

Global Cancer Profiling Market Assessment, By Biomarker Type [Protein Biomarkers, Genetic Biomarkers, Other Cancer Biomarkers], By Technology [Immunoassays, Next Generation Sequencing (NGS), Polymerase Chain Reaction (PCR), In Situ Hybridization (ISH), Microarray, Spectroscopic Method, Others], By Cancer Type [Breast Cancer, Lung Cancer, Colorectal Cancer, Melanoma, Blood Cancer, Prostate Cancer, Ovarian Cancer, Stomach Cancer, Liver Cancer, Other Cancer], By Application [Clinical Application, Research Application], By Enduser [Hospital Associated Diagnostic Laboratories, Diagnostic Centers, Cancer Research Institutes, Others], By Region, Opportunities and Forecast, 2017-2031F

https://marketpublishers.com/r/G3031CE23102EN.html

Date: March 2025 Pages: 217 Price: US\$ 4,500.00 (Single User License) ID: G3031CE23102EN

# **Abstracts**

Global cancer profiling market size was valued at USD 11.16 billion in 2023, expected to reach USD 22.53 billion in 2031, with a CAGR of 9.18% for the forecast period between 2024 and 2031F. The global cancer profiling market is highly dynamic, fostering many market players. The market is expected to grow exponentially due to the increasing number of cancer cases around the world.

As per WHO, cancer is the second leading cause of death globally. The surge in the



prevalence of cancer can be attributed to inherited mutations, alcohol and tobacco consumption, hormonal and lifestyle changes, and carcinogenic microbial infections, which play an important role in driving the global cancer profiling market. Owing to this fact, healthcare professionals and market players are focused on developing more advanced solutions like cancer profiling for precise cancer diagnosis to reduce the cancer burden.

Tumor profiling enables healthcare professionals to develop personalized therapy based on unique genetic profiles of individuals, leading to highly effective therapeutic outcomes. The market for cancer profiling is expanding due to the use of technology such as artificial intelligence and machine learning for cancer diagnosis and prediction.

Growing industry partnerships, the introduction of cutting-edge products, and government programs to promote cancer screening are expected to fuel market expansion throughout the projected period. In July 2023, the pioneer in diagnostic information services, Quest Diagnostics, announced the introduction of a new prostate cancer biomarker test via its subspecialty pathology company, AmeriPath, in association with Envision Sciences. The goal of the new tissue-based test service is to assist in meeting the urgent clinical demand for diagnostics that can distinguish between aggressive and less aggressive cases of prostate cancer in men.

#### Increasing Prevalence of Cancer

Cancer is one of the leading causes of death in developed and developing countries. Exposure to radiation, alcohol and tobacco consumption, and lifestyle changes are the major contributors to the increasing number of cancer patients globally. The market for cancer profiling is expected to grow due to the development of precise diagnostics that can be used to profile and treat cancer. In this case, cancer profiling becomes essential for offering customized treatment alternatives, which further propels the growth of global cancer profiling market. As per WHO, newly diagnosed cancer cases are expected to increase to around 21.62 million with a growth rate of 12.1% by 2025. Among all cases, breast cancer is the world's most prevalent cancer. Breast cancer ranks first among all types of cancer accounting for 12% share.

Growing Preference to Personalized Therapies

Improved outcomes in cancer treatments can be achieved by personalized therapy. Tumor or cancer profiling is the preliminary step in the development of personalized therapy, which drives innovation and growth in the market. This personalized approach,



guided by advancements in genomic technologies, increases treatment efficacy, reduces adverse effects, and improves patient outcomes. The integration of cancer profiling in clinical trial design, increasing popularity of immunotherapy, and supportive government initiatives contribute to the growing adoption of personalized medicine in cancer care.

In March 2023, Artera invested USD 90 million to customize treatment for prostate cancer. The business will use the money to distribute its ArteraAl Prostate Test and create tests that would enable customized treatment plans for various cancers. By examining the patient's clinical information and biopsy images, Artera's multimodal Alpowered test for prostate cancer patients, known as the ArteraAl Prostate Test, assists in forecasting the possible advantages of treatment and the patient's prognosis.

#### **Government Initiatives**

Governments around the globe are actively pushing cancer screening and therapies through awareness campaigns, which is driving growth in the worldwide cancer profiling market. The government is funding research projects targeting cancer diagnosis techniques. In March 2023, the United States government invested USD 394.5 million in three CDC programs, National Comprehensive Cancer Control Program, National Breast and Cervical Cancer Early Detection Programs, and the Colorectal Cancer Control Program to reduce the cancer burden of the country. In January 2023, to decrease the incidence of breast cancer in the United Kingdom, government announced investment of EUR 10 million to build 29 new breast cancer screening facilities.

#### Impact of COVID-19

The COVID-19 pandemic had a significant impact on the global cancer profiling market. Cancer patients were amongst the most vulnerable populations. Although cancer screening is essential for controlling and prevention of cancer, a large number of screenings were canceled or postponed as a result of the COVID-19 pandemic, affecting a large number of patients for access to necessary medical care. There was large scale impact on patients, medical professionals, and health system from the disruption caused by COVID-19 on cancer profiling market. According to a paper published in SAGE in June 2022, between 2019 and 2020, there was a 44% decrease in breast cancer screening mammography.

Key Players Landscape and Outlook



Market players are employing a range of strategies to increase their range of solutions offered while giving their customers access to a wide selection of innovative and cuttingedge products. Additionally, companies are expanding the range of diagnostic services they offer to capture a large portion of the market. Many major industry players are using both organic and inorganic growth techniques, like partnerships, mergers and acquisitions, and launch of new products, to strengthen their position in the global market.

In April 2023, Agilent Technologies introduced a CGP test intended for somatic variant profiling. The technique, known as Agilent SureSelect Cancer CGP, decreases handson time and increases workflow efficiency to enable scientists to profile a larger variety of tumor samples. The pan-cancer test was developed based on a next-generation sequencing (NGS) panel of 679 genes compiled from cancer databases and research collaborations.



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\*Companies mentioned above DO NOT hold any order as per market share and can be changed as per information available during research work

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