Histology and Histopathology Research

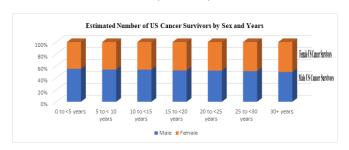
Loai Aljerf

Introduction: Cancer research ranges from epidemiology, molecular bioscience to the performance of clinical trials to evaluate and compare applications of the various cancer treatments. Clinical Cancer Research is a peer-reviewed medical journal on oncology, including the cellular and molecular characterization, prevention, diagnosis, and therapy of human cancer, medical and hematological oncology, radiation therapy, pediatric oncology, pathology, surgical oncology, and clinical genetics. Research efforts in cancer pharmacology include studies of the basic mechanisms of signal transduction associated with cell proliferation and apoptosis, the mechanisms of action of anti-neoplastic agents, the design and discovery of new drugs, basic mechanisms of DNA repair and DNA damage tolerance and the development of novel strategies for gene therapy.

It is our great honor to welcome you all for the conference entitled "31st International Conference on Cancer Research and Pharmacology" which is scheduled during September 28-29, 2020 in Edinburgh, Scotland.

Market Analysis

There are many different types of cancer treatment, including surgery, radiation therapy, and/or systemic therapy (e.g., chemotherapy, hormonal therapy, immune therapy, and targeted therapy). Treatments may be used alone or in combination depending on the type and stage of cancer; tumour characteristics; and the patient's age, health, and preferences. Supportive therapies to reduce side effects and address other patient and family quality of life concerns may also be used. When it is anticipated that a cancer will grow so slowly that it is unlikely to ever cause symptoms or affect the patient's health, the approach may be to avoid or defer immediate treatment and monitor the cancer over time to determine whether to start treatment at a later time (known as active surveillance). Active surveillance is most commonly used for prostate cancer.



Key Market Trends

The Target Therapy Segment is Expected to show the Fastest Growth in the Forecast Period.

The target therapy segment is expected to show the highest CAGR of 9.68% during the forecast period. The target therapy includes hormone therapies, gene expression modulators, apoptosis inducers, angiogenesis inhibitors, immunotherapies, signal transduction inhibitors, and toxin delivery molecules. Targeted therapy is attaining importance due to its specificity toward cancer cells, while sparing the toxicity to off-target cells.

The breast cancer segment is believed to account for the largest market size over the forecast period. This is majorly attributed to the higher and continuously increasing prevalence of breast cancer across the world. As per estimates provided by the Breast Cancer Organization in 2018, it is estimated that over 2,66,120 new cases of invasive breast cancer are expected to be diagnosed in women in the United States, along with 63,960 new cases of non-invasive (in situ) breast cancer.

According to the <u>global cancer</u> therapy market it was valued at USD 136,254.35 million in 2018, and is estimated to be valued at USD 220,701.26 million in 2024, witnessing a CAGR of 8.37%. The market growth has been driven by certain factors that include increasing Patient Assistance Programs (PAPs), increasing government initiatives for cancer awareness, rising prevalence of cancer worldwide, and strong R&D initiatives from key players.

In 2018, an estimated 1,735,350 new cases of cancer will be diagnosed in the United States and 609,640 people will die from the disease.

The most common cancers (listed in descending order according to estimated new cases in 2018) are breast cancer, lung and bronchus cancer, prostate cancer, colon and rectum cancer, melanoma of the skin, bladder cancer, non-Hodgkin lymphoma, kidney and renal pelvis cancer, endometrial cancer, leukemia, pancreatic cancer, thyroid cancer, and liver cancer.

The number of new cases of cancer (cancer incidence) is 439.2 per 100,000 men and women per year (based on 2011–2015 cases).

The number of cancer deaths (cancer mortality) is 163.5 per 100,000 men and women per year (based on 2011–2015 deaths).

Cancer mortality is higher among men than women (196.8 per 100,000 men and 139.6 per 100,000 women). When comparing groups based on race/ethnicity and sex, cancer mortality is highest in

Loai Aljerf

Researcher & Docent Damascus University/Faculty of Dental Medicine Syria, E-mail: envirochrom3@hotmail.com

African American men (239.9 per 100,000) and lowest in Asian/Pacific Islander women (88.3 per 100,000).

In 2016, there were an estimated 15.5 million cancer survivors in the United States. The number of cancer survivors is expected to increase to 20.3 million by 2026.

Approximately 38.4% of men and women will be diagnosed with cancer at some point during their lifetimes (based on 2013–2015 data).

In 2017, an estimated 15,270 children and adolescents ages 0 to 19 were diagnosed with cancer and 1,790 died of the disease.

Estimated national expenditures for cancer care in the United States in 2017 were \$147.3 billion. In future years, costs are likely to increase as the population ages and cancer prevalence increases. Costs are also likely to increase as new, and often more expensive, treatments are adopted as standards of care.

Statistics at a Glance: The Burden of Cancer Worldwide

Cancer is among the leading causes of death worldwide. In 2012, there were 14.1 million new cases and 8.2 million cancer-related deaths worldwide.

57% of new cancer cases in 2012 occurred in less developed regions of the world that include Central America and parts of Africa and Asia; 65% of cancer deaths also occurred in these regions.

The number of new cancer cases per year is expected to rise to 23.6 million by 2030.

U.S. Cancer Mortality Trends

In the United States, the overall cancer death rate has declined since the early 1990s. The most recent SEER Cancer Statistics Review, released in April 2018, shows that cancer death rates decreased by:

- 1.8% per year among men from 2006 to 2015
- 1.4% per year among women from 2006 to 2015
- 1.4% per year among children ages 0-19 from 2011 to 2015

Although death rates for many individual cancer types have also declined, rates for a few cancers have stabilized or even increased.

As the overall cancer death rate has declined, the number of cancer survivors has increased. These trends show that progress is being made against the disease, but much work remains. Although rates of smoking, a major cause of <u>cancer</u>, have declined, the U.S. population is aging, and cancer rates increase with age. Obesity, another risk factor for cancer, is also increasing.

The Surveillance, Epidemiology, and End Results (SEER) Program

NCI's Surveillance, Epidemiology, and End Results (SEER) Program collects and publishes cancer incidence and survival data from population-based cancer registries that cover approximately 28% of the U.S. population. The SEER program website has more detailed cancer statistics, including population statistics for common types of cancer, customizable graphs and tables, and interactive tools.

The Annual Report to the Nation on the Status of Cancer provides an annual update of cancer incidence, mortality, and trends in the United States. This report is jointly authored by experts from NCI, the Centers for Disease Control and Prevention, American Cancer Society, and the North American Association of Central Cancer Registries.

List of Organizations specialized in Oncology/ Cancer care

UCL Cancer Institute

Abramson Family Cancer Research Institute

Melvin and Bren Simon Cancer Center

Huntsman Cancer Institute

James Cancer Hospital and Solove Research Institute

Laura and Isaac Perlmutter Cancer Center

Harold C. Simmons Comprehensive Cancer Center

NCI-designated Cancer Centers

Comprehensive Cancer Center

Sidney Kimmel Comprehensive Cancer Center

Koch Institute for Integrative Cancer Research

Stanford Cancer Institute

University of Gothenburg

LUND University

University of Glasgow

Stanford Medicine

University of Colorado Cancer Center

Institute of Cancer Research

The University of Texas MD Anderson Cancer Center

The University of Manchester

The City

London, the capital of England and the United Kingdom, is a 21st-century city with history stretching back to Roman times. At its centre stand the imposing Houses of Parliament, the iconic 'Big Ben' clock tower and Westminster Abbey, site of British monarch coronations.

Across the Thames River, the London Eye observation wheel provides panoramic views of the South Bank cultural complex, and the entire city. London is considered to be one of the world's most important global cities and has been termed the world's most powerful, most desirable, most influential, most visited, most expensive, innovative, sustainable, most investment friendly, and most popular for work city in the world. London exerts a considerable impact upon the arts, commerce, education, entertainment, fashion, finance, healthcare, media, professional services, research and development, tourism and transportation. London ranks 26 out of 300 major cities for economic performance. It is one of the largest financial centres and has either the fifth or sixth largest metropolitan area.

Loai Aljerf

Researcher & Docent Damascus University/Faculty of Dental Medicine Syria, E-mail: envirochrom3@hotmail.com