

# Radiopharmaceuticals: Market Research Report

https://marketpublishers.com/r/R6F15184084EN.html

Date: December 2018

Pages: 310

Price: US\$ 5,600.00 (Single User License)

ID: R6F15184084EN

### **Abstracts**

This report analyzes the worldwide markets for Radiopharmaceuticals in US\$ Thousand by the following Segments: Diagnostic Radiopharmaceuticals, and Therapeutic Radiopharmaceuticals. The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa and Latin America.

Annual estimates and forecasts are provided for the period 2016 through 2024.

Also, a five-year historic analysis is provided for these markets.

Market data and analytics are derived from primary and secondary research. Company profiles are primarily based on public domain information including company URLs.

The report profiles 61 companies including many key and niche players such as -

Actinium Pharmaceuticals, Inc.

Alliance Medical

Alseres Pharmaceuticals, Inc.

Avid Radiopharmaceuticals

Bayer HealthCare Pharmaceuticals

Bracco Diagnostics, Inc.



### **Contents**

### I. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS

Study Reliability and Reporting Limitations

**Disclaimers** 

Data Interpretation & Reporting Level

Quantitative Techniques & Analytics

Product Definitions and Scope of Study

A. Diagnostic Radiopharmaceuticals

B. Therapeutic Radiopharmaceuticals

#### II. EXECUTIVE SUMMARY

#### 1. INDUSTRY OVERVIEW

A Prelude

**Current & Future Analysis** 

Diagnostic Radiopharmaceuticals: The Dominant Segment

Select Cardiology and Oncology Radiopharmaceuticals

New Therapeutic Radiopharmaceuticals to Drive Global Market

Market Drivers

**Growing Acceptance in Cancer Treatment** 

Increasing Acceptance of Disease-Targeted Treatment

Growing Emphasis of Accurate Diagnosis

**Expanding Molecular Imaging Applications** 

Market Restraints

Stringent Regulatory Guidelines for Manufacture, Storage and Usage

Global Supply Shortages

Price Sensitivity & Competition from Alternatives

Lack of Dosage Standards for Pediatric Patients Limits Radiopharmaceutical Efficacy

Unfounded Fears of Radiation Exposure Hinder Growth

Bottlenecks in Developing Markets

Recognition of Intrinsic Cost Benefits: Critical to Market Acceptance

Competition

Relevant Aspects of Radiopharmaceutical Production

Increasing Uptake of PET: A Prime Growth Driver

Non-Reactor Based TC-99m Production to Drive SPECT Growth

New Radiopharmaceuticals Drive Adoption of Molecular Imaging



PET and SPECT in Cardiovascular Imaging
Innovative Radiotracers – Key to PET & SPECT Success in Cardiovascular Imaging
Cardiac Amyloidosis Visualization – A Potential Application for PET
Application of PET in Drug Development to Expand Opportunities
Industry Focus Gears up for innovative Radiopharmaceuticals with Therapeutic Benefits
Innovative Radiopharmaceuticals to Boost Cardiac Applications
Intra-operative Lymphatic Mapping (ILM): Creates New Opportunities for
Radiopharmaceuticals in Cancer Detection
Personalized Medicine to Drive Nuclear Medicine

**Table 1.** Drug Ineffectiveness for Select Therapeutic Categories as a Percentage of Patient Population (includes corresponding Graph/Chart)

Rise in Incidence of Neurological Disorders to Drive Growth

Battling Alzheimer's Disease – A Powerful Market Force for Nuclear Medicine

Combating the Shortage of RadioIsotopes

#### 2. LONGSTANDING GROWTH DRIVERS

Rise in Incidence of Cancer – A Major Growth Driver Cancer Prone Sites based on Age

**Table 2.** Cancer Incidence in Developed Nations by Site: 2012 (includes corresponding Graph/Chart)

Ageing Population – A Vital Demography

**Table 3.** Global Population Statistics for the 65+ Age Group (2015) (includes corresponding Graph/Chart)

**Table 4.** Comparison of Aging Population by Country (1980, 2015 & 2050): Percentage Share of Population Aged Above-65 Years of the Overall Population for Select Countries (includes corresponding Graph/Chart)

Global CVD Stats



**Table 5.** Global Estimated Fatalities by Heart Conditions - Percentage Share Breakdown for Ischemic Heart Disease, Stroke, CVD, and Others (includes corresponding Graph/Chart)

**Table 6.** Projected Fatalities in Low Income Countries by Disease (2015 & 2030): Percentage Share Breakdown of Number of Deaths for CVD; Cancer; Injury; HIV, TB & Malaria; Malnutrition; and Others (includes corresponding Graph/Chart)

**Table 7.** Projected Fatalities in Mid Income Countries by Disease (2015 & 2030): Percentage Share Breakdown of Number of Deaths for CVD; Cancer; Injury; HIV, TB & Malaria; Malnutrition; and Others (includes corresponding Graph/Chart)

#### 3. PRODUCT OVERVIEW

Radiopharmaceuticals: A Definition

Mechanism of Action

Application of Radiopharmaceuticals

Radioactive Tracers for Diagnostic Imaging

Therapeutics

Research

Sterilization

Classification of Radiopharmaceuticals

Diagnostic Radiopharmaceuticals

Commonly Used Diagnostic Radiopharmaceutical Agents

Major Isotopes and their Diagnostic Applications

Advantages

Classification

Cardiology Diagnostics

Non-cardiology Diagnostics

Molecular Imaging Modalities in Radiopharmaceutical Diagnostics

Planar Imaging

Positron Emission Tomography (PET)

Applications of PET

Commonly used Radioisotopes in PET Scans

Major PET Isotopes and their Applications

Single Photon Emission Computed Tomography (SPECT)

Applications of SPECT

Commonly used Radioisotopes in SPECT Scans



Therapeutic Radiopharmaceuticals

Characteristics of Therapeutic Radiopharmaceuticals

Commonly used Therapeutic Agents

Major Isotopes and their Therapeutic Applications

Note on Select Commercially Available Therapeutic Radiopharmaceuticals

#### 4. PRODUCT INNOVATIONS/INTRODUCTIONS

ORA Launches NEPTIS xSeed Kitless Synthesizer

Advanced Accelerator Applications Resubmits NDA for Lutathera

Norgine B. V. Launches LYMPHOSEEK

IBA launches the Fixed IFP

Piramal Imaging and ISOLOGIC Innovative Radiopharmaceuticals Receive Approval

FDA Approves Netspot to Detect Rare Neuroendocrine Tumors

Blue Earth Diagnostics Bags FDA Approval for AxuminTM

EMA Issues Positive Opinion on Marketing Authorization Application for SomaKit TOC

IBA Unveils the Cyclone KIUBE Cyclotron

Advanced Accelerator Expands NETSPOTTM Supply Chain

Blue Earth Diagnostics and Siemens' PETNET Solutions Introduce AxuminTM

(Fluciclovine F 18) Injection

Blue Earth Wins FDA Approval for PET Agent for Axumin

Zevacor to Develop SomaKit-TATE doses for AAA

Triad Isotopes Receives FDA Approval for Fludeoxyglucose F18 (18F FDG) and Sodium Fluoride F-18.

Zevacor Wins FDA Approval of ANDA for Choline C11

Advanced Medical Isotope Receives FDA Clearance for Y-90 RadioGel Device

Sumitomo Heavy Industries Receives Medical Device Approval for MPS200A?

NorthStar Medical Radioisotopes to Start Production of Molybdenum-99

GE Healthcare Launches GENtraceTM and FASTlab 2 for Radiopharmaceutical

Manufacturing

RadioMedix Introduces SmartMedix Synthesizers

Lantheus Medical Imaging Gains FDA Approval for manufacturing NEUROLITE at Jubilant HollisterStier

### 5. RECENT INDUSTRY ACTIVITY

Telix Pharmaceuticals and ANMI Enter into Partnership for Commercialization of ANMI's 68Ga-HBED-CC-PSMA Kit

Telix Pharmaceuticals Signs Technology Licensing Agreement and Research



Collaboration with the University of Melbourne

RadioMedix and ITM Enhter into Partnership Agreement for Distribution of Lutetium-177 in North America

Blue Earth Diagnostics Signs Exclusive Distribution Agreement with Seibersdorf Laboratories for the supply of Axumin

Blue Earth Diagnostics and GE Healthcare Sign Agreement to Manufacture Axumin

IRE-ELIT Signs Exclusive Long-Term Contract with Cardinal Health

Jubilant Acquires Radiopharmacy Business of Triad

ARTMS Products and GE Healthcare Partner to Expand Cyclotron-Produced Radioisotopes

Theragnostics Signs Partnership Agreement with ROTOP

Cyclotek and Telix Pharmaceuticals Sign Radiopharmaceutical Manufacturing Agreement

IBA and Philips Collaborate for Sales and Marketing of Proton Therapy in Brazil Advanced Accelerator Applications Signs Agreement with Blue Earth Diagnostics to Supply Axumin

ARTMS Products Partners with Alliance Medical to Supply Tc-99m Sofie Biosciences to Acquire Zevacor Pharma

IBA Molecular and Mallinckrodt Nuclear Medicine Merge to Form Curium

GE Healthcare to Supply Radiopharmaceuticals to HealthTrust

IBA Signs Co-Marketing Agreement in North America with Nelco Worldwide

Telix Announces Product Development Partnership with Therapeia

IBA Signs ProteusONE Contracts with Proton Partners International

Cellectar Biosciences Selects Hamilton for Supply of CLR

Life Healthcare Acquires Alliance Medical Group

Lantheus Holdings Divests its Australian Radiopharmacy Servicing Business

ITEL Signed Agreement with AAA to Manufacture and Commercialize F-18 Radiopharmaceuticals

Zevacor Pharmato Manufacture and Supply Lomab-B for Pivotal Phase 3 SIERRA Trial Blue Earth Diagnostics and Norsk Enter into Manufacturing and Distribution partnership for Fluciclovine (18F)

Ipsen and 3B Pharmaceuticals Sign Exclusive License Agreement to Develop Novel Radiopharmaceuticals in Oncology

Isologic Acquires Lantheus Medical Imaging Canadian Radiopharmaceutical Business IRE ELiT & Monrol Sign Distribution Agreement for Galli Eo

Westinghouse Signs Agreement with NorthStar for Production of Medical Radioisotopes Advanced Medical Enters into Collaboration with IsoTherapeutics to

ISOLOGIC Opens New Cyclotron and Radiopharmaceutical Manufacturing Facility IBA Divests IBA Molecular North America Business to Illinois Health and Science



AAA Enters into Distribution Agreement with FUJIFILM RI Pharma for Lutathera in Japan

Piramal Imaging Signs Strategic Partnership with ISOLOGIC for Exclusive

Commercialization of Neuraceq in Canada

Ipsen to Acquire OctreoPharm Sciences

RadioMedix Enters into agreement with AREVA Med to Develop a Novel Treatment against Neuroendocrine Tumors

Siemens' PETNET Solutions to Manufacture and Distribute Blue Earth's Fluciclovine (18F)

IBA to Sell U. S. Operations to Illinois Health and Science

Lantheus Medical Signs agreement with IRE for supply of Xenon Xe 133 Gas

INR Receives U. S. Patent for Radiostrontium Production Technology

#### 6. FOCUS ON SELECT PLAYERS

Actinium Pharmaceuticals, Inc. (USA)

Alliance Medical (UK)

Alseres Pharmaceuticals, Inc. (USA)

Avid Radiopharmaceuticals (USA)

Bayer HealthCare Pharmaceuticals (Germany)

Bracco Diagnostics, Inc. (USA)

Cardinal Health, Inc. (USA)

GE Healthcare (UK)

Ion Beam Applications S. A (Belgium)

Immunomedics, Inc. (USA)

Jubilant Pharma (India)

Lantheus Medical Imaging Inc. (USA)

Medi-Radiopharma Ltd (Hungary)

Nordion, Inc. (Canada)

Peregrine Pharmaceuticals, Inc. (USA)

PETNET Solutions Inc. (USA)

Positron Corporation (USA)

Triad Isotopes, Inc. (USA)

#### 7. GLOBAL MARKET PERSPECTIVE

**Table 8.** World Recent Past, Current & Future Analysis for Radiopharmaceuticals by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa



and Latin American Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 9.** World Historic Review for Radiopharmaceuticals by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa and Latin American Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 10.** World 14-Year Perspective for Radiopharmaceuticals by Geographic Region - Percentage Breakdown of Value Sales for US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 11.** World Recent Past, Current & Future Analysis for Diagnostic Radiopharmaceuticals by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa and Latin American Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 12.** World Historic Review for Diagnostic Radiopharmaceuticals by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa and Latin American Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 13.** World 14-Year Perspective for Diagnostic Radiopharmaceuticals by Geographic Region - Percentage Breakdown of Value Sales for US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 14.** World Recent Past, Current & Future Analysis for Therapeutic Radiopharmaceuticals by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa and Latin American Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 15.** World Historic Review for Therapeutic Radiopharmaceuticals by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa and Latin American Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)



**Table 16.** World 14-Year Perspective for Therapeutic Radiopharmaceuticals by Geographic Region - Percentage Breakdown of Value Sales for US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa and Latin American Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### III. MARKET

#### 1. THE UNITED STATES

A. Market Analysis
Outlook
Radioisotope/Radiopharmaceuticals Production Scenario
Rise in Diagnostic Applications Stimulate Future Growth

**Table 17.** US Market for Diagnostic Radiopharmaceuticals by Modality (2016): Percentage Breakdown of Value Sales for PET and SPECT (includes corresponding Graph/Chart)

**Table 18.** US Market for Diagnostic Radiopharmaceuticals Agents (2016): Percentage Share Breakdown of Value Sales for Cardiology and Non-Cardiology Applications (includes corresponding Graph/Chart)

**Demographic Changes Offer Growth Opportunities** 

**Table 19.** North American Aging Population by Age Group: 1975-2050 (includes corresponding Graph/Chart)

Rising Incidence of Cancer - A Major Growth Driver

**Table 20.** New Cancer Cases by Gender and Affected Site in the US (2017E) (includes corresponding Graph/Chart)

Cardiovascular Imaging to Lead Volume Growth
Focused R&D Efforts to Fuel Therapeutic Radiopharmaceuticals Market
Radiopharmaceuticals in PET Imaging – Prospects
Isotope Shortage Leads to Dependence on Imports



US Fluorodeoxyglucose (FDG) Market Product Launches Strategic Corporate Developments Select Players B. Market Analytics

**Table 21.** US Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 22.** US Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 23.** US 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### 2. CANADA

A. Market Analysis

Outlook

Canadian Scientists Gear up to find Remedy for Mo-99 Supply Shortages

An Overview of Medical Imaging Market

Regulatory and Legal Restrictions

Strategic Corporate Developments

Select Players

B. Market Analytics

**Table 24.** Canadian Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)



**Table 25.** Canadian Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 26.** Canadian 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### 3. JAPAN

A. Market AnalysisOutlookHealthcare in JapanStrategic Corporate DevelopmentsB. Market Analytics

**Table 27.** Japanese Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 28.** Japanese Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 29.** Japanese 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### 4. EUROPE

A. Market AnalysisOutlookNew Applications and Products Augur Good Market Prospects



### B. Market Analytics

**Table 30.** European Recent Past, Current & Future Analysis for Radiopharmaceuticals by Geographic Region - France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 31.** European Historic Review for Radiopharmaceuticals by Geographic Region - France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 32.** European 14-Year Perspective for Radiopharmaceuticals by Geographic Region - Percentage Breakdown of Value Sales for France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 33.** European Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 34.** European Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 35.** European 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### **4A. FRANCE**

A. Market AnalysisOutlookStrategic Corporate DevelopmentsB. Market Analytics



**Table 36.** French Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 37.** French Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 38.** French 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### **4B. GERMANY**

A. Market Analysis
Outlook
Strategic Corporate Developments
Key Player
B. Market Analytics

**Table 39.** German Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 40.** German Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 41.** German 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes



corresponding Graph/Chart)

#### 4C. ITALY

A. Market AnalysisOutlookStrategic Corporate DevelopmentB. Market Analytics

**Table 42.** Italian Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 43.** Italian Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 44.** Italian 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

### **4D. THE UNITED KINGDOM**

A. Market Analysis
Outlook
Strategic Corporate Development
Select Players
B. Market Analytics

**Table 45.** UK Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)



**Table 46.** UK Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 47.** UK 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### **4E. SPAIN**

Market Analysis

**Table 48.** Spanish Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 49.** Spanish Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 50.** Spanish 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### 4F. RUSSIA

A. Market AnalysisOutlookB. Market Analytics

**Table 51.** Russian Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals



Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 52.** Russian Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 53.** Russian 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### **4G. REST OF EUROPE**

A. Market Analysis
Outlook
Market Overview
Product Innovations/Introductions
Strategic Corporate Developments
Select Players
B. Market Analytics

**Table 54.** Rest of Europe Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 55.** Rest of Europe Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 56.** Rest of Europe 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)



#### 5. ASIA-PACIFIC

A. Market AnalysisOutlookB. Market Analytics

**Table 57.** Asia-Pacific Recent Past, Current & Future Analysis for Radiopharmaceuticals by Geographic Region - China, India and Rest of Asia-Pacific Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 58.** Asia-Pacific Historic Review for Radiopharmaceuticals by Geographic Region - China, India and Rest of Asia-Pacific Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 59.** Asia-Pacific 14-Year Perspective for Radiopharmaceuticals by Geographic Region - Percentage Breakdown of Value Sales for China, India and Rest of Asia-Pacific Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 60.** Asia-Pacific Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 61.** Asia-Pacific Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 62.** Asia-Pacific 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### 5A. CHINA

Market Analysis



**Table 63.** Chinese Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 64.** Chinese Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 65.** Chinese 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### 5B. INDIA

A. Market AnalysisOutlookKey PlayerB. Market Analytics

**Table 66.** Indian Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 67.** Indian Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 68.** Indian 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)



#### **5C. REST OF ASIA-PACIFIC**

A. Market Analysis
Outlook
Strategic Corporate Development
Key Player
B. Market Analytics

**Table 69.** Rest of Asia-Pacific Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 70.** Rest of Asia-Pacific Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 71.** Rest of Asia-Pacific 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### 6. MIDDLE EAST & AFRICA

Market Analysis

**Table 72.** Middle East & Africa Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 73.** Middle East & Africa Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)



**Table 74.** Middle East & Africa 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

#### 7. LATIN AMERICA

A. Market AnalysisOutlookB. Market Analytics

**Table 75.** Latin American Recent Past, Current & Future Analysis for Radiopharmaceuticals by Region - Brazil and Rest of Latin America Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 76.** Latin American Historic Review for Radiopharmaceuticals by Region - Brazil and Rest of Latin America Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 77.** Latin American 14-Year Perspective for Radiopharmaceuticals by Region - Percentage Breakdown of Value Sales for Brazil and Rest of Latin America Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

**Table 78.** Latin American Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 79.** Latin American Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 80.** Latin American 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)



#### 7A. BRAZIL

A. Market AnalysisOutlookStrategic Corporate DevelopmentB. Market Analytics

**Table 81.** Brazilian Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 82.** Brazilian Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

**Table 83.** Brazilian 14-Year Perspective for Radiopharmaceuticals by Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

### **7B. REST OF LATIN AMERICA**

Market Analysis

**Table 84.** Rest of Latin America Recent Past, Current & Future Analysis for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2016 through 2024 (includes corresponding Graph/Chart)

**Table 85.** Rest of Latin America Historic Review for Radiopharmaceuticals by Segment - Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets Independently Analyzed with Annual Sales Figures in US\$ Thousand for Years 2011 through 2015 (includes corresponding Graph/Chart)

Table 86. Rest of Latin America 14-Year Perspective for Radiopharmaceuticals by



Segment - Percentage Breakdown of Value Sales for Diagnostic Radiopharmaceuticals and Therapeutic Radiopharmaceuticals Markets for Years 2011, 2017 & 2024 (includes corresponding Graph/Chart)

### IV. COMPETITIVE LANDSCAPE

```
Total Companies Profiled: 61 (including Divisions/Subsidiaries - 69)
The United States (27)
Canada (4)
Japan (1)
Europe (28)
France (4)
Germany (5)
The United Kingdom (4)
Italy (2)
Rest of Europe (13)
Asia-Pacific (Excluding Japan) (8)
Africa (1)
```



### I would like to order

Product name: Radiopharmaceuticals: Market Research Report

Product link: https://marketpublishers.com/r/R6F15184084EN.html

Price: US\$ 5,600.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

## **Payment**

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/R6F15184084EN.html">https://marketpublishers.com/r/R6F15184084EN.html</a>