

Global Radiopharmaceuticals Market Insight

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Abstracts

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Radioisotopes are radioactive isotopes having an unstable balance of atomic nucleus. Radioisotopes are produced either by using nuclear research reactor or by using cyclotron. These isotopes emit energy in the form of alpha, beta or gamma when changed to a stable nature. The gamma rays, thus emitted are used in Nuclear medicine, specifically in medical diagnostics. In this field, the radiation is used to provide diagnostic information about a human body's functioning. Radiotherapy is also used to treat some life-threatening diseases like cancer. Also, it has been observed that the increasing use of radioisotopes is one of the major reasons for a fall in deaths caused by cancer across the globe. It is because of this feature that the demand for radioisotopes or otherwise called radiopharmaceuticals is increasing significantly.

A major part of the radiopharmaceuticals market is dominated by diagnostic radiopharmaceuticals, where, SPECT and PET isotopes are most common. The new innovations in nuclear medicine to target coronary heart disease, Alzheimer's disease, breast cancer, and bone metastasis would be the major drivers of the diagnostic radiopharmaceuticals market in the future. The other segment of the market is the therapeutic segment, which accounts for the remaining 10%. This segment is mainly dominated by isotopes like I-131, Sm-153, Re-186, Y-90, and Lu-177. It is expected that over the next 5-6 years horizon, this market would witness a steep increase owing to the introduction of many new products for treating lymphoma, colon cancer, lung cancer, prostate cancer, bone cancer and other persistent cancers.

The increasing popularity and use of SPECT and PET scans, new and efficient technological equipment, increased awareness about radiopharmaceuticals among physicians and most importantly, the easy availability of radiopharmaceutical from cyclotrons are some of the major factors driving the global radiopharmaceutical market.

In spite of the market for radiopharmaceuticals growing rapidly, there are many challenges, like high cost of devices using radioisotopes, short half-life, lack of good manufacturing practices, and stringent regulatory approvals. Additionally, there are also some obstacles with regards to the manufacturing of radioisotopes, which need to be addressed to tap the opportunities.

The global market for radiopharmaceuticals was estimated to be valued at approximately USD 5.3 billion in 2013. Owing to factors like the increasing adoption rates of PET and SPECT scanners, alpha radioimmunotherapy based targeted cancer treatment, and ready availability of radiopharmaceutical from cyclotrons, coupled with significant developments in research and technology, this market is expected to record a CAGR of close to 15% to reach approximately USD 10.6 billion by 2018.

“Global Radiopharmaceuticals Market Insight” Report Highlights

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About

Radioisotopes are radioactive isotopes having an unstable balance of atomic nucleus.

Radioisotopes are produced either by using nuclear research reactor or by using cyclotron. These isotopes emit energy in the form of alpha, beta or gamma when changed to a stable nature. The gamma rays, thus emitted are used in Nuclear medicine, specifically in medical diagnostics. In this field, the radiation is used to provide diagnostic information about a human body's functioning. Radiotherapy is also used to treat some life-threatening diseases like cancer. Also, it has been observed that the increasing use of radioisotopes is one of the major reasons for a fall in deaths caused by cancer across the globe. It is because of this feature that the demand for radioisotopes or otherwise called radiopharmaceuticals is increasing significantly.

Across the globe more than 10,000 hospitals have included radioisotopes in their medicines and close to xx% procedures are for diagnosis. In recent years, amongst the radioisotopes being used, technetium-99 is one of the most common one used with close to 40 million procedures annually which occupies 80% of the total nuclear procedures used.

A major part of the radiopharmaceuticals market is dominated by diagnostic radiopharmaceuticals, where, SPECT and PET isotopes are most common. The new innovations in nuclear medicine to target coronary heart disease, Alzheimer's disease, breast cancer, and bone metastasis would be the major drivers of the diagnostic radiopharmaceuticals market in the future. The other segment of the market is the therapeutic segment, which accounts for the remaining 10%. This segment is mainly dominated by isotopes like I-131, Sm-153, Re-186, Y-90, and Lu-177. It is expected that over the next 5-6 years horizon, this market would witness a steep increase owing to the introduction of many new products for treating lymphoma, colon cancer, lung cancer, prostate cancer, bone cancer and other persistent cancers.

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The global market for radiopharmaceuticals was estimated to be valued at approximately USD xx billion in 2013. Owing to factors like the increasing adoption rates of PET and SPECT scanners, alpha radioimmunotherapy based targeted cancer treatment, and ready availability of radiopharmaceutical from cyclotrons, coupled with significant developments in research and technology, this market is expected to record a CAGR of close to xx% to reach approximately USD xx billion by 2018.

Global Radiopharmaceuticals Market by Region (US\$ Billion), 2013 – 2018

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