



ADVANCES IN CANCER MARKET

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Cancer, also called malignancy, is an abnormal growth of cells. There are more than 100 types of cancer, including breast cancer, skin cancer, lung cancer, colon cancer, prostate cancer, and lymphoma. Symptoms vary depending on the type. Cancer treatment may include chemotherapy, radiation, and/or surgery. A cancer that has spread from the place where it first started to another place in the body is called metastatic cancer. The process by which cancer cells spread to other parts of the body is called metastasis. Metastatic cancer has the same name and the same type of cancer cells as the original, or primary, cancer. For example, breast cancer that spreads to and forms a metastatic tumor in the lung is metastatic breast cancer, not lung cancer. Under a microscope, metastatic cancer cells generally look the same as cells of the original cancer. Moreover, metastatic cancer cells and cells of the original cancer usually have some molecular features in common, such as the presence of specific chromosome changes. Treatment may help prolong the lives of some people with metastatic cancer. In general, though, the primary goal of treatments for metastatic cancer is to control the growth of the cancer or to relieve symptoms caused by it. Metastatic tumors can cause severe damage to how the body functions, and most people who die of cancer die of metastatic disease. The global cancer diagnostics market size was valued at USD 144.4 billion in 2018 and is expected to register a CAGR of 7.0% over the forecast period. Growing prevalence of oncologic cases, constant technological advancements in diagnostics, and increasing demand for effective screening tests are some of the prime factors spurring demand for screening tools and techniques across the world. Rising awareness and supportive government initiatives are some additional factors anticipated to boost market growth during the forecast period. Cancer is one of the leading causes of deaths across the world and prevalence of the disease has been escalating at an alarming rate. Therefore, healthcare professionals are focusing on development of effective diagnostic and treatment solutions to check prevalence level. Early detection increases the success rate of treatment regimens. As a result, healthcare agencies and market players, through various awareness programs, are promoting routine checkups.

Although various screening procedures, such as lab tests, imaging, and endoscopy, enable disease detection at an early stage, there are certain risk factors posed by medical imaging. These include excessive radiation exposure and administration of fluorescent and barium contrast media in imaging and endoscopic procedures, which cause several adverse effects such as nausea and diarrhea. In addition, the cost entailed in performing diagnosis is relatively high. Thus, the untoward effects associated

with imaging solutions, coupled with the high cost of diagnosis, are anticipated to hinder market growth. The imaging segment led the market with the largest share in 2018 and is expected to maintain its prominence throughout the forecast period. Imaging modalities such as Computed Tomography (CT) scan and Magnetic Resonance Imaging (MRI) are quick, non-invasive, and pain-free diagnostic solutions. These imaging modalities are used as supportive tests along with other laboratory and genetic tests to determine the location and severity of the condition in diagnosing a variety of cancer types, thereby assisting in the selection of an appropriate treatment regimen. These factors are likely to drive the imaging segment at a CAGR of 8.0% over the forecast period. In 2018, in terms of revenue share, the laboratory and genetic test segments were at par as both tests are performed in tandem to confirm the presence or absence of tumor cells and genetic mutations, respectively. Laboratory tests include testing of blood, urine, other body fluids, or tissue for the presence of certain biomarkers, while genetic tests include detection of genetic aberrations in DNA and RNA samples taken from tumors. Not all commercially available tests enable a conclusive medical diagnosis when performed alone. Hence, laboratory and genetic testing are performed simultaneously to yield an accurate diagnosis of the underlying medical condition. The breast cancer segment captured the largest share of 14.0% in 2018 in the cancer diagnostics market. Mammography is the most common and popular screening test employed for breast tumor screening. According to the United States Preventive Services Task Force (USPSTF), women aged between 50 and 74 years are at a higher risk of developing breast cancer. Thus, USPSTF recommends women above 40 years of age to undergo mammography every two years. In addition, many organizations such as the National Breast Cancer Foundation, Inc. are undertaking initiatives to spread awareness regarding breast cancer, benefits of early detection, and available treatment options. Increasing cognizance of the population, coupled with campaigns promoting routine mammography, is resulting in high demand for imaging solutions in breast cancer screening. On the other hand, surging consumption of tobacco and alcohol is resulting in increased prevalence of tumor in the liver and kidney. Thus, demand for liver and kidney cancer screening is anticipated to rise significantly in the coming years.

North America dominated the market by capturing the largest revenue share of 42.0% in 2018. Presence of numerous biotechnology as well as medical device companies in the region is one of the prime factors driving the diagnostics sector in the region. North America is expected to continue its lead

throughout the forecast period owing to factors such as greater funding available for research and development projects and high adoption of advanced technologies. Asia Pacific is expected to exhibit the highest growth in the near future due to presence of a large patient pool, availability of skilled technicians at a comparatively lower price, and a defined regulatory framework favoring expedited product approvals. Furthermore, the booming medical tourism industry in countries such as India, China, and Malaysia are expected to boost demand for oncological screening. In addition, favorable government policies supporting the growth of the manufacturing industry, coupled with lower manufacturing costs in countries such as India and China, are expected to attract the attention of global players to set up their production plants in these countries. In addition, the expected rise in patient base in Asia Pacific is anticipated to boost market growth in the near future. Major players competing in the industry include but are not limited to GE Healthcare; Abbott; F. Hoffmann-La Roche Ltd; and Siemens Healthcare GmbH. These companies hold a strong position in the global market mainly due to adoption of innovative products and their high R&D efforts to introduce advances in the same. Some other players operating in the market are Becton, Dickinson & Company; Illumina, Inc.; Koninklijke Philips N.V.; and Hologic, Inc. Competition in the market is expected to intensify in the near future since several companies are now focusing on their research endeavors and introducing new diagnostic methods through product portfolio expansions and mergers and acquisitions.