

Intraoperative Imaging Market - Forecast from 2026 to 2031

<https://marketpublishers.com/r/I60B366265D3EN.html>

Date: January 2026

Pages: 152

Price: US\$ 3,950.00 (Single User License)

ID: I60B366265D3EN

Abstracts

The intraoperative imaging market is expected to grow at a 4.88% CAGR, increasing from USD 2.157 billion in 2025 to USD 2.871 billion in 2031.

The intraoperative imaging market is experiencing steady growth driven by rising demand for minimally invasive surgeries, technological advancements, and increasing chronic disease prevalence. Intraoperative imaging—the use of various imaging techniques during surgical procedures to provide real-time visual information—assists surgeons in making informed decisions during operations. The convergence of growing minimally invasive surgery adoption, higher chronic disease prevalence, technological progress, shifting adoption of image-guided surgical procedures, and aging populations is propelling market expansion.

Primary Market Drivers

Minimally Invasive Surgery Demand

Increasing preference for minimally invasive surgical techniques requires real-time imaging guidance to compensate for the lack of direct vision. Intraoperative imaging plays crucial roles in providing visualization and navigation during MIS procedures, with shifting adoption expected to boost market growth. According to a National Library of Medicine study in 2020, minimally invasive surgery procedures for six procedures studied increased from 270 to 368—a 36% rise over a 16-year period—demonstrating sustained growth in MIS adoption that creates corresponding demand for intraoperative imaging technologies.

Chronic Disease Burden

Intraoperative imaging technologies are vital in accurately diagnosing and treating chronic conditions such as cancer, cardiovascular disorders, and neurological conditions. Rising chronic disease cases are contemplated to aid market growth. Approximately 13.0 million visits to doctors' offices in the U.S. involved coronary atherosclerosis and other forms of chronic ischemic heart disease as primary diagnoses. Non-communicable chronic diseases are responsible for 82% of all fatalities and 67% of premature deaths in Egypt, highlighting the global chronic disease burden driving demand for advanced surgical visualization technologies.

Image-Guided Surgical Procedures

Intraoperative imaging makes image-guided surgical procedures more efficient and safe by enabling real-time visualization and accurate navigation. Rising image-guided surgical procedures represent major growth drivers. Various advantages drive adoption: surgeons receive real-time feedback during procedures, allowing them to assess intervention efficacy immediately. For complex surgeries such as spinal procedures or brain surgeries, image-guided systems provide navigational support, assisting surgeons in reaching target areas accurately. This precision reduces complications, improves outcomes, and supports minimally invasive approaches.

Medical Technology Advancement

Continuous progress in medical imaging technologies has resulted in increasingly advanced and accurate intraoperative imaging devices, expanding the market. Medical imaging technologies—including MRI, CT scans, and ultrasound—have become more sophisticated, providing clearer and more detailed images for accurate diagnosis and treatment planning. In January 2023, Pie Medical Imaging launched an AI-powered echocardiography platform enabling robust visualization of stress-echo imaging and diastolic function. Additionally, Block Technology launched the Cube Mobile Imaging business to provide healthcare providers with comfortable patient scanning environments, demonstrating ongoing innovation in mobility and patient experience.

Demographic Imperatives

The global aging population is increasing, leading to higher numbers of surgeries, especially those related to age-related health issues. Intraoperative imaging technologies assist in complex surgeries, making them safer for elderly patients. People are more prone to have multiple ailments simultaneously as they age. One in six

individuals globally will be 60 or older by 2031, with 1.4 billion people over 60 compared to 1 billion in 2020. The number of individuals aged 80 or older is expected to triple from 2020 to 2050, reaching 426 million. This demographic evolution creates sustained demand for surgical interventions requiring advanced imaging guidance.

Market Constraints

Despite positive growth trajectories, the intraoperative imaging market faces challenges. Intraoperative imaging devices, especially advanced and cutting-edge technologies, can be expensive to acquire and maintain. High upfront costs may deter some healthcare facilities, particularly in resource-limited settings, from investing in them. Effective utilization of intraoperative imaging systems requires well-trained and skilled healthcare professionals, including surgeons and radiologists. The shortage of trained personnel could limit widespread adoption, particularly in low-income and developing regions lacking specialized training infrastructure.

Regional Dynamics

North America is expected to hold significant market share during the forecast period, supported by rising healthcare expenditure and infrastructure, technological advancements, and higher chronic illness prevalence. An estimated 25,050 people were diagnosed with brain and spinal cord tumors in the U.S. as per a 2022 report. The presence of major market players such as GE Healthcare and Medtronic further boosts regional market growth through improved accessibility and advancements.

Market Players and Recent Developments

Major market players include Siemens Healthineers AG, offering conventional intraoperative 3D imaging in orthopedic trauma surgery; Medtronic, providing O-arm™ intraoperative 2D/3D imaging systems for spine, cranial, and orthopedics procedures; and Ziehm Imaging GmbH, specializing in mobile C-arm imaging systems.

In April 2023, GE Healthcare launched its flagship intraoperative imaging ultrasound platform bkActiv for urology, colorectal, and pelvic floor procedures. The design aims to provide surgeons with high-performance ultrasound guidance while offering simplified and intuitive user experiences.

The intraoperative imaging market continues evolving, driven by surgical technique advancement, technological sophistication, and the healthcare industry's focus on

precision medicine and improved patient outcomes through real-time surgical visualization.

Key Benefits of this Report:

Insightful Analysis: Gain detailed market insights covering major as well as emerging geographical regions, focusing on customer segments, government policies and socio-economic factors, consumer preferences, industry verticals, and other sub-segments.

Competitive Landscape: Understand the strategic maneuvers employed by key players globally to understand possible market penetration with the correct strategy.

Market Drivers & Future Trends: Explore the dynamic factors and pivotal market trends and how they will shape future market developments.

Actionable Recommendations: Utilize the insights to exercise strategic decisions to uncover new business streams and revenues in a dynamic environment.

Caters to a Wide Audience: Beneficial and cost-effective for startups, research institutions, consultants, SMEs, and large enterprises.

What do businesses use our reports for?

Industry and Market Insights, Opportunity Assessment, Product Demand Forecasting, Market Entry Strategy, Geographical Expansion, Capital Investment Decisions, Regulatory Framework & Implications, New Product Development, Competitive Intelligence

Report Coverage:

Historical data from 2021 to 2025 & forecast data from 2026 to 2031

Growth Opportunities, Challenges, Supply Chain Outlook, Regulatory Framework, and Trend Analysis

Competitive Positioning, Strategies, and Market Share Analysis

Revenue Growth and Forecast Assessment of segments and regions including countries

Company Profiling (Strategies, Products, Financial Information, and Key Developments among others.

Intraoperative Imaging Market Segmentation

By Product

iCT

iUltrasound

iMRI

C-arm system

By Application

Neurosurgery

Orthopaedic

ENT surgery

Oncology surgery

Trauma surgery/ emergency room

Cardiovascular

Others

By End-User

Hospital

Others

By Geography

North America

United States

Canada

Mexico

South America

Brazil

Argentina

Others

Europe

Germany

France

United Kingdom

Spain

Others

Middle East and Africa

Saudi Arabia

UAE

Others

Asia Pacific

China

India

Japan

South Korea

Indonesia

Thailand

Others

Contents

1. EXECUTIVE SUMMARY

2. MARKET SNAPSHOT

- 2.1. Market Overview
- 2.2. Market Definition
- 2.3. Scope of the Study
- 2.4. Market Segmentation

3. BUSINESS LANDSCAPE

- 3.1. Market Drivers
- 3.2. Market Restraints
- 3.3. Market Opportunities
- 3.4. Porter's Five Forces Analysis
- 3.5. Industry Value Chain Analysis
- 3.6. Policies and Regulations
- 3.7. Strategic Recommendations

4. TECHNOLOGICAL OUTLOOK

5. INTRAOPERATIVE IMAGING MARKET BY PRODUCT

- 5.1. Introduction
- 5.2. iCT
- 5.3. iUltrasound
- 5.4. iMRI
- 5.5. C-arm system

6. INTRAOPERATIVE IMAGING MARKET BY APPLICATION

- 6.1. Introduction
- 6.2. Neurosurgery
- 6.3. Orthopaedic
- 6.4. ENT surgery
- 6.5. Oncology surgery
- 6.6. Trauma surgery/ emergency room

- 6.7. Cardiovascular
- 6.8. Others

7. INTRAOPERATIVE IMAGING MARKET BY END-USER

- 7.1. Introduction
- 7.2. Hospital
- 7.3. Others

8. INTRAOPERATIVE IMAGING MARKET BY GEOGRAPHY

- 8.1. Introduction
- 8.2. North America
 - 8.2.1. USA
 - 8.2.2. Canada
 - 8.2.3. Mexico
- 8.3. South America
 - 8.3.1. Brazil
 - 8.3.2. Argentina
 - 8.3.3. Others
- 8.4. Europe
 - 8.4.1. Germany
 - 8.4.2. France
 - 8.4.3. United Kingdom
 - 8.4.4. Spain
 - 8.4.5. Others
- 8.5. Middle East and Africa
 - 8.5.1. Saudi Arabia
 - 8.5.2. UAE
 - 8.5.3. Others
- 8.6. Asia Pacific
 - 8.6.1. China
 - 8.6.2. India
 - 8.6.3. Japan
 - 8.6.4. South Korea
 - 8.6.5. Indonesia
 - 8.6.6. Thailand
 - 8.6.7. Others

9. COMPETITIVE ENVIRONMENT AND ANALYSIS

- 9.1. Major Players and Strategy Analysis
- 9.2. Market Share Analysis
- 9.3. Mergers, Acquisitions, Agreements, and Collaborations
- 9.4. Competitive Dashboard

10. COMPANY PROFILES

- 10.1. GE Healthcare
- 10.2. Siemens Healthineers AG
- 10.3. Koninklijke Philips N.V.
- 10.4. Medtronic
- 10.5. Ziehm Imaging GmbH
- 10.6. IMRIS
- 10.7. Shimadzu Corporation
- 10.8. NeuroLogica
- 10.9. Mayo Clinic

11. APPENDIX

- 11.1. Currency
- 11.2. Assumptions
- 11.3. Base and Forecast Years Timeline
- 11.4. Key Benefits for the Stakeholders
- 11.5. Research Methodology
- 11.6. Abbreviations

I would like to order

Product name: Intraoperative Imaging Market - Forecast from 2026 to 2031

Product link: <https://marketpublishers.com/r/l60B366265D3EN.html>

Price: US\$ 3,950.00 (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/l60B366265D3EN.html>