

Radiomics Market - Global Industry Size, Share, Trends, Competition, Opportunity and Forecast, 2018-2028 Segmented By Modality (Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Positron-Emission-Tomography (PET), Others), By Image Type (2D v/s 3D), By Technology (Engineered Features v/s Deep Learning), By Application (Nuclear Medicine, Medical Imaging, Precision Medicine, Oncology, Others), By Region and Competition

<https://marketpublishers.com/r/R13B3924CBC6EN.html>

Date: March 2023

Pages: 118

Price: US\$ 4,900.00 (Single User License)

ID: R13B3924CBC6EN

Abstracts

Global Radiomics Market is projected to grow at a formidable rate in the forecast period, 2018-2028. This can be attributed to the growing prevalence of various chronic diseases such as cancer which require accurate diagnosis and treatment. According to the global cancer observatory, the total number of new cancer cases reported in 2020 was around 19,292,789. Out of this, 10,065,305 new cancer cases were reported in males, and in females were around 9,227,484 in 2020. The rising need of improving disease diagnosis, prognosis, and clinical decision support is expected to create new prospects for the growth of global radiomics market.

Radiomics is a quantitative method of approaching medical imaging that seeks to improve the data already available to doctors through sophisticated mathematical analysis. Using analysis techniques from the field of artificial intelligence, radiomics evaluate textural information by mathematically extracting the spatial patterns of signal intensities and pixel interconnections. The potential of radiomics to improve clinical

decision-making has been highlighted by numerous research from various imaging domains that have been published so far. The numerous technical parameters impacting the retrieved radiomic properties are the primary cause of the numerous significant hurdles the area is currently facing.

Increased Digitization and Use of Artificial Intelligence in the Healthcare Industry

The digitization of information, produced during normal clinical procedures has increased steadily in medicine over the past few decades, much like it has in many other spheres of human endeavor. As more medical records were made available in digital form, ever-evolving, and more complex software was created to analyze them. At the same time, research on artificial intelligence (AI) has long advanced to the point where its techniques and software tools are sophisticated enough to leave computer science departments and find use in an expanding number of fields. As a result, the medical industry has seen a significant rise in the use of AI applications in recent years. These apps are intended to help clinical decision-making and simplify the repetitive tasks that physicians must perform daily.

Radiomics enhances the available data to physicians with the help of modern mathematical analysis. The concept of radiomics has been most widely implied in the field of oncology basically on the assumption of the presence of certain disease-specific information not perceptible by the human eye in biomedical images.

Different modalities can aid in radiomics analysis on medical images, employing the potential additive value of imaging information retrieved from positron-emission-tomography (PET), computed tomography (CT), and magnetic resonance imaging (MRI), rather than assessing each modality on its own, thus permitting an integrated cross-modality approach. Therefore, the integration of AI into the healthcare industry will fuel the global radiomics market in the future.

Increased Dependency on Radiology for Medical Diagnosis

Medical Imaging procedures facilitate diagnosis and pave an approach for the treatment of adults as well as children and lately, there has been a remarkable rise in the use of these techniques.

Between October 2018 and September 2019, about 45.2 million imaging tests were carried out in England, according to a report by the National Health Service (NHS). Out of these, 3.58 million imaging tests were just conducted in September 2019.

This escalation can be attributed to increased demand by physicians and patients, technological improvements, and better financial conditions for people. Computed Tomography or CT scans have seen a rise of about 8% in the past ten years. It has been revealed by a survey that the rate of CT scans being conducted for respiratory diseases in the emergency department has increased by four folds between 2001 and 2010.

Technological advancements have led to more physicians calling for CT scans and MRIs even for conditions that could be investigated with simpler imaging techniques. An improved view of pathologies can be obtained from a CT scan than a plain radiograph. For example, the best imaging technique suitable for identification and follow-up on pulmonary embolism is CT pulmonary angiography. The chief reason for this is its fast speed and high resolution. CT scan has greater sensitivity and specificity along with enhanced visualization due to which it has the potential to identify small opacities that might have been skipped during chest X-rays. Also, it can offer improved views of some regions such as lung lingula and lung bases. This increased dependency on radiology for medical diagnosis is offering lucrative growth opportunities for the global radiomics market.

Growing Geriatric Population and Associated Diseases

With advancing age, the risk of contracting a disease also increases. Nearly 80% of elderly people in the United States have at least one chronic disease, according to the Centers for Disease Control and Prevention (CDC). Furthermore, it has been estimated by the American Medical Association (AMA) that about 60% of individuals with an age of 65 or above will be living with more than one chronic condition by the year 2030. Therefore, the rise in the geriatric population in the world will fuel the necessity for better healthcare facilities and modern treatment options as well as medications.

The increased incidences of chronic diseases worldwide will drive the demand for modern diagnostic and treatment options. Radiology techniques or medical imaging procedures such as Magnetic Resonance Imaging (MRI), Computed Tomography (CT) scans, ultrasound, and angiography are principally deployed for clinical procedures carried out for several cancers. Also, with a rise in unhealthy lifestyle habits and a rising elderly population, the incidence of cancer is on a surge across several countries, thereby raising the acceptance of novel technologies like radiomics. Hence, the growing geriatric population along with rising cancer cases will propel the global radiomics market.

Market Segmentation

Global radiomics market can be segmented based on modality, image type, technology, application, region, and company. Based on modality, the market is segmented into magnetic resonance imaging (MRI), computed tomography (CT), positron-emission tomography (PET), and others. Based on image type, the market is split into 2D and 3D. Based on technology, the market is divided into engineered features and deep learning. Based on application, the market is fragmented into nuclear medicine, medical imaging, precision medicine, oncology, and others.

Company Profiles

Some of the leading players operating in the global radiomics market are Radiomics.io (Computational Imaging & Bioinformatics Lab), Radiomics Bio (Belgium), Health Innovation Ventures (HIV), Sophia Genetics SA, HealthMyne Inc, Oncoradiomics, and ptTheragnostic BV, among others.

Report Scope:

In this report, global radiomics market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Radiomics Market, By Modality:

Magnetic Resonance Imaging (MRI)

Computed Tomography (CT)

Positron-Emission-Tomography (PET)

Others

Radiomics Market, By Image Type:

2D

3D

Radiomics Market, By Technology:

Engineered Features

Deep Learning

Radiomics Market, By Application:

Nuclear Medicine

Medical Imaging

Precision Medicine

Oncology

Others

Radiomics Market, By Region:

North America

United States

Mexico

Canada

Europe

France

Germany

United Kingdom

Italy

Spain

Asia-Pacific

China

India

Japan

South Korea

Australia

South America

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

Saudi Arabia

UAE

Kuwait

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the global radiomics market.

Available Customizations:

With the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

Contents

1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
 - 1.2.1. Markets Covered
 - 1.2.2. Years Considered for Study
 - 1.2.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Key Industry Partners
- 2.4. Major Association and Secondary Sources
- 2.5. Forecasting Methodology
- 2.6. Data Triangulation & Validation
- 2.7. Assumptions and Limitations

3. EXECUTIVE SUMMARY

- 3.1. Overview of the Market
- 3.2. Overview of Key Market Segmentations
- 3.3. Overview of Key Market Players
- 3.4. Overview of Key Regions/Countries
- 3.5. Overview of Market Drivers, Challenges, Trends

4. VOICE OF CUSTOMER

- 4.1. Brand Awareness
- 4.2. Impact of Radiomics on Different Therapeutic Areas
- 4.3. Barriers to Adoption of Radiomics

5. CLINICAL TRIAL ANALYSIS

- 5.1. Ongoing Clinical Trials
- 5.2. Completed Clinical Trials
- 5.3. Terminated Clinical Trials

- 5.4. Breakdown of Pipeline, By Development Phase
- 5.5. Breakdown of Pipeline, By Status
- 5.6. Breakdown of Pipeline, By Study Application
- 5.7. Breakdown of Pipeline, By Region
- 5.8. Clinical Trials Heat Map

6. PATENTS ANALYSIS

7. GLOBAL RADIOMICS MARKET OUTLOOK

- 7.1. Market Size & Forecast
 - 7.1.1. By Value
- 7.2. Market Share & Forecast
 - 7.2.1. By Modality (Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Positron-Emission-Tomography (PET), Others)
 - 7.2.2. By Image Type (2D v/s 3D)
 - 7.2.3. By Technology (Engineered Features v/s Deep Learning)
 - 7.2.4. By Application (Nuclear Medicine, Medical Imaging, Precision Medicine, Oncology, Others)
 - 7.2.5. By Region
 - 7.2.6. By Company (2022)
- 7.3. Product Market Map
 - 7.3.1. By Modality
 - 7.3.2. By Image Type
 - 7.3.3. By Technology
 - 7.3.4. By Application
 - 7.3.5. By Region

8. NORTH AMERICA RADIOMICS MARKET OUTLOOK

- 8.1. Market Size & Forecast
 - 8.1.1. By Value
- 8.2. Market Share & Forecast
 - 8.2.1. By Modality (Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Positron-Emission-Tomography (PET), Others)
 - 8.2.2. By Image Type (2D v/s 3D)
 - 8.2.3. By Technology (Engineered Features v/s Deep Learning)
 - 8.2.4. By Application (Nuclear Medicine, Medical Imaging, Precision Medicine, Oncology, Others)

8.2.5. By Country

8.3. North America: Country Analysis

8.3.1. United States Radiomics Market Outlook

8.3.1.1. Market Size & Forecast

8.3.1.1.1. By Value

8.3.1.2. Market Share & Forecast

8.3.1.2.1. By Modality

8.3.1.2.2. By Image Type

8.3.1.2.3. By Technology

8.3.1.2.4. By Application

8.3.2. Mexico Radiomics Market Outlook

8.3.2.1. Market Size & Forecast

8.3.2.1.1. By Value

8.3.2.2. Market Share & Forecast

8.3.2.2.1. By Modality

8.3.2.2.2. By Image Type

8.3.2.2.3. By Technology

8.3.2.2.4. By Application

8.3.3. Canada Radiomics Market Outlook

8.3.3.1. Market Size & Forecast

8.3.3.1.1. By Value

8.3.3.2. Market Share & Forecast

8.3.3.2.1. By Modality

8.3.3.2.2. By Image Type

8.3.3.2.3. By Technology

8.3.3.2.4. By Application

9. EUROPE RADIOMICS MARKET OUTLOOK

9.1. Market Size & Forecast

9.1.1. By Value

9.2. Market Share & Forecast

9.2.1. By Modality (Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Positron-Emission-Tomography (PET), Others)

9.2.2. By Image Type (2D v/s 3D)

9.2.3. By Technology (Engineered Features v/s Deep Learning)

9.2.4. By Application (Nuclear Medicine, Medical Imaging, Precision Medicine, Oncology, Others)

9.2.5. By Country

- 9.3. Europe: Country Analysis
 - 9.3.1. France Radiomics Market Outlook
 - 9.3.1.1. Market Size & Forecast
 - 9.3.1.1.1. By Value
 - 9.3.1.2. Market Share & Forecast
 - 9.3.1.2.1. By Modality
 - 9.3.1.2.2. By Image Type
 - 9.3.1.2.3. By Technology
 - 9.3.1.2.4. By Application
 - 9.3.2. Germany Radiomics Market Outlook
 - 9.3.2.1. Market Size & Forecast
 - 9.3.2.1.1. By Value
 - 9.3.2.2. Market Share & Forecast
 - 9.3.2.2.1. By Modality
 - 9.3.2.2.2. By Image Type
 - 9.3.2.2.3. By Technology
 - 9.3.2.2.4. By Application
 - 9.3.3. United Kingdom Radiomics Market Outlook
 - 9.3.3.1. Market Size & Forecast
 - 9.3.3.1.1. By Value
 - 9.3.3.2. Market Share & Forecast
 - 9.3.3.2.1. By Modality
 - 9.3.3.2.2. By Image Type
 - 9.3.3.2.3. By Technology
 - 9.3.3.2.4. By Application
 - 9.3.4. Italy Radiomics Market Outlook
 - 9.3.4.1. Market Size & Forecast
 - 9.3.4.1.1. By Value
 - 9.3.4.2. Market Share & Forecast
 - 9.3.4.2.1. By Modality
 - 9.3.4.2.2. By Image Type
 - 9.3.4.2.3. By Technology
 - 9.3.4.2.4. By Application
 - 9.3.5. Spain Radiomics Market Outlook
 - 9.3.5.1. Market Size & Forecast
 - 9.3.5.1.1. By Value
 - 9.3.5.2. Market Share & Forecast
 - 9.3.5.2.1. By Modality
 - 9.3.5.2.2. By Image Type

9.3.5.2.3. By Technology

9.3.5.2.4. By Application

10. ASIA-PACIFIC RADIOMICS MARKET OUTLOOK

10.1. Market Size & Forecast

10.1.1. By Value

10.2. Market Share & Forecast

10.2.1. By Modality (Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Positron-Emission-Tomography (PET), Others)

10.2.2. By Image Type (2D v/s 3D)

10.2.3. By Technology (Engineered Features v/s Deep Learning)

10.2.4. By Application (Nuclear Medicine, Medical Imaging, Precision Medicine, Oncology, Others)

10.2.5. By Country

10.3. Asia-Pacific: Country Analysis

10.3.1. China Radiomics Market Outlook

10.3.1.1. Market Size & Forecast

10.3.1.1.1. By Value

10.3.1.2. Market Share & Forecast

10.3.1.2.1. By Modality

10.3.1.2.2. By Image Type

10.3.1.2.3. By Technology

10.3.1.2.4. By Application

10.3.2. India Radiomics Market Outlook

10.3.2.1. Market Size & Forecast

10.3.2.1.1. By Value

10.3.2.2. Market Share & Forecast

10.3.2.2.1. By Modality

10.3.2.2.2. By Image Type

10.3.2.2.3. By Technology

10.3.2.2.4. By Application

10.3.3. Japan Radiomics Market Outlook

10.3.3.1. Market Size & Forecast

10.3.3.1.1. By Value

10.3.3.2. Market Share & Forecast

10.3.3.2.1. By Modality

10.3.3.2.2. By Image Type

10.3.3.2.3. By Technology

- 10.3.3.2.4. By Application
- 10.3.4. South Korea Radiomics Market Outlook
 - 10.3.4.1. Market Size & Forecast
 - 10.3.4.1.1. By Value
 - 10.3.4.2. Market Share & Forecast
 - 10.3.4.2.1. By Modality
 - 10.3.4.2.2. By Image Type
 - 10.3.4.2.3. By Technology
 - 10.3.4.2.4. By Application
- 10.3.5. Australia Radiomics Market Outlook
 - 10.3.5.1. Market Size & Forecast
 - 10.3.5.1.1. By Value
 - 10.3.5.2. Market Share & Forecast
 - 10.3.5.2.1. By Modality
 - 10.3.5.2.2. By Image Type
 - 10.3.5.2.3. By Technology
 - 10.3.5.2.4. By Application

11. SOUTH AMERICA RADIOMICS MARKET OUTLOOK

- 11.1. Market Size & Forecast
 - 11.1.1. By Value
- 11.2. Market Share & Forecast
 - 11.2.1. By Modality (Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Positron-Emission-Tomography (PET), Others)
 - 11.2.2. By Image Type (2D v/s 3D)
 - 11.2.3. By Technology (Engineered Features v/s Deep Learning)
 - 11.2.4. By Application (Nuclear Medicine, Medical Imaging, Precision Medicine, Oncology, Others)
 - 11.2.5. By Country
- 11.3. South America: Country Analysis
 - 11.3.1. Brazil Radiomics Market Outlook
 - 11.3.1.1. Market Size & Forecast
 - 11.3.1.1.1. By Value
 - 11.3.1.2. Market Share & Forecast
 - 11.3.1.2.1. By Modality
 - 11.3.1.2.2. By Image Type
 - 11.3.1.2.3. By Technology
 - 11.3.1.2.4. By Application

11.3.2. Argentina Radiomics Market Outlook

11.3.2.1. Market Size & Forecast

11.3.2.1.1. By Value

11.3.2.2. Market Share & Forecast

11.3.2.2.1. By Modality

11.3.2.2.2. By Image Type

11.3.2.2.3. By Technology

11.3.2.2.4. By Application

11.3.3. Colombia Radiomics Market Outlook

11.3.3.1. Market Size & Forecast

11.3.3.1.1. By Value

11.3.3.2. Market Share & Forecast

11.3.3.2.1. By Modality

11.3.3.2.2. By Image Type

11.3.3.2.3. By Technology

11.3.3.2.4. By Application

12. MIDDLE EAST AND AFRICA RADIOMICS MARKET OUTLOOK

12.1. Market Size & Forecast

12.1.1. By Value

12.2. Market Share & Forecast

12.2.1. By Modality (Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Positron-Emission-Tomography (PET), Others)

12.2.2. By Image Type (2D v/s 3D)

12.2.3. By Technology (Engineered Features v/s Deep Learning)

12.2.4. By Application (Nuclear Medicine, Medical Imaging, Precision Medicine, Oncology, Others)

12.2.5. By Country

12.3. MEA: Country Analysis

12.3.1. South Africa Radiomics Market Outlook

12.3.1.1. Market Size & Forecast

12.3.1.1.1. By Value

12.3.1.2. Market Share & Forecast

12.3.1.2.1. By Modality

12.3.1.2.2. By Image Type

12.3.1.2.3. By Technology

12.3.1.2.4. By Application

12.3.2. Saudi Arabia Radiomics Market Outlook

- 12.3.2.1. Market Size & Forecast
 - 12.3.2.1.1. By Value
- 12.3.2.2. Market Share & Forecast
 - 12.3.2.2.1. By Modality
 - 12.3.2.2.2. By Image Type
 - 12.3.2.2.3. By Technology
 - 12.3.2.2.4. By Application
- 12.3.3. UAE Radiomics Market Outlook
 - 12.3.3.1. Market Size & Forecast
 - 12.3.3.1.1. By Value
 - 12.3.3.2. Market Share & Forecast
 - 12.3.3.2.1. By Modality
 - 12.3.3.2.2. By Image Type
 - 12.3.3.2.3. By Technology
 - 12.3.3.2.4. By Application
- 12.3.4. Kuwait Radiomics Market Outlook
 - 12.3.4.1. Market Size & Forecast
 - 12.3.4.1.1. By Value
 - 12.3.4.2. Market Share & Forecast
 - 12.3.4.2.1. By Modality
 - 12.3.4.2.2. By Image Type
 - 12.3.4.2.3. By Technology
 - 12.3.4.2.4. By Application

13. MARKET DYNAMICS

13.1. Drivers

- 13.1.1. Integration of Artificial Intelligence in Medical Imaging
- 13.1.2. Increased Reliance Radiology for Medical Diagnosis
- 13.1.3. Growing Population with Cancer and Cardiovascular Disorders

13.2. Challenges

- 13.2.1. Imaging Protocols Not Standardized/Technological Restraints
- 13.2.2. Budget Cuts of Hospitals
- 13.2.3. Lack of Validation and Risk of False-Positive Results

14. MARKET TRENDS & DEVELOPMENTS

- 14.1. Growing Research and Investment Activities
- 14.2. Opportunities in Emerging Countries

14.3. Adoption of Better Healthcare Facilities

15. COMPETITIVE LANDSCAPE

15.1. Business Overview

15.2. Company Snapshot

15.3. Products & Services

15.4. Financials (As Reported)

15.5. Recent Developments

15.6. SWOT Analysis

15.6.1. Radiomics.io (Computational Imaging & Bioinformatics Lab)

15.6.2. Radiomics Bio (Belgium)

15.6.3. Health Innovation Ventures (HIV)

15.6.4. Sophia Genetics SA

15.6.5. HealthMyne Inc

15.6.6. Oncoradiomics

15.6.7. ptTheragnostic BV

16. STRATEGIC RECOMMENDATIONS

I would like to order

Product name: Radiomics Market - Global Industry Size, Share, Trends, Competition, Opportunity and Forecast, 2018-2028 Segmented By Modality (Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Positron-Emission-Tomography (PET), Others), By Image Type (2D v/s 3D), By Technology (Engineered Features v/s Deep Learning), By Application (Nuclear Medicine, Medical Imaging, Precision Medicine, Oncology, Others), By Region and Competition

Product link: <https://marketpublishers.com/r/R13B3924CBC6EN.html>

Price: US\$ 4,900.00 (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 <https://marketpublishers.com/r/R13B3924CBC6EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms

& Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970