+44 20 8123 2220
info@marketpublishers.com

Cancer Biologics Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, 2018-2028 Segmented By Product (Monoclonal Antibodies, Cytokine-Based Immunotherapy, Cancer Vaccines, CAR-T Cell Therapy, Immune Checkpoint Inhibitors), By Application (Non-small Cell Lung Cancer, Prostate Cancer, Breast Cancer, Acute Myeloid Leukemia, Lymphoma, Others), by End User (Hospitals & Clinics, Ambulatory Care Centers, Others), by region, and Competition

https://marketpublishers.com/r/C012E8E20D43EN.html
Date: November 2023
Pages: 178
Price: US$ 4,900.00 (Single User License)
ID: C012E8E20D43EN

Abstracts

Global Cancer Biologics Market has valued at USD 94.10 billion in 2022 and is anticipated to witness an impressive growth in the forecast period with a CAGR of 7.17% through 2028. Cancer biologics, also known as oncology biologics or biopharmaceuticals, are a class of drugs used to treat cancer. These drugs are distinct from traditional chemotherapy and are designed to target specific molecules and pathways involved in the growth, progression, and spread of cancer. Cancer biologics are often derived from living cells or organisms and include a variety of therapeutic agents, such as monoclonal antibodies, cytokines, vaccines, and gene therapies. These drugs inhibit the signals that promote the growth and division of cancer cells. They can be used to slow tumor growth and prevent the formation of new blood vessels that feed the tumor. These monoclonal antibodies can simultaneously bind to two different targets, often one on a cancer cell and one on an immune cell. They bring the immune system into proximity with cancer cells, enhancing the immune response. Cancer biologics are often considered more targeted and specific than traditional

chemotherapy, which can affect both cancer and healthy cells. They are part of the broader field of immunotherapy, which harnesses the patient's immune system to fight cancer.

Ongoing research and innovation in the field of biotechnology and immunology have led to the development of more effective and targeted cancer biologics. New discoveries and technological advancements continue to drive the market forward. The trend toward personalized medicine has led to the development of biologics that target specific genetic mutations and biomarkers, providing tailored treatment options for individual cancer patients. Immune checkpoint inhibitors have shown remarkable success in various cancer types, and ongoing research explores their application in additional cancers, driving market growth. The development and approval of biosimilars for established cancer biologics have increased competition and the potential for cost savings, encouraging market growth. Cancer patient advocacy groups and increased public awareness have led to a greater demand for innovative treatments and the development of new biologics. Pharmaceutical companies are investing significantly in oncology research and development, leading to the discovery of new biologics and therapeutic targets.

Key Market Drivers

Advancements in Biologics Development

Immune checkpoint inhibitors, such as anti-PD-1 and anti-PD-L1 antibodies, have revolutionized cancer treatment. They block inhibitory signals that prevent the immune system from recognizing and attacking cancer cells. Immunotherapies have demonstrated remarkable success in various cancer types, including melanoma, lung cancer, and more. Chimeric Antigen Receptor T-cell (CAR-T) therapy is a groundbreaking approach where a patient's own T cells are genetically modified to express a receptor that targets cancer cells. CAR-T therapies have shown remarkable results in certain blood cancers, such as leukemia and lymphoma. Bispecific antibodies can target two different antigens simultaneously, often on both cancer cells and immune cells. These innovative antibodies enhance the immune system's ability to recognize and attack cancer cells, leading to improved treatment outcomes. Advancements in genomics and biomarker research have enabled the development of biologics tailored to specific genetic mutations and protein markers present in cancer. This personalized approach improves treatment efficacy and reduces side effects. The development of biosimilars, which are highly similar but more affordable versions of established biologics, has increased access to cancer treatments, potentially lowering healthcare

+44 20 8123 2220
info@marketpublishers.com

costs. Monoclonal antibodies continue to be at the forefront of cancer biologics development. New monoclonal antibodies are constantly being researched and developed to target specific cancer markers and pathways.

Cancer vaccines, such as the human papillomavirus (HPV) vaccine and therapeutic cancer vaccines, have been developed to prevent certain types of cancer and boost the body's immune response against existing cancer cells. Targeted biologics have been designed to interfere with specific pathways that drive cancer growth. These therapies aim to disrupt the molecular signals that allow cancer cells to proliferate while sparing healthy cells. Researchers are investigating the synergistic effects of combining different biologics, such as combining immunotherapies with targeted therapies or chemotherapy. These combinations aim to enhance the overall therapeutic impact and reduce the likelihood of resistance. Advancements in gene editing technologies, such as CRISPR-Cas9, offer the potential to modify cancer cells or enhance the body's immune response to cancer. The use of nanoparticles for drug delivery and targeting specific cancer cells has gained attention. Nanotechnology can improve drug delivery efficiency and reduce side effects. Biologics production has become more efficient and scalable, ensuring consistent product quality and supply. Advanced manufacturing techniques have reduced production costs. The development of companion diagnostic tests helps identify the most suitable patients for specific biologic therapies, ensuring a more targeted and effective approach to treatment. This factor will help in the development of the Global Cancer Biologics Market.

Rising Investment in Oncology

Higher investment in oncology research and development (R&D) has led to the discovery and development of new cancer biologics. Pharmaceutical and biotechnology companies allocate substantial funds to conduct clinical trials, explore innovative treatment modalities, and discover novel targets for biologic therapies. Increased funding has led to the discovery of new cancer targets and the development of biologics specifically designed to target these markers. This has expanded the range of available treatment options and personalized medicine approaches. Investment supports a growing number of clinical trials, including large-scale, multi-phase trials for cancer biologics. These trials are essential for evaluating the safety and efficacy of new treatments, ultimately leading to regulatory approvals. Investment has fueled the growth of biotechnology startups dedicated to oncology. These startups often focus on niche areas and novel biologic therapies, contributing to the diversity of treatment options.

Greater investment encourages innovation in biologics development. Researchers and

companies explore novel therapeutic approaches, such as bispecific antibodies, gene editing technologies, and advanced immunotherapies. Investment in oncology research and development extends beyond well-established markets, offering cancer patients worldwide access to cutting-edge biologic treatments. Investment enables the exploration of combination therapies, where biologics are used in conjunction with other treatment modalities, such as chemotherapy, targeted therapies, or radiation therapy. These combinations have shown promise in enhancing treatment efficacy. Funding supports advancements in biologics manufacturing processes, making production more efficient, cost-effective, and scalable. This ensures a stable supply of these treatments. Ongoing investment in oncology leads to the exploration of biologics in new clinical indications and cancer types, broadening the market and increasing treatment options for patients. Funds are allocated to navigate the complex regulatory pathways associated with biologics, increasing the number of approved treatments available for patients. Investment in biomarker research and diagnostic tools enables a more targeted and personalized approach to cancer treatment. Biologics are often used in conjunction with companion diagnostics to identify the most appropriate therapy for individual patients. This factor will pace up the demand of the Global Cancer Biologics Market.

Increasing Awareness and Patient Advocacy

Patient advocacy groups and awareness campaigns provide valuable information about cancer biologics, their benefits, and their availability. This empowers patients and their families to make informed decisions about their treatment options. Increased awareness often leads to earlier cancer detection, which can result in a better prognosis and more treatment options, including biologics. Patients and their advocates often push for access to the latest and most advanced cancer treatments, including biologics. This demand can lead to changes in healthcare policies and increased funding for these therapies. Patients who are aware of clinical trials involving cancer biologics may be more willing to participate in research, helping to advance the development of new treatments and expand treatment options. Patient advocacy and awareness efforts have contributed to the push for personalized medicine. Patients and advocacy groups advocate for treatments tailored to individual genetics and biomarkers, which is a central feature of many biologic therapies. Increased awareness can lead to greater patient access to specialized clinics and healthcare providers experienced in administering cancer biologics.

Advocacy groups often raise funds for cancer research, including biologics development, through events, donations, and partnerships. This financial support helps

+44 20 8123 2220
info@marketpublishers.com

drive further research and innovation. Increased awareness efforts aim to reduce the stigma surrounding cancer and cancer treatments, making it more acceptable for patients to explore various treatment options, including biologics. Advocacy groups often advocate for policy changes and regulatory reforms to improve the approval and accessibility of biologics, which can directly impact demand. Greater awareness can lead to higher enrollment in clinical trials, helping researchers gather valuable data on the efficacy and safety of biologic treatments, ultimately driving demand if positive results are achieved. By promoting early detection, personalized treatment, and advanced therapies like biologics, patient advocacy and awareness efforts contribute to improved patient outcomes, creating a growing demand for these treatments. Patient advocacy may focus on improving the quality of life for cancer patients. Biologics often have a more favorable side effect profile compared to traditional chemotherapy, making them a preferred choice for patients seeking a better quality of life during treatment. This factor will accelerate the demand of the Global Cancer Biologics Market.

Key Market Challenges

High Development Costs

Developing biologic therapies is a highly complex and resource-intensive process. It involves extensive preclinical research, clinical trials, and regulatory requirements, which all require substantial financial investments. Conducting clinical trials for cancer biologics, including Phase I, II, and III trials, is a costly endeavor. These trials involve patient recruitment, monitoring, data collection, and compliance with regulatory standards. Regulatory authorities, such as the U.S. Food and Drug Administration (FDA) and the European Medicines Agency (EMA), have stringent requirements for the approval of biologics. Meeting these standards necessitates significant investment in research and documentation. Biologics are challenging to manufacture due to their complexity. Establishing and maintaining the infrastructure for the large-scale production of biologics requires substantial capital. Maintaining the quality and consistency of biologics is vital to ensuring safety and efficacy. Stringent quality control and assurance processes contribute to development costs. Identifying appropriate biomarkers and targets for cancer biologics can be a resource-intensive process, requiring specialized research and expertise. Patient recruitment and ongoing monitoring in clinical trials involve substantial costs, including patient compensation, site expenses, and data management.

Resistance and Response Variability

+44 20 8123 2220
info@marketpublishers.com

Some cancer patients may exhibit innate or acquired resistance to certain biologics, meaning that the treatment may not be as effective as initially hoped. Tumors are often heterogeneous, with different regions of the tumor having distinct genetic profiles and responses to treatment. This heterogeneity can lead to resistance in certain tumor subpopulations. Patients can respond differently to biologic therapies due to factors such as genetics, overall health, and the presence of other medical conditions. This response variability can make it challenging to predict treatment outcomes accurately. The presence or absence of specific biomarkers, which are often used to select patients for certain biologics, can vary between individuals. This variability can impact the treatment's effectiveness. Cancer cells can adapt to treatment and develop resistance over time. This adaptability can lead to treatment failure and disease progression. Identifying the right patients for specific biologics based on predictive biomarkers is a complex process. Inadequate patient stratification can result in non-responders and treatment inefficiency. Developing and bringing new biologics to market is a costly and resource-intensive process. The potential for resistance and variability can increase the risks and costs associated with these endeavors.

Key Market Trends

Advancements in Monoclonal Antibodies

Monoclonal antibodies have been a cornerstone of cancer treatment for years, and ongoing advancements in this field are expanding their potential and impact. Bispecific monoclonal antibodies are designed to simultaneously target two different antigens or receptors, often present on cancer cells and immune cells. These bi-specific antibodies can enhance the immune system's ability to recognize and attack cancer cells, potentially leading to improved treatment outcomes. Immune checkpoint inhibitors are monoclonal antibodies that block proteins like PD-1 and PD-L1 to unleash the immune system's ability to attack cancer cells. Ongoing research is expanding the use of these inhibitors in various cancer types and as combination therapies. ADCs (Antibody-Drug Conjugates) are monoclonal antibodies that are chemically linked to cytotoxic drugs. These smart bombs selectively target cancer cells, delivering the drug payload directly to the tumor while sparing healthy tissue. Advancements in ADC technology have led to more effective and less toxic treatments. Researchers are continually identifying new cancer targets for monoclonal antibodies. This involves a deeper understanding of the molecular and genetic basis of cancer, leading to more precise targeting. Monoclonal antibodies are often used in combination with other immunotherapies or targeted therapies, leading to the development of innovative combination treatments to enhance treatment efficacy. Some monoclonal antibodies are being developed for subcutaneous

+44 20 8123 2220
info@marketpublishers.com

administration, making treatment more convenient for patients compared to intravenous infusions. Advances in antibody engineering have led to the development of next-generation antibodies with enhanced properties, such as increased binding affinity, longer half-life, and improved tumor penetration. The identification of predictive biomarkers helps select patients who are most likely to respond to specific monoclonal antibody therapies, enabling a more personalized approach to treatment.

Segmental Insights

Product Insights

In 2022, the Global Cancer Biologics Market largest share was held by Immune Checkpoint Inhibitors segment and is predicted to continue expanding over the coming years. Immune checkpoint inhibitors, such as PD-1 and PD-L1 inhibitors, have shown remarkable efficacy in treating a wide range of cancer types, including melanoma, lung cancer, kidney cancer, bladder cancer, and more. Their ability to harness the immune system's natural response to fight cancer has made them a valuable option in the oncology field. Several immune checkpoint inhibitors have demonstrated significant clinical success, often leading to improved patient survival rates and durable responses. This success has fuelled their widespread adoption. Regulatory bodies, such as the U.S. Food and Drug Administration (FDA), have granted approvals for various immune checkpoint inhibitors for multiple cancer indications. These approvals provide healthcare providers with well-established treatment options. Immune checkpoint inhibitors can be used as monotherapy or in combination with other biologics, chemotherapy, or targeted therapies. This versatility allows oncologists to tailor treatment plans to individual patients and their specific cancer types. Immune checkpoint inhibitors are often used in conjunction with biomarker testing, allowing for more precise patient selection. Patients with specific biomarker profiles are more likely to benefit from these therapies, increasing their effectiveness. A robust pipeline of immune checkpoint inhibitors in various stages of clinical trials continually expands the treatment landscape. Clinical trial results have often led to new approvals and indications.

Application Insights

In 2022, the Global Cancer Biologics Market largest share was held by Acute Myeloid Leukemia segment and is predicted to continue expanding over the coming years. Cancer biologics play a crucial role in the treatment of breast cancer. These biologic therapies have been developed to target specific aspects of breast cancer biology, offering more targeted and effective treatment options. Human Epidermal Growth Factor

+44 20 8123 2220
info@marketpublishers.com

Receptor 2 (HER2) is a protein that is overexpressed in some breast cancers. Biologics like trastuzumab (Herceptin) and pertuzumab (Perjeta) are monoclonal antibodies that specifically target HER2-positive breast cancers. They can block the growth signals of cancer cells and enhance the effectiveness of chemotherapy in these cases. Cyclin-dependent kinase 4/6 (CDK4/6) inhibitors, such as palbociclib (Ibrance), ribociclib (Kisqali), and abemaciclib (Verzenio), are used in combination with hormone therapy to treat hormone receptor-positive, HER2-negative metastatic breast cancer. These biologics inhibit specific proteins involved in cell division, slowing the progression of cancer. Some breast cancer patients benefit from immune checkpoint inhibitors, such as atezolizumab (Tecentriq) and pembrolizumab (Keytruda). These biologics unleash the immune system to attack cancer cells by blocking the immune checkpoints that prevent immune cells from recognizing and destroying cancer. Bevacizumab (Avastin) is a biologic antibody used to inhibit angiogenesis, the formation of new blood vessels that supply tumors with nutrients. It can be combined with chemotherapy to treat certain types of advanced breast cancer.

End-User Insights

In 2022, the Global Cancer Biologics Market largest share was held by Hospitals & Clinics segment in the forecast period and is predicted to continue expanding over the coming years. Hospitals and clinics serve as primary points of access for cancer patients seeking diagnosis, treatment, and ongoing care. This results in a significant volume of cancer patients receiving biologics and other treatments within these healthcare settings. Hospitals and clinics offer comprehensive cancer care, including surgery, chemotherapy, radiation therapy, and biologics. They often have multidisciplinary teams of specialists who can coordinate and provide a range of treatments, including biologics, to address the complexity of cancer care. Healthcare professionals in hospitals and clinics have the expertise and experience required to administer biologics safely and effectively. They are equipped to handle the potential side effects and monitor patient responses. Many hospitals and academic medical centres actively participate in clinical trials and cancer research. This involvement allows them to offer patients access to cutting-edge biologics as part of clinical trial programs. Hospitals and clinics typically have advanced medical equipment and infrastructure necessary for the storage, preparation, and administration of biologics, which often require special handling and monitoring.

Regional Insights

The North America region dominates the Global Cancer Biologics Market in 2022. North

+44 20 8123 2220
info@marketpublishers.com

America, particularly the United States and Canada, boasts highly advanced healthcare infrastructure and medical facilities. This allows for early diagnosis and effective treatment of cancer, including the use of biologics. The region is home to numerous leading biopharmaceutical companies, research institutions, and academic centers that are at the forefront of cancer biologics research and development. The United States has a well-established regulatory framework for the approval of biologics. The U.S. Food and Drug Administration (FDA) has a robust and transparent approval process that has encouraged the development and adoption of biologics. North America often serves as an early launch market for new biologics. This, in turn, leads to higher adoption rates and greater market share. Many global clinical trials for cancer biologics are conducted in North America, as it has a diverse and large patient population, streamlined regulatory processes, and skilled clinical trial infrastructure.

Key Market Players

Roche Holding AG

Novartis AG

Merck & Co., Inc.

Bristol-Myers Squibb Company

Amgen Inc.

Johnson & Johnson

Pfizer Inc.

AstraZeneca plc

Eli Lilly and Company

AbbVie Inc.

Report Scope:

In this report, the Global Cancer Biologics Market has been segmented into the following categories, in addition to the industry trends which have also been detailed

+44 20 8123 2220
info@marketpublishers.com

below:

Cancer Biologics Market, By Product:

Monoclonal Antibodies

Cytokine-Based Immunotherapy

Cancer Vaccines

CAR-T Cell Therapy

Immune Checkpoint Inhibitors

Cancer Biologics Market, By Application:

Non-small Cell Lung Cancer

Prostate Cancer

Breast Cancer

Acute Myeloid Leukemia

Lymphoma

Others

Cancer Biologics Market, By End-User:

Hospitals & Clinics

Ambulatory Care Centers

Others

Cancer Biologics Market, By region:

+44 20 8123 2220
info@marketpublishers.com

North America

United States

Canada

Mexico

Asia-Pacific

China

India

South Korea

Australia

Japan

Europe

Germany

France

United Kingdom

Spain

Italy

South America

Brazil

Argentina

Colombia

+44 20 8123 2220
info@marketpublishers.com

- Middle East & Africa
  - South Africa
  - Saudi Arabia
  - UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies presents in the Global Cancer Biologics Market.

Available Customizations:

Global Cancer Biologics Market report with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

- Detailed analysis and profiling of additional market players (up to five).

+44 20 8123 2220
info@marketpublishers.com

Contents

+44 20 8123 2220
info@marketpublishers.com

6. ASIA PACIFIC CANCER BIOLOGICS MARKET OUTLOOK

+44 20 8123 2220
info@marketpublishers.com

7. EUROPE CANCER BIOLOGICS MARKET OUTLOOK

+44 20 8123 2220
info@marketpublishers.com

8. NORTH AMERICA CANCER BIOLOGICS MARKET OUTLOOK

+44 20 8123 2220
info@marketpublishers.com

9. SOUTH AMERICA CANCER BIOLOGICS MARKET OUTLOOK

+44 20 8123 2220
info@marketpublishers.com

10. MIDDLE EAST AND AFRICA CANCER BIOLOGICS MARKET OUTLOOK

11. MARKET DYNAMICS

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Cancer Biologics Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, 2018-2028 Segmented By Product (Monoclonal Antibodies, Cytokine-Based Immunotherapy, Cancer Vaccines, CAR-T Cell Therapy, Immune Checkpoint Inhibitors), By Application (Non-small Cell Lung Cancer, Prostate Cancer, Breast Cancer, Acute Myeloid Leukemia, Lymphoma, Others), by End User (Hospitals & Clinics, Ambulatory Care Centers, Others), by region, and Competition

Product link: https://marketpublishers.com/r/C012E8E20D43EN.html

Price: US$ 4,900.00 (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/C012E8E20D43EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

**All fields are required

Custumer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms

+44 20 8123 2220
info@marketpublishers.com

& Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970