Value in 2014

part 1 of 2



Gilead's share price fell 14% following Express Scripts's decision to exclude Sovaldi and Harvoni.

The analysis below highlights the top 15 product events that negatively impacted shareholder value on the day of the announcement (as measured by a change in market capitalisation) in 2014. In December 2014, over \$23bn was wiped off Gilead's market capitalisation following

Express Scripts announcement that it would not cover the company's Hepatitis C drugs, Sovaldi and Harvoni. Disappointing Phase III results for Roche's anticancer therapeutic Kadcyla and its Alzheimer's treatment gantenerumab resulted in a 6% fall in its share price, or \$15.8bn of the company's value.

Source: EvaluatePharma[®] 22 May 2015

Rank	Company	Event Type	Product	Therapy Area	Date	Commentary on Share Price Change	% Share Price Change	Market Cap Change
1.	Gilead Sciences	Competitor Announcement	Harvoni & Sovaldi	Systemic Anti-infectives	22 Dec 14	22 Dec: Express Scripts says it will exclusively cover AbbVie's newly-approved hep C therapy Viekira Pak, under a deal struck between the companies, to the exclusion of Gilead's Harvoni and Sovaldi. Bank of America downgrades rating to "underperform" from "neutral" and lowers price target to \$87 from \$130.	-14%	-23,460
2.	Roche	Phase III Trial Results	Kadcyla	Oncology & Immunomodulators	19 Dec 14	19 Dec: Phase III trial of company's anticancer therapeutics, Kadcyla plus Perjeta, did not show significant improvement in PFS compared to Herceptin and chemotherapy. Company also reports the discontinuation of its phase III trial of Alzheimer's disease treatment, gantenerumab, citing poor results.	-6%	-15,801
3.	Biogen	Competitor Announcement	Alprolix	Blood	21 Mar 14	21 Mar: Gilead Sciences receives a notice from several democrats requesting an explanation of the pricing methods behind its hepatitis C drug, Sovaldi, which has been priced at \$1,000 a day, raising fears for other high-cost treatments such as Biogen Idec's hemophilia B drug, Alprolix.	-8%	-6,739
4.	Gilead Sciences	Competitor Announcement	Sovaldi	Systemic Anti-infectives	09 Jun 14	9 Jun: Merck plans to buy Idenix for \$3.85bn, raising competition for Gilead's hepatitis C drug, Sovaldi.	-4%	-5,198
5.	Biogen	Results	Tecfidera	Central Nervous System	22 Oct 14	23 Oct: Q3 sales of MS treatment Tecfidera miss expectations, and the company reports the first case of progressive multifocal leukoencephalopathy in a patient taking the drug.	-5%	-4,177
6.	Biogen	Broker Downgrade	Anti-LINGO-1	Central Nervous System	14 Nov 14	14 Nov: Citi removes company from its "most preferred pharma" list, citing concerns about the company's multiple sclerosis treatment, Anti-LINGO-1, as well as patent litigation.	-4%	-2,964
7.	Intercept Pharmaceuticals	Phase II Trial Results	Obeticholic acid	Gastro-Intestinal	14 Jan 14	Shares continue to fall after company's CEO, Mark Pruzanski, disclosed on 13 Jan that the company may require a partner to help bring its lead drug, nonalcoholic steatohepatitis treatment, obeticholic acid, to market; the company also released additional phase IIb trial data for the drug which indicated that patients receiving the drug had higher cholesterol levels compared with those using a placebo.	-30%	-2,112
8.	Regeneron Pharmaceuticals	Results	Eylea	Sensory Organs	04 Nov 14	4 Nov: Q3'14 sales miss forecasts on slower than expected uptake of eye drug Eylea, and the company lowers FY sales forecasts for the drug.	-6%	-2,041
9.	AbbVie	Litigation	AndroGel	Genito-Urinary	09 Jun 14	9 Jun: AbbVie and Abbott Laboratories to face lawsuits combined in one Chicago court over claims that the companies hid the risks of using testosterone-replacement drug, AndroGel.	-2%	-2,004
10.	Intercept Pharmaceuticals	Phase II Trial Results	Obeticholic acid	Gastro-Intestinal	13 Jan 14	13 Jan: Company reports additional data from a phase IIb trial for its nonalcoholic steatohepatitis treatment, obeticholic acid, which indicates that patients receiving the drug had disproportionate lipid abnormalities, including higher cholesterol levels, compared with those using a placebo. Company's CEO, Mark Pruzanski, also discloses that the company may require a partner to help bring obeticholic acid to market.	-18%	-1,576

Key Product Events Negatively Impacting Shareholder Value in 2014

part 2 of 2



Rank	Company	Event Type	Product	Therapy Area	Date	Commentary on Share Price Change	% Share Price Change	Market Cap Change
11.	Intercept Pharmaceuticals	Phase II Trial Results	Obeticholic acid	Gastro-Intestinal	07 Nov 14	7 Nov: Phase II trials show liver disease treatment, Obeticholic Acid, affects cholesterol levels, raising safety concerns. Company also reports wider-than-expected Q3'14 losses. Leerink Swann downgrades rating to "market perform" from "outperform" and lowers price target to \$191 from \$445.	-30%	-1,553
12.	Allergan	Complete Response Letter	Semprana (Levadex)	Central Nervous System	30 Jun 14	30 Jun: Company receives a second complete response letter for its acute migraine aerosol treatment, Levadex, citing concerns about the drug's delivery device. Company receives FDA approval for its diabetic macular edema treatment, Ozurdex.	-3%	-1,407
13.	Regeneron Pharmaceuticals	Market Speculation	Eylea	Sensory Organs	20 Jun 14	20 Jun: BMO Capital issues a note stating that approximately 10% of users of the company's macular degeneration treatment, Eylea, are switching to other treatments, such as Roche's Avastin.	-4%	-1,230
14.	Sumitomo Dainippon Pharma	Product Suspended	BBI608	Oncology & Immunomodulators	26 May 14	23 May [post market]: Company suspends a study on its colorectal cancer, BBI608, after an independent safety monitoring committee states that the drug has failed to meet the criteria set for managing the disease. Multiple analysts downgrade ratings.	-21%	-1,167
15.	Intercept Pharmaceuticals	Safety Concerns	Obeticholic acid	Gastro-Intestinal	17 Mar 14	14 Mar [post market]: Company reports slightly wider-than-expected Q4'13 losses. Company also discloses in its 10K filing that 7 patients with nonalcoholic steatohepatitis taking the company's liver drug, obeticholic acid, experienced cardiovascular serious adverse events in phase II trials.	-12%	-990
Top 15 Total								-72,419

Note: EvaluatePharma™'s EventAnalyzer contains a back catalogue of events which had the greatest impact on company valuations dating back to December 2007. Events can be viewed by Company, Product, Therapy Area and Peer Group to see instantly the impact of events on company valuation and the news flow driving share price movement. Events are categorised into 100 unique Event Type classifications, allowing you to track the market impact of key types of news flow (e.g. regulatory approvals, financial results, patent litigation, broker sentiment and competitor announcements, etc).



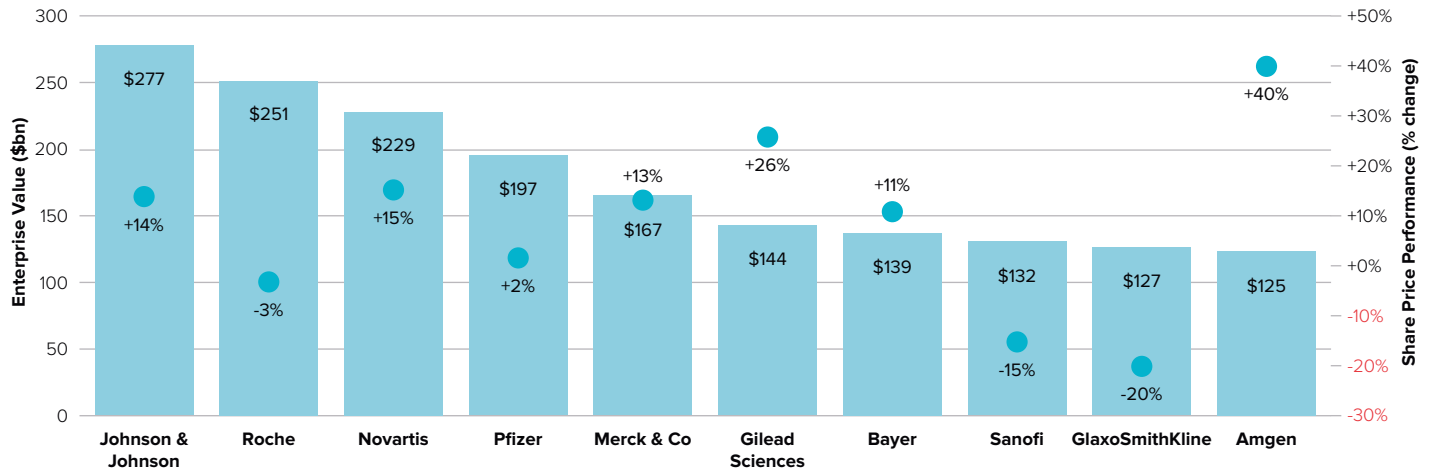
Johnson & Johnson remained the most valuable pharma company in 2014.

EvaluatePharma® finds that Johnson & Johnson continued to have the largest enterprise value in 2014 after increasing 12% over the year to \$276.7bn. Amgen's share price increased by 40% between

2013 and 2014 and this was accompanied by a 26% increase in its enterprise value. Overall, the top 20 pharma companies' share prices performed well with an average 17% gain over the course of the year.

Global Ranking on Enterprise Value in 2014

Source: EvaluatePharma® 22 May 2015



Top 20 Companies in 2014: Ranked by Enterprise Value (based on valuation on 31 DEC 14)

Source: EvaluatePharma® 22 May 2015

Rank	Company	Enterprise Value (\$bn)			Share Price (\$ ADR)			Enterprise Value Ranking		
		2013	2014	% Growth	2013	2014	% Growth	2013	2014	Chg. (+/-)
1.	Johnson & Johnson	247.3	276.7	+12%	91.59	104.57	+14%	1	1	-
2.	Roche	246.2	250.9	+2%	35.10	33.99	-3%	2	2	-
3.	Novartis	203.7	228.8	+12%	80.38	92.66	+15%	3	3	-
4.	Pfizer	200.1	196.6	-2%	30.63	31.15	+2%	4	4	-
5.	Merck & Co	154.1	166.9	+8%	50.05	56.79	+13%	5	5	-
6.	Gilead Sciences	119.7	143.6	+20%	75.10	94.26	+26%	9	6	+3
7.	Bayer	124.6	139.0	+12%	101.95	113.00	+11%	8	7	+1
8.	Sanofi	148.4	132.0	-11%	53.63	45.61	-15%	7	8	-1
9.	GlaxoSmithKline	148.9	127.2	-15%	53.39	42.74	-20%	6	9	-3
10.	Amgen	98.8	124.8	+26%	114.08	159.29	+40%	10	10	-

Top 11-20 continued over...



Rank	Company	Enterprise Value (\$bn)			Share Price (\$ ADR)			Enterprise Value Ranking		
		2013	2014	% Growth	2013	2014	% Growth	2013	2014	Chg. (+/-)
11.	AbbVie	88.7	110.8	+25%	52.81	65.44	+24%	13	11	+2
12.	Bristol-Myers Squibb	91.5	98.4	+8%	53.15	59.03	+11%	12	12	-
13.	Novo Nordisk	93.8	93.2	-1%	36.95	42.32	+15%	11	13	-2
14.	AstraZeneca	75.0	92.6	+23%	59.37	70.38	+19%	14	14	-
15.	Celgene	68.3	88.8	+30%	84.49	111.86	+32%	15	15	-
16.	Actavis	38.0	83.7	+120%	168.00	257.41	+53%	36	16	+20
17.	Eli Lilly	56.8	79.9	+41%	51.00	68.99	+35%	23	17	+6
18.	Biogen	65.4	78.4	+20%	279.57	339.45	+21%	16	18	-2
19.	Abbott Laboratories	57.8	71.3	+23%	38.33	45.02	+17%	22	19	+3
20.	Valeant Pharmaceuticals International	55.9	62.8	+12%	117.40	143.11	+22%	24	20	+4
Total Top 20		2,382.9	2,646.2	+11%	avg.		+17%			
					S&P 500:		+11%			

Enterprise Value = Market Capitalisation + Debt - Cash.

Net Income in 2014: Top 20 Companies

part 1 of 2



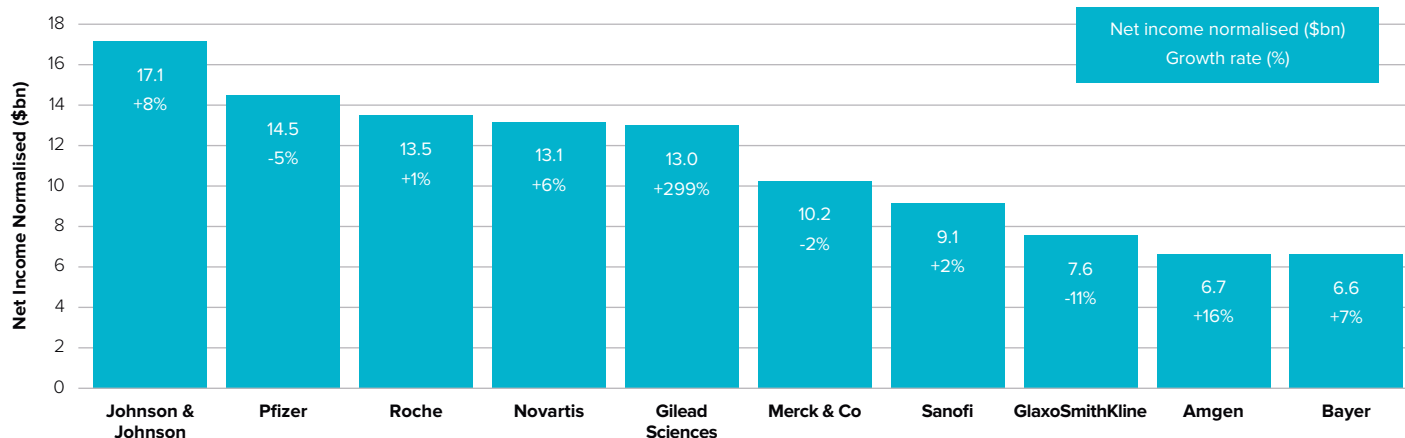
Johnson & Johnson remained number one in terms of net income in 2014.

EvaluatePharma® finds that Johnson & Johnson reported the industry's largest net income (normalised) following an 8% increase over the period to \$17.1bn. Gilead Sciences's net income grew

almost 300% to \$13.0bn after its successful launch of its Hepatitis C treatment, Sovaldi. The company's growth in net income was accompanied by an impressive 23 percentage point increase in net income margin to 52.3%. AstraZeneca dropped out of the top 10 after experiencing another year of falling net income to \$5.4bn.

Global Ranking on Net Income Normalised: Top 10

Source: EvaluatePharma® 22 May 2015



Net Income in 2014: Top 20 Companies

Source: EvaluatePharma® 22 May 2015

Rank	Company	Net Income Normalised (\$bn)			Net Margin		
		2013	2014	% Growth	2013	2014	Chg. (+/-)
1.	Johnson & Johnson	15.9	17.1	+8%	22.3%	23.0%	+0.7pp
2.	Pfizer	15.3	14.5	-5%	29.7%	29.4%	-0.3pp
3.	Roche	13.3	13.5	+1%	26.3%	26.0%	-0.4pp
4.	Novartis	12.4	13.1	+6%	23.5%	24.6%	+1.1pp
5.	Gilead Sciences	3.3	13.0	+299%	29.1%	52.3%	+23.2pp
6.	Merck & Co	10.4	10.2	-2%	23.7%	24.2%	+0.5pp
7.	Sanofi	8.9	9.1	+2%	20.3%	20.3%	-0.0pp
8.	GlaxoSmithKline	8.5	7.6	-11%	20.5%	19.9%	-0.5pp
9.	Amgen	5.8	6.7	+16%	30.9%	33.3%	+2.4pp
10.	Bayer	6.2	6.6	+7%	11.6%	11.8%	+0.2pp

Top 11-20 continued over...



Source: EvaluatePharma® 22 May 2015

Rank	Company	Net Income Normalised (\$bn)			Net Margin		
		2013	2014	% Growth	2013	2014	Chg. (+/-)
11.	AstraZeneca	6.3	5.4	-15%	24.6%	20.7%	-3.9pp
12.	AbbVie	5.1	5.4	+6%	27.0%	27.0%	+0.1pp
13.	Novo Nordisk	4.5	4.7	+5%	30.1%	29.8%	-0.3pp
14.	Teva Pharmaceutical Industries	4.3	4.4	+2%	20.9%	21.5%	+0.5pp
15.	Biogen	2.1	3.3	+54%	30.7%	33.7%	+3.0pp
16.	Actavis	1.4	3.1	+127%	15.8%	23.8%	+8.0pp
17.	Bristol-Myers Squibb	3.0	3.1	+2%	18.4%	19.4%	+1.0pp
18.	Abbott Laboratories	2.6	3.0	+17%	13.2%	15.0%	+1.8pp
19.	Eli Lilly	4.5	3.0	-34%	19.5%	15.2%	-4.3pp
20.	Valeant Pharmaceuticals International	2.0	2.8	+44%	34.3%	34.5%	+0.2pp
	Top 20	135.6	149.6	+10%	23.9%	26.6%	Weighted Avg.

Note: Excludes companies where majority of sales are derived from non-pharma sources.

Measure: Net Income (normalised)

The accounting profit a company made during 2014, adjusted to exclude any one-off items, such as restructuring charges and disposal gains/losses.

Net Income Margin in 2014: Top 20 Companies

part 1 of 2



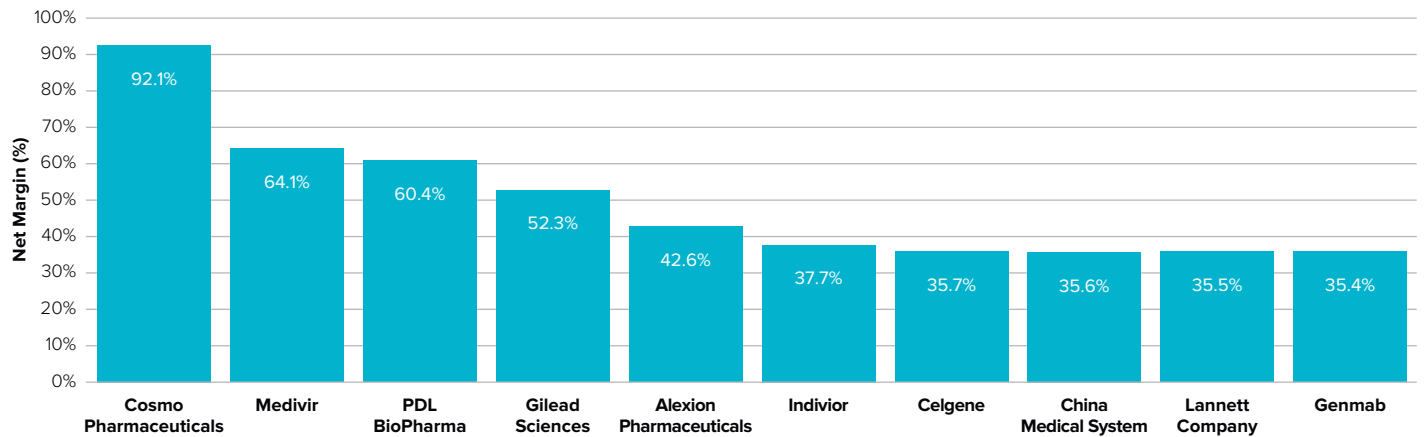
Gilead Science achieved a net margin of over 50% in 2014.

EvaluatePharma® finds that, following the successful launch of Sovaldi and Harvoni, Gilead Sciences improved its net margin by 23 percentage points to 52.3% between 2013 and 2014 --

unprecedented for a major pharmaceutical company. As a result of Cosmo Pharmaceuticals receiving most of its revenue as royalties that have little associate cost, the company recorded the highest net income margin at 92.1% in 2014.

Global Ranking on Net Income Margin 2014: Top 10

Source: EvaluatePharma® 22 May 2015



Net Margin in 2014: Top 20 Companies

Source: EvaluatePharma® 22 May 2015

Rank	Company	Net Margin			Net Income - Normalised		
		2013	2014	Chg. (+/-)	2013	2014	% Growth
1.	Cosmo Pharmaceuticals	121.9%	92.1%	-29.8pp	91	97	+6.7%
2.	Medivir	3.5%	64.1%	+60.6pp	2	166	+6,731.0%
3.	PDL BioPharma	60.5%	60.4%	-0.1pp	265	322	+21.8%
4.	Gilead Sciences	29.1%	52.3%	+23.2pp	3,265	13,018	+298.7%
5.	Alexion Pharmaceuticals	35.3%	42.6%	+7.3pp	548	951	+73.6%
6.	Indivior	40.2%	37.7%	-2.5pp	489	420	-14.1%
7.	Celgene	35.5%	35.7%	+0.2pp	2,307	2,738	+18.7%
8.	China Medical System	28.7%	35.6%	+6.9pp	105	170	+61.9%
9.	Lannett Company	20.9%	35.5%	+14.6pp	57	144	+151.5%
10.	Genmab	10.6%	35.4%	+24.9pp	12	54	+329.7%

Top 11-20 continued over...



Source: EvaluatePharma[®] 22 May 2015

Rank	Company	Net Margin			Net Income - Normalised		
		2013	2014	Chg. (+/-)	2013	2014	% Growth
11.	Shire	30.0%	34.7%	+4.7pp	1,478	2,089	+41.3%
12.	Valeant Pharmaceuticals International	34.3%	34.5%	+0.2pp	1,977	2,850	+44.1%
13.	Biogen	30.7%	33.7%	+3.0pp	2,129	3,272	+53.7%
14.	Amgen	30.9%	33.3%	+2.4pp	5,780	6,684	+15.6%
15.	Actelion	26.0%	30.6%	+4.6pp	500	655	+30.9%
16.	Novo Nordisk	30.1%	29.8%	-0.3pp	4,486	4,719	+5.2%
17.	Pfizer	29.7%	29.4%	-0.3pp	15,288	14,529	-5.0%
18.	Allergan	22.8%	28.0%	+5.1pp	1,439	2,021	+40.5%
19.	AbbVie	27.0%	27.0%	+0.1pp	5,066	5,375	+6.1%
20.	Insys Therapeutics	40.7%	26.7%	-14.0pp	40	58	+42.6%

Measure: Net Margin

A ratio measuring company profitability based on net income normalised divided by total revenue.

Note: Analysis only includes companies with two consecutive years of profit and with 2014 profit in excess of \$50m. Lannett Company is based on forecast data for 2014 (company has a June 2015 year end).

2014: Top 50 Selling Products in the World

part 1 of 3



Humira remained the top-selling product in 2014; Sovaldi debuts at number two.

EvaluatePharma® finds Humira to be the largest selling product worldwide in 2014, with sales of \$12.9bn, representing an increase

of 17% over the year. Gilead's Sovaldi enters the top 50 in the number two position after it achieved over \$10bn in its first full year on the market.

Source: EvaluatePharma® 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	WW Product Sales (\$bn)			Products Age (Yrs)	Technology
					2013	2014	% Growth		
1.	Humira	adalimumab	AbbVie + Eisai	Anti-tumour necrosis factor alpha (TNFα) MAb	11,014	12,890	+17%	12.3	Monoclonal antibody
2.	Sovaldi	sofosbuvir	Gilead Sciences	Hepatitis C nucleoside NS5B polymerase inhibitor	139	10,283	+7,275%	1.3	Small molecule chemistry
3.	Enbrel	etanercept	Amgen + Pfizer + Takeda	Tumour necrosis factor alpha (TNFα) inhibitor	8,778	8,915	+2%	16.5	Recombinant product
4.	Remicade	infliximab	JNJ + Merck & Co + Mitsubishi Tanabe	Anti-tumour necrosis factor alpha (TNFα) MAb	8,367	8,807	+5%	16.6	Monoclonal antibody
5.	Lantus	insulin glargine recombinant	Sanofi	Insulin analogue	7,592	8,428	+11%	14.8	Recombinant product
6.	Rituxan	rituximab	Roche	Anti-CD20 MAb	7,503	7,547	+1%	17.4	Monoclonal antibody
7.	Seretide/Advair	fluticasone propionate; salmeterol xinafoate	GlaxoSmithKline + Almirall + Faes	Beta 2 adrenoreceptor agonist & corticosteroid	8,341	7,058	-15%	16.6	Small molecule chemistry
8.	Avastin	bevacizumab	Roche	Anti-VEGF MAb	6,751	7,018	+4%	11.1	Monoclonal antibody
9.	Herceptin	trastuzumab	Roche	Anti-HER2 (ErbB-2) MAb	6,562	6,863	+5%	16.5	Monoclonal antibody
10.	Januvia/Janumet	sitagliptin phosphate	Merck & Co + Daewoong + Ono + Almirall	Dipeptidyl peptidase IV (DPP-IV) inhibitor	6,256	6,358	+2%	8.6	Small molecule chemistry
11.	Crestor	rosuvastatin calcium	AstraZeneca + Shionogi + Chiesi	Statin/ HMG CoA reductase inhibitor	6,105	5,987	-2%	12.2	Small molecule chemistry
12.	Lyrica	pregabalin	Pfizer + Jeil	Alpha 2 delta ligand	4,636	5,209	+12%	10.6	Small molecule chemistry
13.	Revlimid	lenalidomide	Celgene	Immunomodulator	4,302	4,980	+16%	9.2	Small molecule chemistry
14.	Gleevec	imatinib mesylate	Novartis	Tyrosine kinase inhibitor	4,693	4,746	+1%	13.9	Small molecule chemistry
15.	Abilify	aripiprazole	Otsuka Holdings	5-HT1A (serotonin) & dopamine D2 partial agonist & 5-HT2 (serotonin) antagonist	5,749	4,638	-19%	12.4	Small molecule chemistry
16.	Neulasta	pegfilgrastim	Amgen + Kyowa Hakko	Granulocyte colony-stimulating factor (G-CSF)	4,392	4,599	+5%	13.0	Recombinant product
17.	Nexium	esomeprazole magnesium	AstraZeneca + Daiichi Sankyo + Daewoong	Proton pump inhibitor (PPI)	4,431	4,325	-2%	14.7	Chiral chemistry
18.	Lucentis	ranibizumab	Novartis + Roche	Anti-VEGF MAb	4,206	4,301	+2%	8.8	Monoclonal antibody
19.	Spiriva	tiotropium bromide monohydrate	Boehringer Ingelheim	Long-acting muscarinic antagonist (LAMA)	4,719	4,300	-9%	12.9	Small molecule chemistry
20.	Prevnar 13	pneumococcal vaccine	Pfizer + Daewoong	Pneumococcal vaccine	3,763	4,297	+14%	5.3	Bioengineered vaccine

Top 21-50 continued over...



Source: EvaluatePharma® 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	WW Product Sales (\$bn)			Products Age (Yrs)	Technology
					2013	2014	% Growth		
21.	Copaxone	glatiramer acetate	Teva Pharmaceutical Industries	MS agent	4,328	4,237	-2%	18.3	Small molecule chemistry
22.	Symbicort Turbuhaler	budesonide; formoterol fumarate dihydrate	AstraZeneca + Sigma-Tau	Beta 2 adrenoreceptor agonist & corticosteroid	3,502	3,820	+9%	14.5	Small molecule chemistry
23.	Atripla	efavirenz; emtricitabine; tenofovir disoproxil fumarate	Gilead Sciences	Nucleoside & non-nucleoside reverse transcriptase inhibitor (NRTI & NNRTI)	3,648	3,470	-5%	8.7	Small molecule chemistry
24.	Truvada	emtricitabine; tenofovir disoproxil fumarate	Gilead Sciences + Torii	Nucleoside reverse transcriptase inhibitor (NRTI)	3,270	3,424	+5%	10.7	Small molecule chemistry
25.	Xarelto	rivaroxaban	Bayer + JNJ	Factor Xa inhibitor	1,948	3,366	+73%	6.6	Small molecule chemistry
26.	Epogen/Procrit	epoetin alfa	Amgen + JNJ + Kyowa Hakko Kirin	Erythropoietin	3,350	3,292	-2%	25.8	Recombinant product
27.	NovoRapid	insulin aspart recombinant	Novo Nordisk	Insulin analogue	3,001	3,109	+4%	15.5	Recombinant product
28.	Celebrex	celecoxib	Pfizer + Astellas	COX-2 inhibitor	3,360	3,081	-8%	16.2	Small molecule chemistry
29.	Avonex	interferon beta-1a	Biogen	Interferon beta	3,005	3,013	+0%	18.9	Recombinant product
30.	Eylea	afibercept	Regeneron + Bayer + Santen	VEGFr kinase inhibitor	2,039	2,972	+46%	3.4	Recombinant product
31.	Tecfidera	dimethyl fumarate	Biogen	Nuclear factor erythroid 2-related factor (Nrf2) pathway activator	876	2,909	+232%	2.0	Small molecule chemistry
32.	Velcade	bortezomib	JNJ + Takeda	Proteasome inhibitor	2,610	2,883	+10%	11.9	Small molecule chemistry
33.	Alimta	pemetrexed disodium	Eli Lilly	Thymidylate synthase inhibitor	2,703	2,792	+3%	11.1	Small molecule chemistry
34.	Humalog	insulin lispro recombinant	Eli Lilly	Insulin analogue	2,611	2,785	+7%	18.8	Recombinant product
35.	Zetia	ezetimibe	Merck & Co	Cholesterol absorption inhibitor	2,658	2,650	-0%	12.4	Small molecule chemistry
36.	Micardis	telmisartan	Boehringer Ingelheim + Astellas + Bayer	Angiotensin II receptor (AT1) antagonist	3,046	2,583	-15%	16.4	Small molecule chemistry
37.	Plavix	clopidogrel bisulfate	Sanofi + BristolMyers Squibb	Platelet aggregation inhibitor	2,613	2,549	-2%	17.1	Small molecule chemistry
38.	Levemir	insulin detemir recombinant	Novo Nordisk	Insulin analogue	2,057	2,533	+23%	11.0	Recombinant product
39.	Gilenya	fingolimod hydrochloride	Novartis + Mitsubishi Tanabe Pharma	Sphingosine-1-phosphate (S1P) receptor modulator	1,957	2,506	+28%	4.6	Small molecule chemistry
40.	Botox	onabotulinumtoxinA	Allergan + GlaxoSmithKline	Botulinum toxin	2,201	2,496	+13%	25.3	Recombinant product

Top 41-50 continued over...



Source: EvaluatePharma® 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	WW Product Sales (\$bn)			Products Age (Yrs)	Technology
					2013	2014	% Growth		
41.	Lipitor	atorvastatin calcium	Pfizer + Astellas + Jeil	Statin/ HMG CoA reductase inhibitor	2,915	2,479	-15%	18.2	Chiral chemistry
42.	Aranesp	darbepoetin alfa	Amgen + Kyowa Hakko	Erythropoietin	2,486	2,454	-1%	13.8	Recombinant product
43.	Rebif	interferon beta-1a	Merck KGaA	Interferon beta	2,513	2,444	-3%	17.3	Recombinant product
44.	Xgeva/Prolia	denosumab	Amgen + Daiichi Sankyo	Anti-RANKL MAb	1,801	2,411	+34%	4.9	Monoclonal antibody
45.	Victoza	liraglutide [rDNA origin]	Novo Nordisk	Glucagon-like peptide 1 (GLP-1) agonist	2,072	2,393	+15%	5.8	Recombinant product
46.	Diovan	valsartan	Novartis + Ipsen	Angiotensin II receptor (AT1) antagonist	3,534	2,354	-33%	18.5	Small molecule chemistry
47.	Cialis	tadalafil	Eli Lilly + Nippon Shinyaku	Phosphodiesterase V (PDE5) inhibitor	2,202	2,340	+6%	12.2	Small molecule chemistry
48.	Olysio	simeprevir	Johnson & Johnson + Medivir	Hepatitis C NS3/4A protease inhibitor	23	2,329	+10,026%	1.4	Small molecule chemistry
49.	Lovenox	enoxaparin sodium	Sanofi	Heparin, low molecular weight (LMWH)	2,262	2,257	-0%	27.3	Miscellaneous
50.	Zytiga	abiraterone acetate	Johnson & Johnson	17-alpha-hydroxylase/C17,20 lyase inhibitor	1,698	2,237	+32%	4.0	Small molecule chemistry
Total					194,589	215,718	+11%	12.7	

Note: Sales represent company reported sales where available, otherwise based on an average of equity analyst estimates.

2014: Top 50 Selling Products in the USA

part 1 of 3



Sovaldi top selling product in the USA; Humira number two.

EvaluatePharma® finds Sovaldi to be the largest selling product in the USA in 2014 after recording over \$8.5bn in sales during its first full year on the market. Humira continued to perform well with a 25%

increase in sales, year-on-year, to \$6.5bn. Overall, total sales of the top 50 products in the USA increased 20% to \$120bn in 2014 versus \$100bn in 2013.

Source: EvaluatePharma® 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	USA Product Sales (\$bn)			USA Age (Yrs)	Company Strategy
					2013	2014	% Growth		
1.	Sovaldi	sofosbuvir	Gilead Sciences	Hepatitis C nucleoside NS5B polymerase inhibitor	136	8,507	+6,138%	1.4	Company acquisition
2.	Humira	adalimumab	AbbVie	Anti-tumour necrosis factor alpha (TNFα) MAb	5,236	6,524	+25%	12.3	Company acquisition
3.	Lantus	insulin glargine recombinant	Sanofi	Insulin analogue	4,978	5,613	+13%	15.0	Company acquisition
4.	Enbrel	etanercept	Amgen	Tumour necrosis factor alpha (TNFα) inhibitor	4,256	4,404	+3%	16.5	Company acquisition
5.	Remicade	infliximab	Johnson & Johnson	Anti-tumour necrosis factor alpha (TNFα) MAb	3,891	4,155	+7%	16.6	Company acquisition
6.	Abilify	aripiprazole	Otsuka Holdings	5-HT1A (serotonin) & dopamine D2 partial agonist & 5-HT2 (serotonin) antagonist	4,549	3,807	-16%	12.4	Organic
7.	Neulasta	pegfilgrastim	Amgen	Granulocyte colony-stimulating factor (G-CSF)	3,499	3,649	+4%	13.2	Joint venture
8.	Rituxan	rituximab	Roche	Anti-CD20 MAb	3,594	3,646	+1%	17.4	Company acquisition
9.	Seretide/Advair	fluticasone propionate; salmeterol xinafoate	GlaxoSmithKline	Beta 2 adrenoreceptor agonist & corticosteroid	4,332	3,248	-25%	14.6	Organic
10.	Copaxone	glatiramer acetate	Teva Pharmaceutical Industries	MS agent	3,200	3,113	-3%	18.3	In-licensed
11.	Januvia/Janumet	sitagliptin phosphate	Merck & Co	Dipeptidyl peptidase IV (DPP-IV) inhibitor	2,946	3,054	+4%	8.5	Organic
12.	Avastin	bevacizumab	Roche	Anti-VEGF MAb	2,780	2,933	+6%	11.1	Company acquisition
13.	Crestor	rosuvastatin calcium	AstraZeneca	Statin/ HMG CoA reductase inhibitor	2,912	2,918	+0%	11.7	In-licensed
14.	Revlimid	lenalidomide	Celgene	Immunomodulator	2,489	2,916	+17%	9.3	Organic
15.	Epogen/Procrit	epoetin alfa	Amgen + JNJ	Erythropoietin	2,748	2,746	-0%	25.9	Joint venture
16.	Tecfidera	dimethyl fumarate	Biogen	Nuclear factor erythroid 2-related factor (Nrf2) pathway activator	864	2,427	+181%	2.0	Company acquisition
17.	Spiriva	tiotropium bromide monohydrate	Boehringer Ingelheim	Long-acting muscarinic antagonist (LAMA)	2,416	2,372	-2%	11.2	Organic
18.	Atripla	efavirenz; emtricitabine; tenofovir disoproxil fumarate	Gilead Sciences	Nucleoside & non-nucleoside reverse transcriptase inhibitor (NRTI & NNRTI)	2,356	2,357	+0%	8.8	Joint venture
19.	Lyrica	pregabalin	Pfizer	Alpha 2 delta ligand	1,963	2,315	+18%	10.3	Company acquisition
20.	Gleevec	imatinib mesylate	Novartis	Tyrosine kinase inhibitor	1,939	2,170	+12%	13.9	Organic

Top 21-50 continued over...



Source: EvaluatePharma[®] 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	USA Product Sales (\$bn)			USA Age (Yrs)	Company Strategy
					2013	2014	% Growth		
21.	Pprevnar 13	pneumococcal vaccine	Pfizer	Pneumococcal vaccine	1,804	2,154	+19%	5.1	Company acquisition
22.	Herceptin	trastuzumab	Roche	Anti-HER2 (ErbB-2) MAb	1,929	2,151	+12%	16.6	Company acquisition
23.	Harvoni	ledipasvir; sofosbuvir	Gilead Sciences	Hepatitis C nucleoside NS5A & NS5B polymerase inhibitor	-	2,001	n/m	0.5	Organic
24.	Avonex	interferon beta-1a	Biogen	Interferon beta	1,902	1,957	+3%	18.9	Organic
25.	Olysio	simeprevir	Johnson & Johnson	Hepatitis C NS3/4A protease inhibitor	13	1,943	+14,846%	1.4	In-licensed
26.	Nexium	esomeprazole magnesium	AstraZeneca	Proton pump inhibitor (PPI)	2,123	1,876	-12%	14.2	Organic
27.	Lucentis	ranibizumab	Roche	Anti-VEGF MAb	1,823	1,860	+2%	8.8	Company acquisition
28.	NovoLog/ NovoRapid	insulin aspart recombinant	Novo Nordisk	Insulin analogue	1,773	1,816	+2%	14.9	Organic
29.	Truvada	emtricitabine; tenofovir disoproxil fumarate	Gilead Sciences	Nucleoside reverse transcriptase inhibitor (NRTI)	1,570	1,787	+14%	10.7	Company acquisition
30.	Eylea	afibercept	Regeneron Pharmaceuticals	VEGFR kinase inhibitor	1,409	1,736	+23%	3.4	Organic
31.	Celebrex	celecoxib	Pfizer	COX-2 inhibitor	1,933	1,735	-10%	16.3	Company acquisition
32.	Levemir	insulin detemir recombinant	Novo Nordisk	Insulin analogue	1,215	1,673	+38%	9.8	Organic
33.	Humalog	insulin lispro recombinant	Eli Lilly	Insulin analogue	1,521	1,628	+7%	18.8	Organic
34.	Victoza	liraglutide [rDNA origin]	Novo Nordisk	Glucagon-like peptide 1 (GLP-1) agonist	1,343	1,612	+20%	5.2	In-licensed
35.	Xarelto	rivaroxaban	Johnson & Johnson	Factor Xa inhibitor	864	1,522	+76%	3.8	In-licensed
36.	Gammagard Liquid ¹	immune globulin (human)	Baxter International	Immunoglobulin	1,451	1,516	+4%	10.0	Organic
37.	Symbicort Turbuhaler	budesonide; formoterol fumarate dihydrate	AstraZeneca	Beta 2 adrenoreceptor agonist & corticosteroid	1,233	1,511	+23%	8.7	Organic
38.	Xgeva/Prolia	denosumab	Amgen	Anti-RANKL MAb	1,226	1,482	+21%	4.9	Organic
39.	Zetia	ezetimibe	Merck & Co	Cholesterol absorption inhibitor	1,454	1,475	+1%	12.5	Company acquisition
40.	Botox	onabotulinumtoxinA	Allergan	Botulinum toxin	1,235	1,398	+13%	25.3	Product acquisition

Top 41-50 continued over...

Source: EvaluatePharma[®] 22 May 2015

Rank	Product	Generic Name	Company	Pharmacological Class	USA Product Sales (\$bn)			USA Age (Yrs)	Company Strategy
					2013	2014	% Growth		
41.	Stelara	ustekinumab	Johnson & Johnson	Anti-interleukin-12 (IL-12) & interleukin-23 (IL-23) MAb	957	1,334	+39%	5.6	Company acquisition
42.	Vyvanse	lisdexamfetamine dimesylate	Shire	Psychostimulant	1,177	1,334	+13%	8.1	Company acquisition
43.	Gardasil	human papillomavirus (HPV) vaccine	Merck & Co	Human papillomavirus (HPV) vaccine	1,295	1,319	+2%	8.9	In-licensed
44.	Rebif	interferon beta-1a	Merck KGaA	Interferon beta	1,270	1,290	+2%	13.1	Company acquisition
45.	Velcade	bortezomib	Takeda	Proteasome inhibitor	950	1,265	+33%	11.9	Company acquisition
46.	Alimta	pemetrexed disodium	Eli Lilly	Thymidylate synthase inhibitor	1,209	1,230	+2%	11.2	In-licensed
47.	Gilenya	fingolimod hydrochloride	Novartis	Sphingosine-1-phosphate (S1P) receptor modulator	1,023	1,190	+16%	4.6	In-licensed
48.	Viagra	sildenafil citrate	Pfizer	Phosphodiesterase V (PDE5) inhibitor	1,132	1,140	+1%	17.1	Organic
49.	Xolair	omalizumab	Roche	Anti-IgE MAb	853	1,066	+25%	11.8	Company acquisition
50.	Cialis	tadalafil	Eli Lilly	Phosphodiesterase V (PDE5) inhibitor	943	1,040	+10%	11.4	Company acquisition
Total					99,713	119,914	+20%	11.3	

Note: Sales represent company reported sales where available, otherwise based on an average of equity analyst estimates.

EvaluatePharma[®] endeavours to treat the sales from patent protected new formulations of existing products as distinct entities where possible Epogen and Neulasta developed via Kirin-Amgen joint venture.

¹ Includes sales of Gammagard Liquid and other plasma-based therapies.

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