

Cancer Drugs – Data, Analysis and Forecasts to 2023

*Pharmaceutical, Commercial & Strategic Developments in the Global Cancer Drugs
Market to 2023*



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- 9.8 Celgene
- 9.9 Eisai Co., Ltd.
- 9.10 Eli Lilly & Co
- 9.11 ImClone Systems Inc. (a subsidiary of Eli Lilly & Co)
- 9.12 Exelixis
- 9.13 GlaxoSmithKline

9.14 Merck & Co

9.15 Millennium Pharmaceuticals (Subsidiary of Takeda Oncology Company)

9.16 Novartis Pharmaceuticals

9.17 Onyx Pharmaceuticals

9.18 Pfizer Inc.

9.19 Roche

9.20 Sanofi

9.21 Teva Pharmaceuticals Industries

10: Expert OpiniOn

10.1 Dr John Marshall, Clinical Director of Oncology, Georgetown University Hospital

10.2 Dr Anderson Ryan, Senior Group Leader at Gray Institute of Radiation, Oncology and Biology, at the University of Oxford

10.3 Dr Ben Anderson, Professor of Surgery at the University of Washington & Chair of the Breast Health Global Initiative

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The cancer drugs market has gradually developed over the past decade with quite a number of acquisitions by major players of smaller R&D outfits. The cancer drugs market is still dominated by a few major players, however new technologies of treatment and high growth emerging markets will drive the future growth trends. The cost effectiveness and post treatment survival rates along with the safety profiles of major drug candidates will be the major growth driver for upcoming therapies and drugs.

Patent expiration of major drugs have increased the industry competition, licensing of agreements allows companies to expand their product portfolio and improve their competitive positions in the market. Cancer drugs that are currently marketed are unable to treat the diseases completely. With increasing competition in the market, due to the expiration of patents, many pharmaceutical companies have successfully launched generic versions of major industry drugs and many products have reached the last phase of trials.

Through reading this report you will gain the following knowledge:

- Acquire analysis of the state of the Global Cancer Drugs market in 2012-13 and a market forecast for the period 2013-2023. Market forecasts are also provided for the major therapies and major drugs used in the respective therapies.
- Examine the current state of the markets, pipelines and research for main therapies. The therapies discussed are Targeted Therapy, Chemotherapy, Immunotherapy and Hormonal Therapy.
- Identify the leading companies operating in the market, their performance, current products and pipeline products.
- The report gives you revenue forecasts to 2023, growth rates and market shares. Also, it lets you see qualitative and forecasting analysis, business outlooks and developmental trends (R&D).

1.2 Chapter Breakdown

The chapters of this report cover the following topics.

Chapter 1 is an executive summary.

Chapter 2 introduces the various cancer diseases, types and symptoms, as well as the global market, major drugs causes and risk factors

Chapter 3 discusses causes and effects of the Cancer.

Chapter 4 discusses the various cancer treatments options and their associated side effects.

Chapter 5 discusses various cancer therapies, the drugs used in the therapies; and market size of therapy and drugs used from 2008 to 2012; alongside forecasts of these individual markets to 2023.

Chapter 6 discusses the recent approved oncology drugs, pipeline of oncology drugs as well as recent failures in the cancer drugs pipeline.

Chapter 7 discusses the major trends and challenges of the oncology market.

Chapter 8 introduces the regional landscape of the oncology drugs market with respect to the key global oncology markets; forecast of the market from 2013 to 2023 for each key oncology market.

Chapter 9 details the major companies in the oncology market; describing their major oncology drugs and pipeline drugs.

Chapter 10 contains interviews with leading experts in the cancer drugs market.

1.3 Research and Analysis Methods

This report harnesses primary and secondary research. This study provides world market forecasts and analyses of market drivers and restraints (including forecast analyses, major drivers and challenges) and principal developments. We also provide geographical breakdowns of the world market. Our analyses are original, benefiting from our consulting experts in industry, academia, medical practice and other roles. Our analysts also refer to industry data, company reports, news and trade articles, public health data, policy documents and other analysts' views. We conduct primary research by telephone interviews, correspondence or face-to-face discussions.

Our report contains quantitative and qualitative analytical content, covering the present and future of the global cancer drugs market. Although our report is market-centered, we include medical and technical information. We include analyses of under-met market needs from the present looking forward. Our revenue forecasting assesses the magnitude and effects of driving and restraining forces, to determine annual growth and total sales across a series of years. We base our forecasts upon knowledge of financial performance, disease prevalence, product/technology characteristics and other factors, as well as data and opinions gathered from our primary and secondary research.

Products and vendors listed in this report are provided for reference and constitute neither a complete list, necessarily, nor an endorsement of any specific vendor or product. Also, in this report, only human cell products are considered.

Revenue figures in this report are for the respective world market, or market segment, unless stated otherwise. Tabulated revenue values for later years (2013 onwards) are whole-year predictions (January to December). Because of rounding, values may not add up exactly. Compound annual growth rate (CAGR) values are for 2013-2023. In this report, all revenue figures and market values are expressed in USD. Any figures that are not originally quoted in USD were converted from their original currency to USD and were correct at time of research.

5.1.3. Avastin (Bevacizumab) by Roche

Avastin, approved in 2004 by the FDA, is a drug used to block angiogenesis i.e. the formation of blood vessels that supply cancer tissue with nutrients and oxygen. It is used in the treatment of colorectal cancer, breast cancer, non-small cell lung cancer, kidney cancer, ovarian cancer and glioblastoma. Avastin works by targeting and inhibiting the vascular endothelial growth factor (VEGF).

Avastin is set to lose its patent exclusivity in the US in 2019 and in the EU in 2022. Biosimilars for Avastin are being developed by Amgen, Fujifilm and Kyowa Hakko Kirin. In 2012, Roche received the approval for Avastin, in the EU, for treating platinum sensitive ovarian cancer.

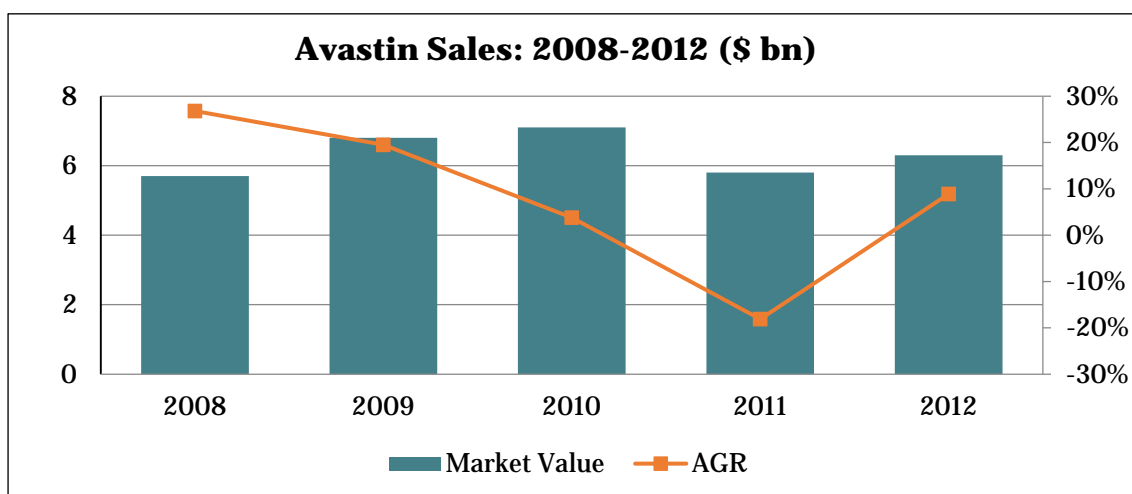
Sales for Avastin grew by 9% between 2011 and 2012 to reach \$6.3bn, compared to \$5.8bn in 2011. The increase was attributable to increased usage in established indications i.e. colorectal, lung and breast cancer along with EU approval in advanced ovarian cancer.

Table 5.1.3.a: Avastin Sales: 2008-2012

	2008	2009	2010	2011	2012
\$ bn	5.7	6.8	7.1	5.8	6.3
AGR	26.8%	19.5%	3.8%	-18.1%	8.9%

Roche 2013

Figure 5.1.3.1: Avastin Sales: 2008-2012



Roche 2013

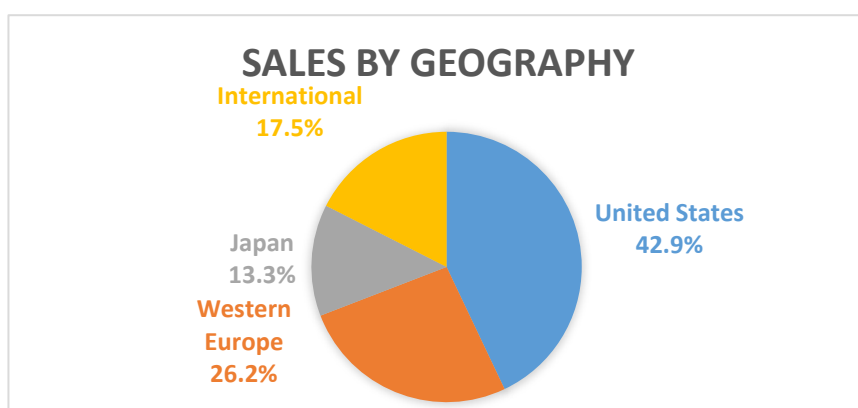
In terms of geographic breakdown, Avastin's revenue comes primarily from the US market, which claims 43% of the global revenue. Sales in the US increased in 2012 to reach \$2.7bn from \$2.6bn in 2011. The next largest market for Herceptin was Western Europe occupying 26% of global revenue. Western Europe generated \$1.7bn in 2012 compared to \$1.6bn in 2011. Sales in Japan improved by 23%, while ROW sales increased by 16%;

Table 5.1.3.b: 2011 - 2012 Avastin Sales Geographic Breakdown (\$ bn)

	2011	2012	% change
United States	2.6	2.7	4%
Western Europe	1.6	1.7	6%
Japan	0.7	0.9	23%
International (ROW)	0.9	1.1	16%

Roche 2013

Figure 5.1.3.2: 2012 Avastin Sales Geographic Breakdown



Roche 2013

Sales in the international markets were boosted by the CEMAI region, Latin America and APAC;

- The increase in sales from the Western European region was attributable to two new EU approvals in late 2012, the first one for treatment of recurrent ovarian cancer, in combination with standard chemotherapy, and the second one for colorectal cancer treatment
- Growth in the Japanese market was driven by increased use of Avastin in colorectal cancer, non-small cell lung cancer and metastatic breast cancer
- In September 2011, Avastin's indication for breast cancer was approved in Japan
- In April 2012 Avastin reported positive results for late-stage clinical studies for colorectal cancer

GMR Data forecast that Avastin will reach its financial peak by 2018 before losing its patent exclusivity in 2019. The drug is also set to benefit from a potential combination therapy, with EGFL7, for the treatment of colorectal and lung cancer, similar to that of Herceptin and Perjeta. GMR Data forecasts that Avastin revenue will reach \$XXbn by 2018 and will then

decline significantly, due to competition from biosimilars and the loss of patent exclusivity in the EU in 2022. Overall sales, from 2013 to 2023, will decline at a CAGR of XX% to reach \$XXbn, down from \$6.8bn in 2013.

Table 5.1.3.c: Avastin Sales & Forecast: 2013-2023

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	10 yr CAGR
\$ bn	6.8	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
AGR	XX%	XX%	XX%	XX%	XX%	XX%	XX%	XX%	XX%	XX%	XX%	

GMR Data 2013