Nuclear Imaging - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2021 - 2029

Market Report | 2024-02-17 | 168 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License $4750.00
- Team License (1-7 Users) $5250.00
- Site License $6500.00
- Corporate License $8750.00

Report description:

The global nuclear imaging market was valued at USD 7,135.57 million in the base year, and it is expected to reach USD 10,976.18 million by the end of the forecast period, registering a CAGR of 7.63%.

The nuclear imaging market was moderately impacted due to the pandemic. The operation of reactors has been largely classified as an essential service, given its criticality. Therefore, nuclear reactors were not shut down during the lockdown. For instance, under Section 71 of the Labour Act 66 of 1995 in South Africa, its SAFARI-1 reactor remained operational during the lockdown enforced in the country post-March 2020.

However, according to an article published in Seminar in Nuclear Medicine in June 2021, the number of nuclear studies, nuclear cardiac imaging, and oncology positron emission tomography/computed tomography decreased in March and April 2020 due to the rise of COVID-19 cases and deaths as reported by the Centers for Disease Control and Prevention (CDC). The study further stated that procedures increased from June 2020 to February 2021 as COVID-19 cases declined. Thus, COVID-19 has slightly impacted the nuclear imaging market with delays in clinical studies, postponement of various surgeries and imaging procedures, an increase in teleradiology, and several staff-related limitations. However, since the lockdown restrictions were lifted, the industry has been recovering well.

Over the last two years, the market recovery has been led by the high prevalence of chronic diseases. Patients' hospital visits for imaging diagnosis increased as the restrictions were relaxed, and so the industry saw a major surge in diagnostics and treatment. This is expected to promote the market's growth in the next few years.

Certain factors that are propelling the growth of the market include technological advancements, increasing diagnostic

applications in various diseases, such as cancer and cardiovascular diseases, government support, and a shift from standalone to hybrid modalities. For instance, according to the Breast Cancer Factsheet Now 2021, around 55,000 women and 370 men in the United Kingdom are diagnosed with breast cancer every year. Breast cancer has claimed the lives of an estimated 600,000 people in the United Kingdom. This figure is expected to climb to 1.2 million by 2030. Moreover, the growing prevalence of heart diseases is expected to propel the growth of the market. As stated by the American Heart Association 2021 Journal, it is estimated that by 2035, more than 130 million adults in the United States will have some type of heart disease. Thus, the growing prevalence of chronic diseases such as cancer and cardiac diseases is expected to increase demand for early and effective diagnosis, thereby boosting the growth of the nuclear imaging market over the forecast period.

The technological advancements in the field of imaging have always been challenging to practitioners in terms of how best to optimize them in patient care. Over the past few years, scientists, researchers, and technologists have been able to bring systems into clinical practice in which two or even more standalone diagnostic imaging modalities are combined. Some of those multimodality imaging systems include PET/CT, SPECT/CT, PET/MRI, and PET/SPECT/CT. For instance, in October 2022, Spectrum Dynamics announced its newest development in digital nuclear medicine imaging capability to image high-energy isotopes using solid-state detector technology in a 3600-CZT-based, wide-bore SPECT/CT configuration. This functionality is available in the new VERITON-CT 400 Series Digital SPECT/CT scanners, enabling total body, brain, heart, and other imaging applications. With such advances in nuclear imaging, the market studied is expected to grow significantly over the forecast period.

The key players are working on many strategic initiatives such as mergers, acquisitions, collaborations, partnerships, and product launches. For instance, in January 2021, Koninklijke Philips NV and Rennes University Hospital signed a five-year innovation and technology partnership to support PET diagnostics, interventional imaging, patient monitoring, and management, among other things. Additionally, in March 2021, GE Healthcare launched StarGuide in the United Kingdom, a next-generation SPECT/CT system that uses the latest digital technologies to help clinicians improve patient outcomes in bone procedures, cardiology, neurology, oncology, and other specialties.

According to the factors mentioned above, such as the growing prevalence of chronic diseases and technological advances in nuclear imaging, the market studied is anticipated to witness growth over the forecast period. However, regulatory issues and a lack of reimbursement may restrain the market's growth.

Nuclear Imaging Market Trends

Oncology is Expected to Hold the Significant Market Share in PET Applications over the Forecast Period

Radiopharmaceuticals have been heavily used in the imaging of cancer in recent times. According to the REDECAN Report published in November 2022, breast cancer is the most frequent cancer and the primary cause of cancer-related death in women in Spain, with an estimated 34,750 women diagnosed with the disease in 2022. Additionally, as per the same source, there were estimated to be 30,948 new cases of lung cancer diagnosed in Spain in 2022. In 2022, 22,316 men and 8,632 women were estimated to be diagnosed with lung cancer. Thus, the growing prevalence of cancer and the need for early diagnostics are expected to increase, supporting the segment's expansion over the forecast period.

In oncology, PET (positron emission tomography) uses FDG (18 fluorine-2-fluoro-2-deoxy-d-glucose) as the radiopharmaceutical, as it demonstrates the increased metabolism by malignant cells when compared to that of normal cells. This technique can be used for the imaging of lung cancer, lymphoma, head and neck tumors, breast cancer, esophageal cancer, colorectal cancer, and urinary tract tumors. Furthermore, increased research and development in the field of nuclear medicine are anticipated to boost the market's growth. For instance, as per the press release published in 2022 by the Society of Nuclear Medicine and Molecular Imaging, according to new research presented at the Society of Nuclear Medicine and Molecular Imaging 2022 Annual Meeting, a newly developed small-molecular radiopharmaceutical pair has successfully visualized and treated melanoma in a preclinical

study.

Furthermore, new product launches are expected to aid the growth of the segment during the forecast period. In March 2022, the United States Food and Drug Administration (FDA) approved Novartis' complementary diagnostic imaging agent, Locametz. Locametz, after radiolabeling with gallium-68, is used for the identification of prostate-specific membrane antigen (PSMA)-positive lesions. The FDA also approved Novartis's Pluvicto in March 2022 for the imaging of adult patients with a specific type of advanced cancer called prostate-specific membrane antigen-positive metastatic castration-resistant prostate cancer (PSMA-positive mCRPC) that will spread to other parts of the body. Additionally, in February 2022, Monrol signed an agreement with Curium Netherlands to license its good manufacturing practice (GMP)-grade medical radioisotope, no-carrier-added 177Lu, and cutting-edge production technology LuMagic. Hence, due to the factors mentioned above, such as the growing burden of cancer and product launches, this market segment is expected to witness growth over the forecast period.

North America is Expected to Hold a Significant Share in the Market and Expected to do the Same in the Forecast Period

North America is projected to account for the largest share of the market due to the advancements in technology, including hybrid imaging, the introduction of new radiopharmaceuticals for diagnosis, and the development of molecular imaging.

The robust growth of the healthcare sector in the United States, the increasing incidences of cancer, the growing geriatric population, and the increase in product launches account for the growth of the market. According to statistics published in November 2021 by the Government of Canada, an estimated 229,200 Canadians were diagnosed with cancer in 2021, and 84,600 died from it. Lung, breast, colorectal, and prostate cancers are expected to remain the most commonly diagnosed cancers, accounting for 46% of all diagnoses in 2021. According to the survey, breast cancer affects one out of every eight women at some point in their lives. As the number of incidences of cancer increases, the urge for early detection also rises, propelling demand for nuclear imaging over the forecast period. Similarly, the CDC reported in September 2021 that approximately 6.5 million people in the United States aged 40 and older had peripheral arterial disease in 2021. Thus, the high burden of cardiovascular diseases is expected to drive the demand for effective diagnoses such as nuclear imaging and fuel the growth of the market in the country over the forecast period.

The presence of competitors, collaborations, and research initiatives boost the market's growth. For instance, in 2021, the Canadian Nuclear Safety Commission (CNSC) amended Ontario Power Generation's (OPG) operating license for its Darlington nuclear power station near Clarington, Ontario, allowing the company to produce the medical radioisotope molybdenum-99 using Darlington's Unit 2 CANDU reactor. A precursor to technetium-99m, molybdenum-99 (Mo-99) is used in more than 40 million procedures a year to detect cancer and diagnose various medical conditions. With the use of Tc-99m in radiopharmaceuticals, the market is expected to grow at a tremendous rate in Canada.

The number of launches in the North American region by market players is expected to increase the demand for nuclear imaging. For instance, in October 2022, Spectrum Dynamics introduced its newest development, the capability to image high-energy isotopes using solid-state detector technology in a CZT-based, wide-bore SPECT/CT configuration. This functionality is available in the new VERITRON-CT 400 series digital SPECT/CT scanners, enabling full-body imaging applications. Thus, owing to the factors mentioned above, such as the growing prevalence of cancer and cardiac diseases coupled with product launches, North America is expected to register a significant growth rate for the market studied over the forecast period.

Nuclear Imaging Industry Overview

The global nuclear imaging market is highly competitive and consists of several major players. In terms of market share, a few of the major players currently dominate the market. Companies like Bracco Imaging SpA, Curium, Cardinal Health Inc., Koninklijke Philips NV, General Electric Company (GE Healthcare), and Siemens Healthineers hold a substantial share of the market. Leading

market players are opting for geographic expansion, strategic collaborations, and partnerships through mergers and acquisitions in emerging and economically favorable regions.

Additional Benefits:

  The market estimate (ME) sheet in Excel format
 3 months of analyst support

Table of Contents:

Nuclear Imaging - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2021 - 2029

Market Report | 2024-02-17 | 168 pages | Mordor Intelligence

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$4750.00
	Team License (1-7 Users)	$5250.00
	Site License	$6500.00
	Corporate License	$8750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2025-05-06
		Signature