

Treatment Planning Systems and Advanced Image
Processing Market Size, Trends, Analysis, and
Outlook By Component (Advanced Image Processing
Software, Treatment Planning Software), By
Technique (3D Image Reconstruction, In-Room
Imaging, Image Registration using Graphics
Processor Unit), By Application (Adaptive
Radiotherapy, Online Monitoring, Tracking, Dose
Accumulation, Validation of Image Registration), by
Region, Country, Segment, and Companies, 2024-2030

https://marketpublishers.com/r/T77ADC822B0EEN.html

Date: March 2024

Pages: 190

Price: US\$ 3,980.00 (Single User License)

ID: T77ADC822B0EEN

#### **Abstracts**

The global Treatment Planning Systems and Advanced Image Processing market size is poised to register 9.1% growth from 2024 to 2030, presenting significant growth prospects for companies operating in the industry. The industry study analyzes the global Treatment Planning Systems and Advanced Image Processing market across By Component (Advanced Image Processing Software, Treatment Planning Software), By Technique (3D Image Reconstruction, In-Room Imaging, Image Registration using Graphics Processor Unit), By Application (Adaptive Radiotherapy, Online Monitoring, Tracking, Dose Accumulation, Validation of Image Registration).

The Treatment Planning Systems and Advanced Image Processing Market are witnessing growth propelled by increasing demand for personalized and precise treatment strategies in oncology and other medical fields, technological advancements in imaging modalities and software solutions, and the growing adoption of advanced medical imaging techniques. These systems enable healthcare professionals to plan



and optimize treatment regimens based on patient-specific data and imaging information. Key trends include the development of cloud-based treatment planning platforms for enhanced accessibility and collaboration, the integration of artificial intelligence (AI) algorithms for automated segmentation and treatment plan optimization, and the customization of software solutions for specific clinical applications. Additionally, collaborations between healthcare institutions and software developers to enhance treatment planning workflows and the rising demand for image-guided therapies contribute to market expansion.

Treatment Planning Systems and Advanced Image Processing Market Drivers, Trends, Opportunities, and Growth Opportunities

This comprehensive study discusses the latest trends and the most pressing challenges for industry players and investors. The Treatment Planning Systems and Advanced Image Processing market research analyses the global market trends, key drivers, challenges, and opportunities in the industry. In addition, the latest Future of Treatment Planning Systems and Advanced Image Processing survey report provides the market size outlook across types, applications, and other segments across the world and regions. It provides data-driven insights and actionable recommendations for companies in the Treatment Planning Systems and Advanced Image Processing industry.

Key market trends defining the global Treatment Planning Systems and Advanced Image Processing demand in 2024 and Beyond

The industry continues to remain an attractive hub for opportunities for both domestic and global vendors. As the market evolves, factors such as emerging market dynamics, demand from end-user sectors, a growing patient base, changes in consumption patterns, and widening distribution channels continue to play a major role.

Treatment Planning Systems and Advanced Image Processing Market Segmentation-Industry Share, Market Size, and Outlook to 2030

The Treatment Planning Systems and Advanced Image Processing industry comprises a wide range of segments and sub-segments. The rising demand for these product types and applications is supporting companies to increase their investment levels across niche segments. Accordingly, leading companies plan to generate a large share of their future revenue growth from expansion into these niche segments. The report presents the market size outlook across segments to support Treatment Planning Systems and Advanced Image Processing companies scaling up production in these



sub-segments with a focus on expanding into emerging countries.

Key strategies adopted by companies within the Treatment Planning Systems and Advanced Image Processing industry

Leading Treatment Planning Systems and Advanced Image Processing companies are boosting investments to capitalize on untapped potential and future possibilities across niche market segments and surging demand conditions in key regions. Further, companies are leveraging advanced technologies to unlock opportunities and achieve operational excellence. The report provides key strategies opted for by the top 10 Treatment Planning Systems and Advanced Image Processing companies.

Treatment Planning Systems and Advanced Image Processing Market Study- Strategic Analysis Review

The Treatment Planning Systems and Advanced Image Processing market research report dives deep into the qualitative factors shaping the market, empowering you to make informed decisions-

Industry Dynamics: Porter's Five Forces analysis to understand bargaining power, competitive rivalry, and threats that impact long-term strategy formulation.

Strategic Insights: Provides valuable perspectives on key players and their approaches based on comprehensive strategy analysis.

Internal Strengths and Weaknesses: Develop targeted strategies to leverage strengths, address weaknesses, and capitalize on market opportunities.

Future Possibilities: Prepare for diverse outcomes with in-depth scenario analysis. Explore potential market disruptions, technology advancements, and economic changes.

Treatment Planning Systems and Advanced Image Processing Market Size Outlook-Historic and Forecast Revenue in Three Cases

The Treatment Planning Systems and Advanced Image Processing industry report provides a detailed analysis and outlook of revenue generated by companies from 2018



to 2023. Further, with actual data for 2023, the report forecasts the market size outlook from 2024 to 2030 in three case scenarios- low case, reference case, and high case scenarios.

Treatment Planning Systems and Advanced Image Processing Country Analysis and Revenue Outlook to 2030

The report analyses 22 countries worldwide including the key driving forces and market size outlook from 2021 to 2030. In addition, region analysis across Asia Pacific, Europe, the Middle East, Africa, North America, and South America is included in the study. For each of the six regions, the market size outlook by segments is forecast for 2030.

North America Treatment Planning Systems and Advanced Image Processing Market Size Outlook- Companies plan for focused investments in a changing environment

The US continues to remain the market leader in North America, driven by a large consumer base, the presence of well-established providers, and a strong end-user industry demand. Leading companies focus on new product launches in the changing environment. The US economy is expected to grow in 2024 (around 2.2% growth in 2024), potentially driving demand for various Treatment Planning Systems and Advanced Image Processing market segments. Similarly, Strong end-user demand is encouraging Canadian Treatment Planning Systems and Advanced Image Processing companies to invest in niche segments. Further, as Mexico continues to strengthen its trade relations and invest in technological advancements, the Mexico Treatment Planning Systems and Advanced Image Processing market is expected to experience significant expansion, offering lucrative opportunities for both domestic and international stakeholders.

Europe Treatment Planning Systems and Advanced Image Processing Market Size Outlook-Companies investing in assessing consumers, categories, competitors, and capabilities

The German industry remains the major market for companies in the European Treatment Planning Systems and Advanced Image Processing industry with consumers in Germany, France, the UK, Spain, Italy, and others anticipated to register a steady demand throughout the forecast period, driving the overall market prospects. In addition, the proactive approach of businesses in identifying and leveraging new growth prospects positions the European Treatment Planning Systems and Advanced Image Processing market for an upward trajectory, fostering both domestic and international



interest. Leading brands operating in the industry are emphasizing effective marketing strategies, innovative product offerings, and a keen understanding of consumer preferences.

Asia Pacific Treatment Planning Systems and Advanced Image Processing Market Size Outlook- an attractive hub for opportunities for both local and global companies

The increasing prevalence of indications, robust healthcare expenditure, and increasing investments in healthcare infrastructure drive the demand for Treatment Planning Systems and Advanced Image Processing in Asia Pacific. In particular, China, India, and South East Asian Treatment Planning Systems and Advanced Image Processing markets present a compelling outlook for 2030, acting as a magnet for both domestic and multinational manufacturers seeking growth opportunities. Similarly, with a burgeoning population and a rising middle class, India offers a vast consumer market. Japanese and Korean companies are quickly aligning their strategies to navigate changes, explore new markets, and enhance their competitive edge. Our report utilizes in-depth interviews with industry experts and comprehensive data analysis to provide a comprehensive outlook of 6 major markets in the region.

Latin America Treatment Planning Systems and Advanced Image Processing Market Size Outlook- Continued urbanization and rising income levels

Rising income levels contribute to greater purchasing power among consumers, spurring consumption and creating opportunities for market expansion. Continued urbanization and rising income levels are expected to sustainably drive consumption growth in the medium to long term.

Middle East and Africa Treatment Planning Systems and Advanced Image Processing Market Size Outlook- continues its upward trajectory across segments

Robust demand from Middle Eastern countries including Saudi Arabia, the UAE, Qatar, Kuwait, and other GCC countries supports the overall Middle East Treatment Planning Systems and Advanced Image Processing market potential. Fueled by increasing healthcare expenditure of individuals, growing population, and high prevalence across a few markets drives the demand for Treatment Planning Systems and Advanced Image Processing.

Treatment Planning Systems and Advanced Image Processing Market Company Profiles



The global Treatment Planning Systems and Advanced Image Processing market is characterized by intense competitive conditions with leading companies opting for aggressive marketing to gain market shares. The report presents business descriptions, SWOT analysis, growth strategies, and financial profiles. Leading companies included in the study are Accuray Inc, Brainlab, DOSIsoft SA, Elekta, MIM Software Inc, Philips Healthcare, Prowess Inc, RaySearch Laboratories, Varian Medical Systems, ViewRay Inc

Recent Treatment Planning Systems and Advanced Image Processing Market Developments

The global Treatment Planning Systems and Advanced Image Processing market study presents recent market news and developments including new product launches, mergers, acquisitions, expansions, product approvals, and other updates in the industry.

Treatment Planning Systems and Advanced Image Processing Market Report Scope

Parameters: Revenue, Volume Price

Study Period: 2023 (Base Year); 2018- 2023 (Historic Period); 2024- 2030 (Forecast Period)

Currency: USD; (Upon request, can be provided in Euro, JPY, GBP, and other Local Currency)

**Qualitative Analysis** 

**Pricing Analysis** 

Value Chain Analysis

**SWOT Profile** 

Market Dynamics- Trends, Drivers, Challenges

Porter's Five Forces Analysis

Macroeconomic Impact Analysis



### Case Scenarios- Low, Base, High

Market Segmentation:
By Component
Advanced Image Processing Software
Treatment Planning Software
-Auto-Contouring Software
-Multi-Modality Software
-PET/CT Deformable Software
-DICOM-RT Software
By Technique
3D Image Reconstruction
In-Room Imaging
Image Registration using Graphics Processor Unit
By Application
Adaptive Radiotherapy
Online Monitoring
Tracking
Dose Accumulation

Validation of Image Registration

Treatment Planning Systems and Advanced Image Processing Market Size, Trends, Analysis, and Outlook By Compone...



Geographical Segmentation:

# North America (3 markets) Europe (6 markets) Asia Pacific (6 markets) Latin America (3 markets) Middle East Africa (5 markets) Companies Accuray Inc Brainlab DOSIsoft SA Elekta MIM Software Inc Philips Healthcare Prowess Inc RaySearch Laboratories Varian Medical Systems ViewRay Inc Formats Available: Excel, PDF, and PPT



### **Contents**

#### 1. EXECUTIVE SUMMARY

- 1.1 Treatment Planning Systems and Advanced Image Processing Market Overview and Key Findings, 2024
- 1.2 Treatment Planning Systems and Advanced Image Processing Market Size and Growth Outlook, 2021- 2030
- 1.3 Treatment Planning Systems and Advanced Image Processing Market Growth Opportunities to 2030
- 1.4 Key Treatment Planning Systems and Advanced Image Processing Market Trends and Challenges
- 1.4.1 Treatment Planning Systems and Advanced Image Processing Market Drivers and Trends
- 1.4.2 Treatment Planning Systems and Advanced Image Processing Market Challenges
- 1.5 Competitive Landscape and Key Players
- 1.6 Competitive Analysis- Growth Strategies Adopted by Leading Treatment Planning Systems and Advanced Image Processing Companies

# 2. TREATMENT PLANNING SYSTEMS AND ADVANCED IMAGE PROCESSING MARKET SIZE OUTLOOK TO 2030

- 2.1 Treatment Planning Systems and Advanced Image Processing Market Size Outlook, USD Million, 2021- 2030
- 2.2 Treatment Planning Systems and Advanced Image Processing Incremental Market Growth Outlook, %, 2021- 2030
- 2.3 Segment Snapshot, 2024

# 3. TREATMENT PLANNING SYSTEMS AND ADVANCED IMAGE PROCESSING MARKET- STRATEGIC ANALYSIS REVIEW

- 3.1 Porter's Five Forces Analysis
- \* Threat of New Entrants
- \* Threat of Substitutes
- \* Intensity of Competitive Rivalry
- \* Bargaining Power of Buyers
- \* Bargaining Power of Suppliers
- 3.2 Value Chain Analysis



#### 3.3 SWOT Analysis

## 4. TREATMENT PLANNING SYSTEMS AND ADVANCED IMAGE PROCESSING MARKET SEGMENTATION ANALYSIS AND OUTLOOK

- 4.1 Market Segmentation and Scope
- 4.2 Market Breakdown by Type, Application, and Other Segments, 2021-2030

By Component

Advanced Image Processing Software

Treatment Planning Software

- -Auto-Contouring Software
- -Multi-Modality Software
- -PET/CT Deformable Software
- -DICOM-RT Software

By Technique

#### 3D IMAGE RECONSTRUCTION

In-Room Imaging

Image Registration using Graphics Processor Unit

By Application

Adaptive Radiotherapy

Online Monitoring

Tracking

Dose Accumulation

Validation of Image Registration

- 4.3 Growth Prospects and Niche Opportunities, 2023-2030
- 4.4 Regional comparison of Market Growth, CAGR, 2023-2030

#### 5. REGION-WISE MARKET OUTLOOK TO 2030

- 5.1 Key Findings for Asia Pacific Treatment Planning Systems and Advanced Image Processing Market, 2025
- 5.2 Asia Pacific Treatment Planning Systems and Advanced Image Processing Market Size Outlook by Type, 2021- 2030
- 5.3 Asia Pacific Treatment Planning Systems and Advanced Image Processing Market Size Outlook by Application, 2021- 2030
- 5.4 Key Findings for Europe Treatment Planning Systems and Advanced Image Processing Market, 2025



- 5.5 Europe Treatment Planning Systems and Advanced Image Processing Market Size Outlook by Type, 2021- 2030
- 5.6 Europe Treatment Planning Systems and Advanced Image Processing Market Size Outlook by Application, 2021- 2030
- 5.7 Key Findings for North America Treatment Planning Systems and Advanced Image Processing Market, 2025
- 5.8 North America Treatment Planning Systems and Advanced Image Processing Market Size Outlook by Type, 2021- 2030
- 5.9 North America Treatment Planning Systems and Advanced Image Processing Market Size Outlook by Application, 2021- 2030
- 5.10 Key Findings for South America Treatment Planning Systems and Advanced Image Processing Market, 2025
- 5.11 South America Pacific Treatment Planning Systems and Advanced Image Processing Market Size Outlook by Type, 2021- 2030
- 5.12 South America Treatment Planning Systems and Advanced Image Processing Market Size Outlook by Application, 2021- 2030
- 5.13 Key Findings for Middle East and Africa Treatment Planning Systems and Advanced Image Processing Market, 2025
- 5.14 Middle East Africa Treatment Planning Systems and Advanced Image Processing Market Size Outlook by Type, 2021- 2030
- 5.15 Middle East Africa Treatment Planning Systems and Advanced Image Processing Market Size Outlook by Application, 2021- 2030

#### 6. COUNTRY-WISE MARKET SIZE OUTLOOK TO 2030

- 6.1 US Treatment Planning Systems and Advanced Image Processing Market Size Outlook and Revenue Growth Forecasts
- 6.2 US Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.3 Canada Market Size Outlook and Revenue Growth Forecasts
- 6.4 Canada Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.6 Mexico Market Size Outlook and Revenue Growth Forecasts
- 6.6 Mexico Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.7 Germany Market Size Outlook and Revenue Growth Forecasts
- 6.8 Germany Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.9 France Market Size Outlook and Revenue Growth Forecasts



- 6.10 France Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.11 UK Market Size Outlook and Revenue Growth Forecasts
- 6.12 UK Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.13 Spain Market Size Outlook and Revenue Growth Forecasts
- 6.14 Spain Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.16 Italy Market Size Outlook and Revenue Growth Forecasts
- 6.16 Italy Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.17 Rest of Europe Market Size Outlook and Revenue Growth Forecasts
- 6.18 Rest of Europe Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.19 China Market Size Outlook and Revenue Growth Forecasts
- 6.20 China Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.21 India Market Size Outlook and Revenue Growth Forecasts
- 6.22 India Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.23 Japan Market Size Outlook and Revenue Growth Forecasts
- 6.24 Japan Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.26 South Korea Market Size Outlook and Revenue Growth Forecasts
- 6.26 South Korea Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.27 Australia Market Size Outlook and Revenue Growth Forecasts
- 6.28 Australia Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.29 South East Asia Market Size Outlook and Revenue Growth Forecasts
- 6.30 South East Asia Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.31 Rest of Asia Pacific Market Size Outlook and Revenue Growth Forecasts
- 6.32 Rest of Asia Pacific Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.33 Brazil Market Size Outlook and Revenue Growth Forecasts
- 6.34 Brazil Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.36 Argentina Market Size Outlook and Revenue Growth Forecasts



- 6.36 Argentina Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.37 Rest of South America Market Size Outlook and Revenue Growth Forecasts
- 6.38 Rest of South America Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.39 Middle East Market Size Outlook and Revenue Growth Forecasts
- 6.40 Middle East Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities
- 6.41 Africa Market Size Outlook and Revenue Growth Forecasts
- 6.42 Africa Treatment Planning Systems and Advanced Image Processing Industry Drivers and Opportunities

## 7. TREATMENT PLANNING SYSTEMS AND ADVANCED IMAGE PROCESSING MARKET OUTLOOK ACROSS SCENARIOS

- 7.1 Low Growth Case
- 7.2 Reference Growth Case
- 7.3 High Growth Case

## 8. TREATMENT PLANNING SYSTEMS AND ADVANCED IMAGE PROCESSING COMPANY PROFILES

- 8.1 Profiles of Leading Treatment Planning Systems and Advanced Image Processing Companies in the Market
- 8.2 Business Descriptions, SWOT Analysis, and Growth Strategies
- 8.3 Financial Performance and Key Metrics

Accuray Inc

Brainlab

DOSIsoft SA

Elekta

MIM Software Inc

Philips Healthcare

Prowess Inc

RaySearch Laboratories

Varian Medical Systems

ViewRay Inc

#### 9. APPENDIX



- 9.1 Scope of the Report
- 9.2 Research Methodology and Data Sources
- 9.3 Glossary of Terms
- 9.4 Market Definitions
- 9.5 Contact Information



#### I would like to order

Product name: Treatment Planning Systems and Advanced Image Processing Market Size, Trends,

Analysis, and Outlook By Component (Advanced Image Processing Software, Treatment Planning Software), By Technique (3D Image Reconstruction, In-Room Imaging, Image Registration using Graphics Processor Unit), By Application (Adaptive Radiotherapy, Online Monitoring, Tracking, Dose Accumulation, Validation of Image Registration), by Region, Country, Segment, and Companies, 2024-2030

Product link: <a href="https://marketpublishers.com/r/T77ADC822B0EEN.html">https://marketpublishers.com/r/T77ADC822B0EEN.html</a>

Price: US\$ 3,980.00 (Single User License / Electronic Delivery)

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

Service:

info@marketpublishers.com

### **Payment**

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/T77ADC822B0EEN.html">https://marketpublishers.com/r/T77ADC822B0EEN.html</a>

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

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

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



& Conditions at <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

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