

## 17th International Conference on Cancer Science and Radiation Oncology

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### Market Analysis Report

Cancer has a worldwide prevalence that major reason for the demand for cancer medicine. The key factors for the expansion of the oncology/cancer medicine market square measure surge in cancer analysis, rise in population worldwide and increase in the collaborations between pharmaceutical firms. Additionally, rise in aid expenditure worldwide is expected to boost up the market enlargement.

Radiation may cause cancer in most of the body parts with no age restrictions, although radiation induced solid tumours usually take 10–15 years and can take up to forty years, to become clinically manifest, and radiation induced malignant neoplastic disease usually need 2–10 years to look.

Global radiotherapy market report is segmented on the basis of type, application, end-users and regional & country level. Based on type, global radiotherapy market is classified as external beam radiation therapy, internal radiation therapy and systemic radiation therapy. Based upon application, global radiotherapy market is classified into skin & lip cancer, breast cancer, head & neck cancer, prostate cancer, cervical cancer, spine cancer, lung cancer and others. Based upon end-users, global radiotherapy market is classified as hospitals, cancer research institutes, and ambulatory & radiotherapy centers.

The regions covered in this Global Radiotherapy Market report are North America, Europe, Asia-Pacific and Rest of the World. On the idea of country level, market of radiotherapy is sub divided into U.S., Mexico, Canada, U.K., France, Germany, Italy, China, Japan, India, South East Asia, GCC, Africa, etc.

Exposure to sun stands as the most preventable risk factor for all skin cancer. According to the survey done by the National Cancer Institute (NCI), the rate of new Melanoma and Carcinoma cases among the American adults has tripled, in detail; in the year 1975 the melanoma affected rate was 7.9 per 100,000 but in the year 2014 the rate has been increased to 25.2 per 100,000. In addition among both men and women the new melanoma cases increases at a rate of 1.7% and 1.4% per year respectively which is had been stated by Federal Centers for Disease Control and Prevention (CDC).

Worldwide there are ten million people getting affected by cancer each year and the incidence of cancer is getting increased at a rate of 2.4% annually and it may reach upto 14 million per year by 2020. Cancer being the second most common death in the industrialized world and also because of growing incidence of cancer there is a steady growth in

the market for cancer diagnosis and treatment products, precisely radiation therapy curing 40% of cancer affected people, the recent technological advancements in radiotherapy and the increased healthcare expenditure stands as a key factor for rapid market.

### Industrial Analysis

The market size of global radiation oncology in the year 2016 was estimated around \$5.7 billion it is believed to expand at a rate of 6.5% per year. There are several factors for the market growth of radiation oncology but the key factors to be considered are the emerging technological advancements, worldwide prevalence of cancer and increase in the healthcare expenditure. Radiotherapy can be used at three different levels of cancer treatments which include primary treatment, therapy after chemotherapy or surgery and as a palliative therapy to reduce the size of tumour. According to the statement given by World Health Organisation (WHO) nearly 14 million new cancer cases got identified and 8.2 million cancer related deaths happened in the year 2012. Also this number is expected to increase to 70% over the next two decades. To reduce the mortality rate, effective treatment is required and it is achieved by the emerging techniques such as Three Dimensional Conformal Radiotherapy, Intensity Modulated Radiation Therapy and Image Guided and Stereotactic Radiation Therapy which has led to effective treatment with reduced adverse effect

### Product Analysis

The market share of External beam Radiation Therapy (EBRT) was about 80% in the year 2016. The ease of controlled dose of radiotherapy makes it even more effective and user friendly. In addition to EBRT many radiotherapy devices such as Cyber Knife, Gamma Knife and tomotherapy has also wide range of applications in the treatment of cancer. Where Cyber Knife is used in the treatment of benign and malignant tumours and Gamma Knife is primarily used to treat brain tumours. Tomotherapy has the ability to deliver radiation in slices with the help of computed tomography.

### Application Analysis

EBRT has a wide range of application in the treatment of cancer such as prostate, breast, lung, colorectal, head and neck cancer. EBRT showed a substantial growth in the treatment of cancer and the market value increases steadily as the incidence of lung cancer in the rising pace. The major factor considered as the reason for increase of market value

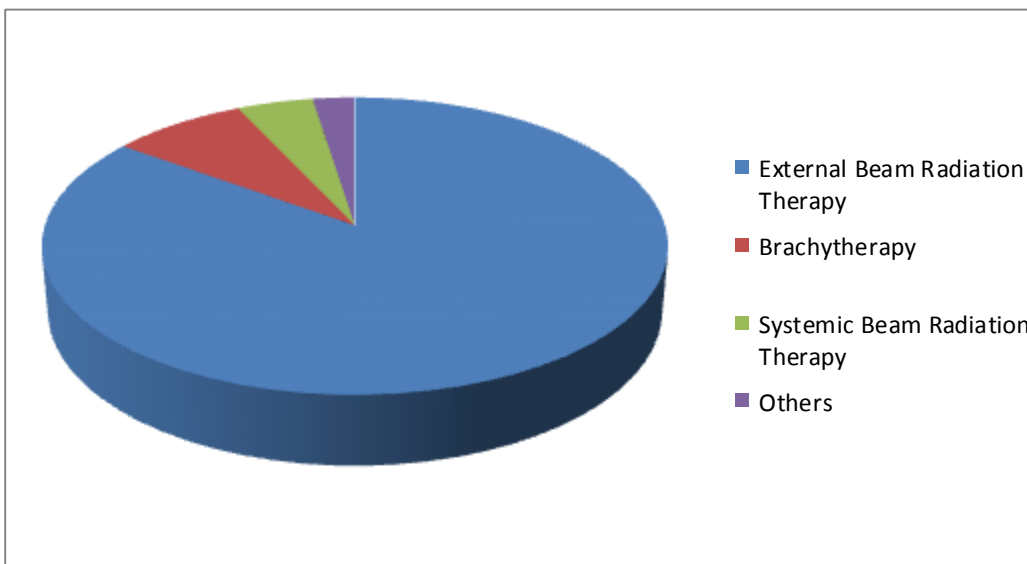
## Market Analysis

of EBRT is its three stage application in the cancer treatment that is, EBRT can be used before surgery to reduce the size of tumours and after surgery it is used to remove remnant tumour cells and also treat lung cancer that has spread to other parts of the body.

## Technological Analysis

The three dimensional Conformal Radiotherapy (CRT) is considered to be the emerging technology and it is believed to attain growth rate of 6.5% in the next eight years. This technique allows the radiation beam to form the shape of cancer and hence it is considered to be the most suitable method to treat the tumours which is of irregular shape and the tumours close to the healthy organs. To understand the shape of tumours various medical imaging techniques such as Magnetic Resonance Imaging (MRI) and Positron Emission Tomography (PET) is used and then treated with 3D-CRT.

The global radiation oncology market share by technology in the year 2016 is shown below,



## Regional Analysis

In the year 2016, North America led the global market by holding nearly 40% share of radiation oncology. Recent outbreaks in the healthcare infrastructure and high healthcare expenditure are considered to be the major reasons for rise of market value.

On the other, Asian countries is estimated to attain a sustainable growth in the upcoming years. Rise in population, urbanization in the countries like India and China is considered to be the major reason for the regional market growth.