



EvaluatePharma®

World Preview 2017, Outlook to 2022

Executive Summary

10th Edition – June 2017

Analysis Highlights

- Worldwide prescription drug sales forecasted to grow at a robust 6.5% (CAGR) through 2022 to reach \$1.06trn
 - 32% of the 2022 increase in sales to come from orphan drugs (+\$95bn)
-
- Sales at risk worth \$194bn potentially signal a second patent cliff era with the advent of biosimilars
 - Novartis, Pfizer and Roche to compete head to head for the crown of worldwide Prescription sales in 2022, but Novartis seems to have a slight edge
 - Celgene (+15%) and Shire (+10%) expected to record the fastest sales growth (CAGR) by 2022 although growth estimates have been revised downward in the last 12 months
 - Biologics to contribute 52% of the Top 100 product sales by 2022; Roche leads market
 - Roche gains the top spot of the pipeline value creation ranking proving its leadership ambitions beyond oncology. AstraZeneca and AbbVie complete the podium
 - Novo Nordisk's portfolio expected to yield the highest return on investment in the future
 - Biogen's aducanumab and J&J's apalutamide projected to be the most valuable R&D projects
 - Worldwide pharmaceutical R&D spend expected to grow by 2.4% (CAGR) to \$181bn in 2022
 - Average R&D spend per NME at \$4bn over the last 10 years
 - Roche forecast to be the biggest spender on pharmaceutical R&D in 2022.
 - New drug approvals in 2016 drop to 27 NMEs down 50% vs. the record high of 56 in 2015. Positive trend in the first 5 months of 2017 with 21 NMEs already approved
 - Oncology is still the largest therapy area in sales (+12.7% CAGR) 2016-22
 - Roche remains atop the oncology field but its leadership is challenged by Celgene. Novartis to drop out of the top 3
 - Novo Nordisk is expected to remain the major player in the anti-diabetics market in 2022, but Lilly is gaining ground behind driven by Trulicity
 - AbbVie still dominates anti-rheumatics market in 2022; ABT-494 (upadacitinib) set to be the most promising R&D asset in development
 - GSK leads in the vaccine market ahead of Merck and Pfizer
 - Pfizer's pneumococcal vaccine Prevnar 13 remains the top selling vaccine product
 - Gilead lead continues in anti-viral market in 2022 largely due to its HIV portfolio
 - Opdivo and Revlimid to compete for the top selling products in the world in 2022
 - Humira still expected to be the top selling drug in 2022 at \$15.9bn ahead of Revlimid and Opdivo
 - Keytruda (\$9.5bn in 2022) nearly closed the gap with Opdivo (\$9.9bn) in terms of consensus forecast
 - Eliquis took over Xarelto as the leading anti-coagulant in 2022 at \$8.5bn
 - AbbVie's Humira will continue to be the leading product in the USA in 2022, with sales of \$12.0bn. Keytruda knocks off Opdivo as the top-selling PD-1/PD-L1 product in 2022

Worldwide Prescription Drug Sales (2008-2022)



Worldwide prescription drug sales forecasted to grow at 6.5% (CAGR) through to 2022.

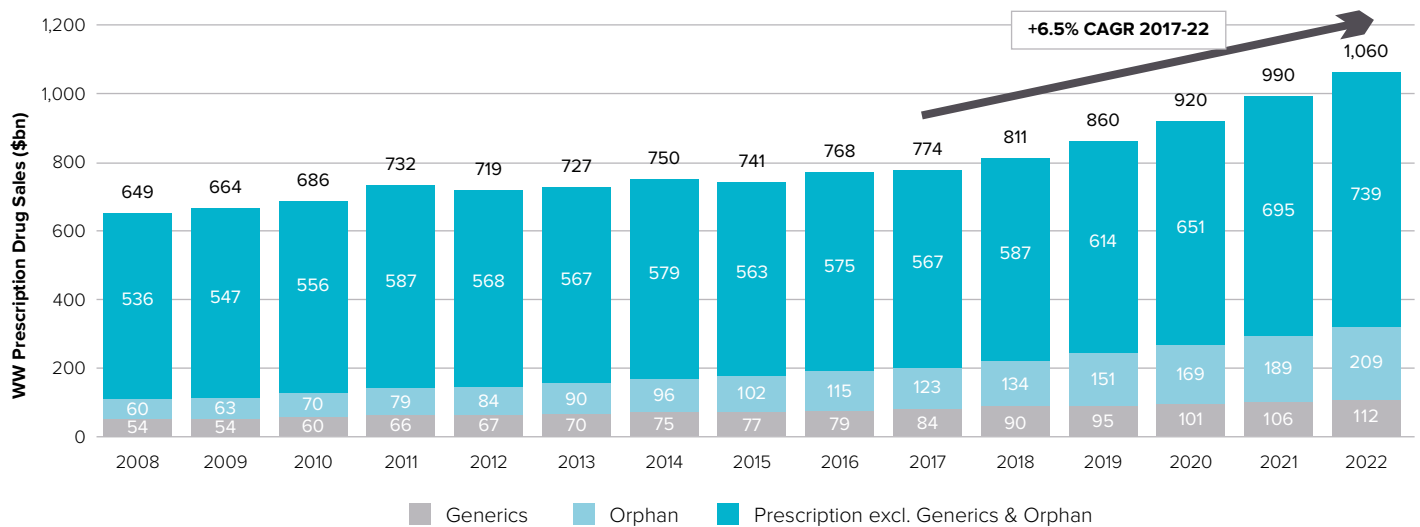
According to Evaluate consensus forecast, the pharmaceutical industry is set to grow at 6.5% per year (CAGR) to reach \$1.06trn by 2022. This growth can be largely attributed to the expansion of existing therapies such as the PD-1/PD-L1 inhibitors Opdivo and Keytruda and J&J's Darzalex, as well as the launch of novel therapies, such as Sanofi/Regeneron's Dupixent in atopic dermatitis and Roche's Ocrevus in multiple sclerosis. CAR-T therapies continue to generate interest in oncology although the recent safety issues have partially dampened any short term excitement.

The orphan drug market is expected to almost double during the 2016-22 period, peaking at \$209bn in 2022 and further demonstrating that R&D programmes are increasingly oriented towards more narrow patient populations characterised by larger unmet need, a faster route to market and a more compelling market

access value proposition. Although this all points to a rather optimistic future for the industry, since June 2016 the industry's CAGR has only just revived itself from a prediction of a 5.4% CAGR over the same period, demonstrating uncertainty surrounding pharma. As with all changes within the industry, many variables have contributed to this uncertain environment, but some main factors can be identified. Firstly, the \$194bn of sales at risk between 2017 and 2022 signals that the pharma industry has just entered a second patent cliff era where top biologic blockbusters will be challenged by biosimilars. The investment of large biotech companies in this space, such as Biogen and Amgen, is likely to fast track the commercial impact of these therapies. Secondly, the US market access landscape continues to rapidly transform forcing pharmaceutical companies to adjust their access strategies, either through pay for performance deals or more payer-friendly prices at launch.

Worldwide Total Prescription Drug Sales (2008-2022)

Source: Evaluate, May 2017



Worldwide Sales At Risk from Patent Expiration (2008-2022)

Source: Evaluate, May 2017



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.



Evaluate is the trusted provider of commercial intelligence including product sales and consensus forecasts to 2022 for commercial teams and their advisors within the global life science industry. We help our clients make high value decisions through superior quality, timely, must-have data and insights, combined with personalised, expert client support.

EvaluatePharma[®] delivers exclusive consensus sales forecasts and trusted commercial insight into biotech and pharmaceutical performance.

 [@EvaluatePharma](https://twitter.com/EvaluatePharma)

EvaluateMedTech[®] sets a new standard in commercial analysis and consensus forecasts of the global medical device and diagnostic industry.

 [@EvaluateMedTech](https://twitter.com/EvaluateMedTech)

EvaluateClinical Trials[®] delivers unique clinical trial intelligence expertly curated to efficiently analyse the global clinical trial landscape.

 [@EPClinicalTrial](https://twitter.com/EPClinicalTrial)

EP Vantage an award winning editorial team, provides daily commentary and analysis with fresh perspectives and insight into current and future industry trends.

 [@EPVantage](https://twitter.com/EPVantage)

Evaluate Custom Services provides customised solutions to help you access, analyse and manage the information you need to support effective decision-making.

The Evaluate services enable the life science community to make sound business decisions about value and opportunity.

www.evaluate.com

Evaluate Headquarters

Evaluate Ltd.
11-29 Fashion Street
London E1 6PX
United Kingdom
T +44 (0)20 7377 0800
F +44 (0)20 7539 1801

Evaluate Americas

EvaluatePharma USA Inc.
15 Broad Street, Suite 401
Boston, MA 02109
USA
T +1 617 573 9450
F +1 617 573 9542

Evaluate APAC

Evaluate Japan KK
Akasaka Garden City 4F
4-15-1 Akasaka, Minato-ku
Tokyo 107-0052
Japan
T +81 (0)80 1164 4754