+357 96 030922
info@marketpublishers.com

PARP Inhibitor Global Market Insights 2025, Analysis and Forecast to 2030, by Market Participants, Regions, Technology, Application, Product Type

https://marketpublishers.com/r/P0D7E9858458EN.html
Date: September 2025
Pages: 76
Price: US$ 3,200.00 (Single User License)
ID: P0D7E9858458EN

Abstracts

PARP Inhibitor Market Summary

The poly (ADP-ribose) polymerase (PARP) inhibitor market is an important segment of the global oncology therapeutics landscape, focusing on targeted therapies that address cancers associated with defects in DNA damage repair mechanisms. PARP inhibitors function by blocking the PARP enzyme, which normally repairs single-strand breaks in DNA. In cancer cells with mutations in homologous recombination repair genes such as BRCA1/2, this inhibition leads to the accumulation of DNA damage and subsequent cell death. The approach has been particularly effective in patients with breast cancer, ovarian cancer, fallopian tube cancer, and prostate cancer, although applications continue to expand into other indications through ongoing clinical development. The market has seen steady progress since the first approvals in ovarian cancer and has developed into a multi-billion-dollar segment within oncology. By 2025, the global PARP inhibitor market is projected to reach a value of USD 5–8 billion, supported by rising cancer incidence, expanded label indications, and ongoing clinical adoption. Growth through 2030 is expected to remain robust with a compound annual growth rate (CAGR) of 4.0%–7.4%. Patent expirations of leading products will reshape the competitive landscape, creating both challenges and opportunities for established pharmaceutical companies and new entrants.

Regional Market Trends

The regional dynamics of the PARP inhibitor market are shaped by cancer epidemiology, regulatory approvals, healthcare infrastructure, and reimbursement frameworks.

+357 96 030922
info@marketpublishers.com

North America: The United States dominates the global PARP inhibitor market, supported by high incidence of ovarian and breast cancers, advanced molecular diagnostics, and rapid adoption of targeted therapies. Growth in this region is estimated at 3.5%–6.0% CAGR through 2030. Canada also contributes, with universal healthcare access enabling availability of novel oncology drugs, though pricing pressures are more significant compared to the U.S.

Europe: Key markets include Germany, the United Kingdom, France, and Italy. Growth is estimated at 3.8%–6.5% CAGR. Europe benefits from robust regulatory support through the EMA and widespread integration of PARP inhibitors into treatment guidelines for ovarian and breast cancers. Patent expirations in this region during 2027–2029 are expected to encourage earlier entry of generics and biosimilars, influencing competitive dynamics and access.

Asia-Pacific: With a projected growth rate of 5.0%–8.0%, this region represents the fastest-growing market for PARP inhibitors. China and Japan are the major contributors, with China’s large cancer population and rapidly expanding healthcare infrastructure driving demand. Patent expiry of olaparib in China has already opened opportunities for local generics. Japan, with high adoption of innovative oncology therapies, also remains a key market. India, South Korea, and Australia are emerging contributors as access to oncology diagnostics improves.

Latin America: Countries such as Brazil and Mexico are seeing steady growth at an estimated CAGR of 3.5%–6.0%. Improving cancer care infrastructure and government-led initiatives to expand access to targeted therapies support demand, although reimbursement challenges remain a barrier to widespread adoption.

Middle East and Africa (MEA): Growth is estimated at 3.0%–5.5% CAGR. South Africa, Saudi Arabia, and the UAE are leading adopters, supported by improving oncology care networks and participation in international clinical trials. However, cultural, economic, and infrastructure barriers continue to limit broader uptake across much of the region.

Application Analysis

The market for PARP inhibitors is segmented by therapeutic application, with breast

+357 96 030922
info@marketpublishers.com

cancer and ovarian cancer representing the largest opportunities, followed by fallopian tube cancer, prostate cancer, and other indications.

Breast Cancer: A leading application area with strong demand, driven by patients with BRCA1/2 mutations. PARP inhibitors are increasingly used in both metastatic and earlier-stage disease. Growing use of genetic testing is expected to further expand adoption.

Ovarian and Fallopian Tube Cancer: Ovarian cancer was the first approved indication for PARP inhibitors and continues to be a cornerstone of the market. Maintenance therapy following platinum-based chemotherapy remains a strong driver, with adoption in both newly diagnosed and recurrent cases.

Prostate Cancer: This represents a growing segment, with PARP inhibitors being integrated into treatment pathways for metastatic castration-resistant prostate cancer patients with DNA repair gene mutations. Rising prostate cancer incidence globally and new approvals will support expansion.

Others: Research is ongoing to extend the application of PARP inhibitors into other cancers, including pancreatic cancer and gastric cancer. While still early-stage, these indications may provide incremental growth opportunities.

Type Analysis

The PARP inhibitor market is structured around several leading products, each with unique positioning:

Olaparib (LYNPARZA®): Co-developed by Merck & Co. and AstraZeneca, olaparib dominates the market with broad label coverage across ovarian, breast, pancreatic, and prostate cancers. Revenue in 2024 was USD 4.5–5.5 billion. Patent expirations in China have already opened opportunities for generics, while patents in the U.S., Europe, and Japan are expected to expire between 2027 and 2029.

Niraparib (Zejula®): Marketed by GlaxoSmithKline, niraparib is approved for ovarian cancer treatment and maintenance therapy. Revenues in 2024 reached USD 0.6–0.7 billion. Ongoing clinical trials are evaluating its role in combination therapies, which may extend its use.

+357 96 030922
info@marketpublishers.com

Talazoparib (TALZENNA®): Pfizer's talazoparib is used for HER2-negative breast cancer and has generated revenues of USD 0.1–0.2 billion in 2024. Expansion into prostate cancer treatment through combinations with other targeted agents is a key focus for growth.

Rucaparib (RUBRACA®): Licensed to pharma& Schweiz GmbH and commercialized by Tolmar, rucaparib is indicated for ovarian and prostate cancers. While its market share is smaller compared to olaparib and niraparib, it remains an important option within the class.

Company Profiles

Merck & Co. / AstraZeneca: Market leaders with olaparib, which commands the largest share of the PARP inhibitor space. Their extensive clinical trial network and combination therapy research ensure continued leadership despite patent expirations.

GlaxoSmithKline: Strong in ovarian cancer with niraparib, and investing heavily in expanding applications. Its focus on women's health and oncology strengthens its strategic position.

Pfizer: Growing its oncology presence with talazoparib and leveraging its global commercialization network. Combination studies with androgen receptor inhibitors in prostate cancer are central to its growth strategy.

pharma& Schweiz GmbH: Through rucaparib, the company maintains a niche presence in ovarian and prostate cancers, with licensing agreements supporting its commercialization.

Industry Value Chain Analysis

The value chain for PARP inhibitors spans multiple stages:

Research and Development: Involves discovery of targeted compounds, biomarker-driven clinical trials, and regulatory approvals. Extensive collaboration between pharmaceutical companies, academic institutions, and biotechnology

+357 96 030922
info@marketpublishers.com

firms characterizes this stage.

Manufacturing: Requires high-quality active pharmaceutical ingredients (APIs) and adherence to stringent GMP standards for oral oncology drugs.

Distribution and Access: Large multinational companies distribute through specialty pharmacies, hospitals, and oncology clinics. Access programs and patient assistance initiatives are critical in emerging markets.

Clinical Adoption and Monitoring: Oncologists play a central role in prescribing, supported by genetic testing to identify eligible patients. Pharmacovigilance and long-term monitoring of safety and efficacy remain integral.

Opportunities and Challenges

Opportunities:

Expansion into earlier stages of cancer treatment and additional indications beyond ovarian and breast cancers.

Growing demand in emerging markets, particularly in Asia-Pacific, where cancer incidence is rising rapidly.

Combination therapy strategies, pairing PARP inhibitors with immune checkpoint inhibitors or targeted therapies, which may expand efficacy.

Advances in companion diagnostics, enabling precision medicine approaches and more targeted use.

Challenges:

Patent expirations of leading products between 2027 and 2029, opening the market to generic competition.

Cost and reimbursement pressures, particularly in Europe and emerging markets, which may limit broad adoption.

Safety concerns, including hematologic toxicities and gastrointestinal

+357 96 030922
info@marketpublishers.com

side effects, which can restrict long-term use.

Competition from alternative therapies, including next-generation targeted drugs and immunotherapies, which may erode market share.

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

CHAPTER 15 ANALYSIS OF GLOBAL KEY VENDORS

Please ask for sample pages for full companies list

+357 96 030922
info@marketpublishers.com

Tables & Figures

TABLES AND FIGURES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: PARP Inhibitor Global Market Insights 2025, Analysis and Forecast to 2030, by Market Participants, Regions, Technology, Application, Product Type

Product link: https://marketpublishers.com/r/P0D7E9858458EN.html

Price: US$ 3,200.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/P0D7E9858458EN.html