Image Guided Radiotherapy Market Information: On Types (Soft-Tissue Imaging, Lung MRI, Simplifying Cardiac MRI, Simplifying MRI-Conditional Implant Scans, Silent MRI Scanning), By Technology (Radiation-Based, Non-Radiation Based Systems), By Devices (X-Ray Computed Tomography (CT), Magnetic Resonance Imaging (MRI), And Positron Emission Tomography), By End Users (Hospitals, Smart Cancer Centers, Research Institutes) - Global Forecast Till 2023

Market Scenario

Image guided radiotherapy (IGRT), a type of conformal radiotherapy, involves the use of different scans and X-rays to treat an area of cancer. Conformal radiotherapy shape the radiotherapy beams around the area of the cancerous tissue. It uses X-rays and scans similar to CT scans before and during the radiotherapy treatment. It improves the precision and accuracy of treatment delivery. These therapy are majorly used in the treatment of cancer such as lung cancer, skin cancer, and others.

Increasing prevalence of cancer and rapid development in the cancer treatment drives the growth of the market. According to the World Health Organization (WHO), cancer is one of the leading causes of morbidity and mortality worldwide. The data also suggest that about 14 million new cases observed in 2012, which is expected to increase by 70% till 2030. Apart from this, continuously rising demand for the better cancer treatment, increasing healthcare expenditure, and government encouragement for research & development expected to fuel the growth of the market over the corresponding period.

On the other hand, high cost of the treatment & devices and side effects of the treatment may slow the market growth over the forecasted period.

The global IGRT market is expected to grow at a CAGR of 15.8% during the forecasted period.

Figure: Global Image guided radiotherapy market, by technology, 2016 (%)
Key Players
Some of the key players in the image guided radiotherapy market are ViewRay (US), General Electric Company (US), Hitachi, Ltd. (Japan), Siemens AG (Germany), Koninklijke Philips N.V. (Netherlands), TOSHIBA CORPORATION (Japan), Varian Medical Systems, Inc. (US), Vision RT Ltd. (UK), Scranton Gillette Communications (US), XinRay Systems (US), and C-RAD (Sweden).

Segmentation
The global image guided radiotherapy market is segmented on the basis of types, technology, devices, application, and end users.

On the basis of types, the market is segmented into soft-tissue imaging, lung MRI, simplifying cardiac MRI, simplifying MRI-conditional implant scans, and silent MRI scanning.

On the basis of technology, the market is segmented into radiation-based, non-radiation based systems, and others. Radiation-based system is further segmented into electronic portal imaging devices (EPID), cone beam CT, Fan beam, and others. Non-radiation based systems are further segmented into ultrasound-based systems, camera-based or optical tracking systems, MRI-guided IGRT, and others.

On the basis of devices, the market is segmented into X-ray computed tomography (CT), magnetic resonance imaging (MRI), positron emission tomography, and others. X-ray computed tomography market is further segmented into digital X-ray, computed tomography (CT), conventional CT, optical tracking, cone beam, MVCT, and others.

On the basis of end users, the market is segmented in hospitals, smart cancer centers, research institutes, and others.

Research Methodology:
Regional Analysis
The Americas account for the largest share in the global image guided radiotherapy market owing to the presence of huge patient population and increasing healthcare expenditure. According to the American Cancer Society, in 2016, over 1,688,780 cancer cases were diagnosed in the America. Moreover, increasing awareness among the people and well-developed technology have fuelled the market growth.

Europe is the second largest market and holds a noticeable share in the global image guided radiotherapy market. The European market is expected to grow significantly during the forecast period owing to availability of advanced treatment facilities, skilled medical professionals, and the government support for research & development.

Asia Pacific accounts for the fastest growing market owing to increasing prevalence of cancer, rising awareness about the cancer, and availability of new treatment methods. In Asia Pacific, the market shows growth opportunities in China and India. However, the Middle East & Africa is expected to show the least growth in this market due to lack of awareness, limited development in healthcare technology, and availability of treatment facilities.

Intended Audience
- Pharmaceutical Manufacturers and Suppliers
- Radiology Devices Manufacturers and Suppliers
- Medical Research Laboratories
- Research and Development (R&D) Companies
- Market Research and Consulting Service Providers
3.3 Secondary research
3.4 Market Size Estimation

4 Market Dynamics
4.1 Drivers
4.2 Restraints
4.3 Opportunities
4.4 Challenges
4.5 Macroeconomic Indicators
4.6 Technology Trends & Assessment

5. Market Factor Analysis
5.1 Porters five Forces Analysis
5.1.1 Bargaining Power of Suppliers
5.1.2 Bargaining Power of Buyers
5.1.3 Threat of New Entrants
5.1.4 Threat of Substitutes
5.1.5 Intensity of Rivalry
5.2 Value Chain
5.3 Investment Feasibility Analysis
5.4 Price Factor Analysis

6 Global Image Guided Radiotherapy Market, by types
6.1 Introduction
6.2 Soft-Tissue Imaging
6.3 Lung MRI
6.4 Simplifying Cardiac MRI
6.5 Simplifying MRI-Conditional Implant Scans
6.6 Silent MRI Scanning
6.7 Others

7 Global Image Guided Radiotherapy Market, by technology
7.1 Introduction
7.2 Radiation-Based System
7.2.1 Electronic Portal Imaging Devices (EPID)
7.2.2 Cone Beam CT
7.2.3 Fan Beam
7.2.4 Others
7.3 Non-Radiation Based Systems
7.3.1 Ultrasound-Based Systems
7.3.2 Camera-Based or Optical Tracking Systems
7.3.3 MRI-Guided IGRT
7.3.4 Others
7.4 Others

8 Global Image Guided Radiotherapy Market, by Devices
8.1 Introduction
8.2 X-Ray Computed Tomography (CT)
8.2.1 Digital X-ray
8.2.2 Computed Tomography (CT)
8.2.3 Conventional CT
8.2.4 Optical Tracking
8.2.5 Cone Beam
8.2.6 MVCT
8.2.7 Others
8.3 Magnetic Resonance Imaging (MRI)
8.4 Positron Emission Tomography
8.5 Others
9 Global Image Guided Radiotherapy Market, by End Users
9.1 Introduction
9.2 Hospitals
9.3 Smart Cancer Centers
9.4 Research Institutes
9.5 Others
10 Global Image Guided Radiotherapy Market by Region
10.1 Introduction
10.2 Americas
10.2.1 North America
10.2.1.1 US
10.2.1.2 Canada
10.2.2 Latin America
10.3 Europe
10.3.1 Western Europe
10.3.1.1 Germany
10.3.1.2 France
10.3.1.3 UK
10.3.1.4 Italy
10.3.1.5 Spain
10.3.1.6 Rest of Western Europe
10.3.2 Eastern Europe
10.4 Asia Pacific
10.4.1 Japan
10.4.2 China
10.4.3 India
10.4.4 Republic of Korea
10.4.5 Australia
10.4.6 Rest of Asia Pacific
10.5 The Middle East & Africa
10.5.1 United Arab Emirates
10.5.2 Saudi Arabia
10.5.3 Oman
10.5.4 Kuwait
10.5.5 Qatar
10.5.6 Rest of Middle East & Africa
11 Company Landscape
11.1 Introduction
11.2 Market share Analysis
11.3 Key Development & Strategies
11.3.1 Key Developments
12 Company Profiles
12.1 ViewRay