Medical Imaging Markets

Description: The purpose of this report is to describe the specific market segment of the diagnostics market sector called medical imaging. Medical imaging can be categorized into nine main modalities: X-ray, ultrasound, computed tomography (CT), positron emission tomography (PET), single photon emission tomography (SPECT), magnetic resonance imaging (MRI), nuclear medicine (NM), mammography and fluoroscopy.

Globally, X-ray is the most frequently used imaging procedure with about 108 million X-ray exams per year. MRI is second with 26 million examinations per year. PET, SPECT, CT and nuclear medicine rank third with 30 million examinations per year. Picture archiving and communication systems (PACS) and contrast agents are the sub-segments in medical imaging market that have gained significant growth in recent years. As a result of these medical imaging advancements, the multi-slice systems are generating large volumes of data, and this creates demand for data storage, 3-D visualization and analysis. As such, the global medical imaging industry is primed to experience significant growth through the next decade.

This report surveys almost all of the companies known to be marketing, manufacturing or developing medical imaging equipment and supplies in the world. Each company is discussed in extensive depth with a section on its history, product line, business and marketing analysis, and a subjective commentary of the company's market position. Detailed tables and charts with sales forecasts and market share data are also included.

Contents:

1. Overview
   1.1 Statement of This Report
   1.2 Scope of This Report
   1.3 Methodology
   1.4 Executive Summary

2. Medical Imaging Technologies: An Overview
   2.1 Projection Radiography (X-rays)
      2.1.1 Applications Using X-Rays
      2.1.2 Radiography System Configurations & Mounts
   2.2 Computed Radiography
   2.3 Direct Digital Radiography
   2.4 Fluoroscopy and C-Arm Systems
      2.4.1 Undercouch (Conventional) System
      2.4.2 Overcouch (Remote-Controlled) Systems
      2.4.3 Multipurpose Systems (C-arms)
      2.4.4 Clinical Procedures Using Radiography/Fluoroscopy Systems
      2.4.4.1 Barium Studies
      2.4.4.2 Biopsy
      2.4.4.3 Angiography
      2.4.4.4 Other Clinical Procedures
      2.4.5 Fluoroscopy Systems on the Market
      2.4.5.1 Fixed Fluoroscopy Systems
      2.4.5.2 Mobile C-arm/O-arm/G-arm Systems
   2.5 Mammography
   2.5.1 System Considerations
   2.5.2 Procedure Room Layout
   2.5.3 Procedures Using C-Arm Systems
   2.5.4 Types of C-arms
   2.5.5 Cooling System
   2.5.6 Dose Reduction Features
   2.5.7 Image Processing & Storage
   2.5.8 Major Players in the Mobile C-Arm Systems Market
   2.5.9 Comparison of C-Arm Systems
   2.5.10 Trends in C-Arm Systems
   2.5.11 Mammography
2.5.1 Film/Screen Systems for Mammography
2.5.2 Digital Mammography
2.5.3 Clinical Applications of Mammography Systems
2.5.4 Components of a Mammography System
2.5.5 Comparison of Mammography Technologies
2.5.6 Select CR Mammography Systems
2.5.7 Select DR Mammography Systems
2.5.8 Select Digital Breast Tomography (3D Mammography)
2.6 Bone Densitometry Scanners
2.6.1 Select Bone Densitometry Scanners
2.7 Computed Tomography (CT)
2.7.1 Conventional CT Scanners
2.7.2 Spiral CT Scanners
2.7.3 Multislice CT Scanners
2.7.4 Electron Beam CT Scanners
2.7.5 Spectral CT
2.7.6 Important Features to Consider When Choosing a CT Scanner
2.7.6.1 Tube Voltage
2.7.6.2 Tube Current
2.7.6.3 Pitch
2.7.6.4 Gantry Rotation Time
2.7.6.5 Multidetectors & Number of Slices
2.7.6.6 Dose Reduction and Optimization Strategies
2.7.7 Market Leaders in CT Scanners
2.8 MRI Scanners
2.8.1 Types of MRI Scanners
2.8.1.1 High-Field MRI Scanners
2.8.1.2 Low-Field MRI Scanners
2.8.1.3 Stand-Up/Upright MRI Scanners
2.8.2Leading Vendors and their Models
2.8.3 Key Purchasing Factors to Consider
2.8.3.1 Technical Features
2.8.3.2 Ease of Use and Safety
2.9 Ultrasound Scanners
2.9.1 Types of Ultrasound Imaging
2.9.2 Market Leaders in Ultrasound Scanners
2.10 Nuclear Imaging
2.10.1 Single Photon Emission Computed Tomography
2.10.1.1 Advantages of SPECT Imaging
2.10.1.2 Disadvantages of SPECT Imaging
2.10.1.3 Medical Applications of SPECT Systems
2.10.1.4 Leading SPECT System Manufacturers
2.10.1.5 The Market Leading SPECT Systems
2.10.1.6 U.S. SPECT Statistics
2.10.1.7 Radionuclides Used in SPECT Imaging
2.10.2 SPECT/CT
2.10.2.1 Clinical Applications of SPECT/CT
2.10.2.2 The Market Leading SPECT/CT Systems
2.10.3 Positron Emission Tomography
2.10.3.1 Medical Applications of PET
2.10.4 PET/CT
2.10.4.1 Clinical Applications of PET/CT in Oncology
2.10.4.2 Clinical Applications of PET/CT in Head and Neck Cancer
2.10.4.3 Clinical Applications of PET/CT in Lung Cancer
2.10.4.4 Clinical Applications of PET/CT in Breast Cancer
2.10.4.5 Clinical Application of PET/CT in Prostate Cancer
2.10.4.6 Clinical Application of PET/CT in Digestive Tract Tumors
2.10.4.7 Clinical Application of PET/CT in Cardiology
2.10.4.8 Clinical Application of PET/CT in Non-oncologic Conditions
2.11 Nuclear Medicine
2.11.1 Diagnostic Techniques in Nuclear Medicine
2.11.2 Diagnostic Radiopharmaceuticals
2.11.2.1 Suppliers of Radioisotopes
2.11.2.2 Reactor Isotopes
2.11.2.3 Cyclotron Isotopes

3. Medical Indications for the Currently Available Imaging Modalities
3.1 Medical Imaging in Cancer Care
3.1.1 Global Incidence of Cancer
3.1.2 Incidence of Cancer in the U.S.
3.1.3 Cancer Incidence in Europe
3.1.4 Use of Imaging Modalities in Oncology
3.2 Global Incidence of Cardiovascular Diseases
3.2.1 Cardiovascular Diseases in the U.S.
3.2.2 Cardiovascular Disease in Europe
3.2.2.1 Mortality Due to Heart Diseases in Europe
3.2.3 Use of Imaging Modalities in Cardiology
3.3 Global Incidence of Neurological Disorders
3.3.1 Neurological Diseases in the U.S.
3.3.2 Use of Imaging Modalities in Neurology
3.4 Musculoskeletal Disorders
3.4.1 Use of Imaging Modalities in Bone Scans

4. Medical Imaging: Market Analysis
4.1 Global Medical Imaging Market
4.1.1 Global Medical Imaging Market by Geography
4.1.2 Global Medical Imaging Market by Modality
4.1.3 Global Medical Imaging Market by Care Setting
4.1.4 U.S. Market for Medical Imaging Modalities
4.1.4.1 Cost of Hospital-Based Imaging Services in the U.S.
4.1.4.2 Cost of Imaging Procedures in Freestanding Imaging Centers in the U.S.
4.1.4.3 Hospital-Based vs. Freestanding Outpatient Imaging Services in the U.S.
4.1.4.4 Medicare Spending for Imaging Services in the U.S.
4.1.5 Medical Imaging in Canada
4.1.5.1 Number of Selected Imaging Modalities in Canada
4.1.6 Medical Imaging Market in Germany
4.1.7 Medical Imaging Market in France
4.1.8 Medical Imaging Market in Italy
4.1.9 Medical Imaging in Spain
4.1.10 Medical Imaging Market in the U.K.
4.1.11 Relative Strengths of Medical Imaging Market in Europe by Country
4.1.12 Growth of Medical Imaging in Pharmerging Markets
4.1.13 Medical Imaging Market in Asia/Pacific
4.1.14 Medical Imaging Market in Japan
4.1.15 Medical Imaging Market in China
4.1.16 Medical Imaging Market in South Korea
4.1.17 Medical Imaging Market in Australia
4.1.18 Medical Imaging Market in India
4.2 Global Market for X-Ray Systems
4.2.1 Growing Market for Mobile X-Ray Systems
4.2.2 Global Market for Fluoroscopy and Mobile C-Arms
4.3 Global Market for Digital Mammography Systems
4.4 Global Market for Bone Densitometry Systems
4.5 Global Market for CT Scanners
4.5.1.1 The Average Age of CT Systems
4.6 Global MRI Market
4.7 Global Market for Ultrasound Systems
4.7.1 Ultrasound Market by Clinical Specialties
4.8 Global Market for Nuclear Imaging Systems
4.8.1 Global Market for PET Systems
4.8.2 Global SPECT Market
4.9 M&A Activity
4.9.1 Philips Completes Acquisition of Volcano
4.9.2 Konica Minolta Aquires Viztek
4.9.3 Cannon makes Toshiba Medical Systems Corporation its Subsidiary
5. Relative Use of Imaging Modalities in Future

6. Company Profiles
6.1 PIE Medical Imaging
   6.1.1 CAAS Workstation
       6.1.1.1 QCA (Quantitative Coronary Analysis)
       6.1.1.2 IV-LINQ
       6.1.1.3 QCA 3D (3-dimensional Quantitative Coronary Analysis)
       6.1.1.4 QVA (Quantitative Vascular Analysis)
       6.1.1.5 LVA (Left Ventricular Analysis)
       6.1.1.6 RVA (Right Ventricular Analysis)
       6.1.1.7 StentEnhancer
       6.1.2 CAAS A-Valve
       6.1.3 CAAS MRV
       6.1.4 CAAS MRV FARM
       6.1.5 CAAS MR Flow
       6.1.6 CAAS MR 4D Flow
       6.1.7 CAAS Intravascular
       6.1.8 3mensio Structural Heart Module
           6.1.8.1 Aortic Root
           6.1.8.2 LAA
           6.1.8.3 Mitral Valve
           6.1.8.4 Coronary
       6.2 Agfa Healthcare
           6.2.1 Computed Radiography
               6.2.1.1 CR 10-X
               6.2.1.2 CR 12-X
               6.2.1.3 CR 15-X
               6.2.1.4 CR 30-Xm
               6.2.1.5 DX-M
           6.2.2 Direct Radiography
               6.2.2.1 DX-D 100 (Mobile DR)
               6.2.2.2 DX-D 300 (U-Arm DR)
               6.2.2.3 DX-D 400 (floor-mounted DR)
               6.2.2.4 DX-D 600 (ceiling-suspended DR)
               6.2.2.5 DX-D 800 (Genrad/Fluoroscopy DR)
               6.2.2.6 DX-D Retrofit
               6.2.2.7 DX-D 10 (Tethered DR Detector)
               6.2.2.8 DX-D 20 (Tethered DR Detector)
               6.2.2.9 DX-D 30C (Wireless DR Detector)
               6.2.2.10 DX-D 35C (Wireless DR Detector)
               6.2.2.11 DX-D 40C (Wireless DR Detector)
               6.2.2.12 DX-D 45C (Wireless DR Detector)
           6.2.3 Conventional Imaging and Processing
               6.2.4 IMPAX
           6.3 Analogic
               6.3.1 Digital Mammography
                   6.3.1.1 Direct Conversion X-ray Detectors
               6.3.2 Computed Tomography
                   6.3.2.1 Integrated CT Systems
                   6.3.2.2 PowerLink
                   6.3.2.3 Data Management Systems
                   6.3.2.4 CT Image Reconstruction
               6.3.3 MRI
                   6.3.3.1 Gradient Power Amplifiers
                   6.3.3.2 RF Power Amplifiers
               6.3.4 Ultrasound
                   6.3.4.1 bk5000
                   6.3.4.2 bk3500
                   6.3.4.3 bk3000
                   6.3.4.4 Flex Focus 800
                   6.3.4.5 Flex Focus 500
                   6.3.4.6 Flex Focus 400 exp
6.3.4.7 Flex Focus 400
6.3.4.8 Flex Focus 300
6.3.4.9 SonixTouch Q+
6.3.4.10 SonixOne Q+
6.3.4.11 SonixMDP Q+
6.3.4.12 SonixOP Q+
6.3.4.13 SonixSP Q+
6.3.4.14 SonixTablet
6.3.4.15 Sonic Window
6.3.5 OEM Ultrasound Transducers
6.4 Canon U.S.A., Inc.
6.4.1 Digital Detectors
6.4.2 Digital Radiography Solutions
6.4.2.1 RadPRO FM
6.4.1.2 RadPRO URS
6.4.1.3 RadPRO ELITE XM
6.4.1.4 RadPRO OMNERA 400A
6.4.1.5 RadPRO OMNERA 400T
6.4.1.6 RadPRO® Digital Room Upgrade Kit for Compatible X-ray Systems
6.4.2 Digital Radiography and Fluoroscopy Solution
6.4.2.1 RadPRO Solegra 500 Univeral RF System
6.4.3 Mobile and Portable Solutions
6.4.3.1 RadPRO Mobile 40kW FLEX Digital X-ray System
6.4.3.2 RadPRO® Digital Mobile Upgrade Kit for the AMX 4/4+ and Definium 700 Portable X-Ray Systems
6.4.3.3 RadPRO® Mobile 40kW Digital X-ray System
6.4.3.4 CXDI Control Software NE
6.5 Biosound Esaote, Inc.
6.5.1 Ultrasound Solutions
6.5.1.1 MyLab Twice
6.5.1.2 MyLab ClassC
6.5.1.3 MyLab Gold Platform
6.5.1.4 MyLab Seven
6.5.1.5 MyLab 50
6.5.1.6 MyLab 40
6.5.1.7 MyLab Alpha
6.5.1.8 MyLab 30 Gold Cardiovascular
6.5.1.9 MyLab Six
6.5.1.10 MyLab 25 Gold
6.5.1.11 MyLab 20 Plus
6.5.1.12 MyLab Gamma
6.5.1.13 MyLab Five
6.5.1.14 MyLab One/Touch
6.5.2 Dedicated Musculoskeletal MRI
6.5.2.1 G-Scan Brio
6.5.2.3 O-Scan
6.5.2.4 S-Scan
6.6 GE Healthcare
6.6.1 Bone Health Imaging Products
6.6.1.1 Lunar iDXA
6.6.1.2 Prodigy
6.6.1.3 CoreScan
6.6.1.4 Achilles
6.6.2 Computed Tomography Products
6.6.2.1 Revolution EVO
6.6.2.2 Revolution CT
6.6.2.3 Revolution HD
6.6.2.2 Optima CT660 FREEdom Edition
6.6.2.3 Optima CT660
6.6.2.4 Optima CT540
6.6.2.5 Optima CT580 W
6.6.3 Magnetic Resonance Imaging
6.6.3.1 SIGNA PET/MR
6.6.3.2 SIGNA Explorer
6.6.3.3 SIGNA Pioneer
6.6.3.4 Discovery MR750w 3.0T
6.6.3.5 SIGNA Creator
6.6.3.6 Signa HDxt 3.0T
6.6.3.2 Optima MR450w 1.5T with GEM Suite
6.6.4 Mammography Systems
6.6.4.1 Senographe Essential
6.6.4.2 Senographe Care
6.6.4.3 Senographe DS
6.6.4.4 SenoClaire (3D Breast Imaging)
6.6.5 PET/CT
6.6.5.1 Optima PET/CT 560
6.6.5.2 Discovery PET/CT 710
6.6.5.3 Discovery IQ
6.6.5.4 Discovery MI
6.6.6 SPECT & SPECT/CT
6.6.6.1 Brivo NM615
6.6.6.2 Discovery NM630
6.6.6.3 Discovery NM/CT 670 CTZ
6.6.6.4 Discovery NM/CT 670
6.6.6.5 Discovery NM/CT 670 Pro
6.6.6.6 Optima NM/CT 640
6.6.7 Additional Nuclear Medicine Systems
6.6.7.1 Ventri
6.6.7.2 Discovery NM 530c
6.6.7.3 Discovery NM/CT 570c
6.6.7.4 Discovery NM750b
6.6.8 Fixed RAD Systems
6.6.8.1 Discovery XR656 Plus
6.6.8.2 Definium 5000
6.6.8.3 Proteus XR/a
6.6.8.4 Brivo XR 385
6.6.9 Mobile X-Ray Systems
6.6.9.1 Optima XR 220 amx
6.6.9.2 Optima XR 200 amx
6.6.10 Radiography and Fluoroscopy
6.6.10.1 Precision 500D
6.6.10.2 Precision RXi
6.6.11 Surgical Imaging Systems
6.6.11.1 OEC 9900 Elite Mobile C-Arm
6.6.11.2 OEC 9800 Plus Mobile C-Arm
6.6.11.3 OEC Brivo Plus
6.6.11.4 OEC Elite + Venue 40
6.3.11.5 NuBOOM Ultra
6.6.12 Ultrasound
6.6.12.1 Vscan
6.6.12.2 Vscan with Dual Probe
6.6.12.3 LOGIQ E9 XDclear 2.0
6.6.12.4 LOGIQ S8 (with or without XDclear)
6.6.12.5 LOGIQ E9 (with or without XDclear)
6.6.12.6 LOGIQ S7 with XDclear
6.6.12.7 LOGIQ P9
6.6.12.8 LOGIQ P6
6.6.12.9 LOGIQ P5
6.6.12.10 NextGen LOGIQ e
6.6.12.11 LOGIQ P3
6.6.12.12 LOGIQ A5
6.6.12.13 Venue 50
6.6.12.14 Venue 40
6.6.12.15 Voluson i
6.6.12.16 Voluson E10
6.6.12.17 Voluson E8
6.6.12.18 Voluson E6
6.6.12.19 Voluson S10
6.6.12.20 Voluson S8
6.6.12.21 Voluson P8
6.6.12.22 Vivid E95
6.6.12.23 Vivid E90
6.6.12.24 Vivid S70
6.6.12.25 Vivid S60
6.6.12.26 Vivid i
6.6.12.27 Vivid q
6.6.12.28 Vivid T8
6.7 Hologic, Inc.
6.7.1 Digital Mammography
6.7.1.1 Selenia Dimensions with 2D Mammography and/or Genius 3D Mammography
6.7.1.2 Affirm System
6.7.1.3 Trident Specimen Radiography System
6.7.2 Mini C-Arm Systems
6.7.2.1 Fluoroscan InSight
6.7.3 Bone Densitometry
6.7.3.1 Discovery DXA System
6.7.3.2 Horizon DXA System
6.8 Philips Healthcare
6.8.1 Computed Tomography (CT Scanners)
6.8.1.1 MX 16EVO CT Scanner
6.8.1.2 Brilliance CT – Big Bore Radiology Configuration
6.8.1.3 Ingenuity CT Scanner
6.8.1.4 Ingenuity Flex32
6.8.1.5 iCT Family
6.8.2.1 Ingenia 3.0T CX
6.8.2.2 Ingenia 3.0T
6.8.2.3 Ingenia 1.5T
6.8.2.4 Ingenia 1.5T CX
6.8.2.5 Ingenia 1.5T S
6.8.3 Mobile C-Arms
6.8.3.1 Veradius Neo
6.8.3.2 Veradius Unity
6.8.3.3 BV Pulsera
6.8.3.4 BV Endura
6.8.4 SPECT & SPECT/CT
6.8.4.1 BrightView XCT
6.8.4.2 BrightView X
6.8.5 Digital Radiography
6.8.5.1 AlluraClarity with ClarityIQ
6.8.5.2 Allura Xper FD20 X-ray System
6.8.5.3 Allura Xper FD10-10
6.8.5.4 Allura Xper FD10
6.8.5.5 DuraDiagnost
6.8.5.6 MobileDiagnost wDR
6.8.6 Ultrasound
6.8.6.1 EPIQ 7
6.8.6.2 EPIQ 5
6.8.6.3 CX50 xMATRIX CompactXtreme Ultrasound System
6.8.6.4 CX50
6.8.6.5 Affiniti 70
6.8.6.6 Affiniti 50
6.8.6.7 ClearVue 850
6.8.6.8 ClearVue 350
6.8.6.9 Lumify
6.8.6.10 SparQ Ultrasound System
6.8.7 Digital Mammography
6.8.7.1 MicroDose SI Mammography
6.8.8 PET/CT & PET/MR Scanners
6.8.8.1 Verios Digital PET/CT
6.8.8.2 Ingenuity CT Scanner
6.8.8.3 GEMINI TF
6.8.8.4 TruFlight
6.8.8.5 Ingenuity TF
6.8.9 Fluoroscopy
6.8.9.1 EasyDiagnost Eleva DRF
6.8.9.2 Juno DRF
6.8.10 Computed Radiography
6.8.10.1 PCR Eleva Compact
6.9 Positron Corporation
6.9.1 Attrius
6.9.2 PosiRx
6.9.3 Radiopharmaceuticals
6.10 Siemens Healthcare
6.10.1 Siemens Universal Angiography Systems
6.10.1.1 Artis Zee
6.10.2 Computed Tomography Systems - Single Source CT Scanners
6.10.2.1 SOMATOM Definition Edge
6.10.2.2 SOMATOM Definition AS
6.10.2.3 SOMATOM Perspective
6.10.2.4 SOMATOM Emotion
6.10.2.5 SOMATOM Spirit
6.10.2.6 SOMATOM Scope
6.10.3 Computed Tomography Systems – Dual Source CT Scanners
6.10.3.1 SOMATOM Definition Flash
6.10.3.2 SOMATOM Drive
6.10.3.3 SOMATOM Force
6.10.4 Fluoroscopy
6.10.4.1 Luminos dRF Max
6.10.4.2 Luminos dRF
6.10.4.3 Luminos Fusion
6.10.4.4 Luminos Select
6.10.4.5 Luminos RF Classic
6.10.4.6 Luminos Agile Max
6.10.4.7 Luminos Agile
6.10.5 MRI Systems
6.10.5.1 MAGNETOM Aera 1.5T
6.10.5.2 MAGNETOM Amira
6.10.5.3 MAGNETOM Avanto 1.5T
6.10.5.4 MAGNETOM Essenza 1.5T
6.10.5.5 MAGNETOM CI 0.35T
6.10.5.6 Mobile MRI Scanner
6.10.5.7 MAGNETOM Skyra
6.10.5.8 MAGNETOM Prisma
6.10.5.9 MAGNETOM Verio 3T
6.10.5.10 MAGNETOM Spectra 3T
6.10.5.11 MAGNETOM Terra
6.10.5.12 Biograph mMR
6.10.6 Mammography
6.10.6.1 Mammatom Inspiration with PRIME Technology
6.10.6.2 Mammatom Fusion
6.10.6.3 Mammatom Select
6.10.7 PET/CT Systems
6.10.7.1 Biograph mCT Flow
6.10.7.2 Biograph mCT
6.10.7.3 Biograph mCT 20 Excel
6.10.7.4 Biograph TruePoint PET/CT
6.10.7.5 Biograph RT Pro Edition
6.10.7.6 Biograph Horizon
6.10.8 PET/MR Scanner – Molecular MR
6.10.8.1 Biograph mMR
6.10.9 SPECT/CT Systems
6.10.9.1 Symbia Intevo
6.10.9.3 Symbia T Series
6.10.10 SPECT Systems
6.10.10.1 Symbia Evo
6.10.10.2 Symbia Evo Excel
6.10.10.3 Symbia S
6.10.11 Digital Radiography Systems
6.10.11.1 Ysio Max
6.10.11.2 Ysio
6.10.11.3 Multix Fusion
6.10.11.4 Multix Select DR
6.10.11.5 Luminos Agile Max
6.10.11.6 Luminos dRF Max
6.10.12 Analog Radiography Systems
6.10.12.1 Multix Fusion Analog
6.10.13 Mobile Radiography Systems
6.10.13.1 Mobilett Mira Max
6.10.13.2 Mobilett Mira
6.10.13.3 Mobilett XP
6.10.13.4 Polymobil Plus
6.10.13.5 MULTIMOBIL
6.10.14 Surgical C-Arms and Navigation Systems
6.10.14.1 Arcadis Avantic
6.10.14.2 Arcadis Orbic 3D
6.10.14.3 Arcadis Orbic
6.10.14.4 Arcadis Varic
6.10.14.5 Siremobil Compact L
6.10.14.6 Cios Alpha
6.10.14.7 Cios Fusion
6.10.14.8 Cios Connect
6.10.14.9 Cios Select
6.10.14.10 Multimobil 5C
6.10.15 Multitom Rax Robotic X-ray
6.10.16 Ultrasound Systems
6.10.16.1 ACUSON S3000
6.10.16.2 ACUSON S2000
6.10.16.3 ACUSON S1000
6.10.16.4 ACUSON NX3
6.10.16.5 ACUSON X700
6.10.16.6 ACUSON X600
6.10.16.7 ACUSON X300 Premium Edition
6.10.16.8 ACUSON X300
6.10.16.9 ACUSON X150
6.10.16.10 ACUSON Freestyle
6.10.16.11 ACUSON P500
6.10.16.12 ACUSON P300
6.10.16.13 ACUSON SC2000
6.10.17 Urology Devices
6.10.17.1 Uroskop Omnia Max
6.10.17.2 Uroskop Omnia
6.10.17.3 Modularis
6.11 Toshiba Medical Systems Corporation (now a subsidiary of Canon)
6.11.1 Computed Tomography Systems
6.11.1.1 Aquilion ONE / GENESIS Edition
6.11.1.2 Aquilion ONE / VISION Edition
6.11.1.3 Aquilion ONE
6.11.1.4 Aquilion PRIME
6.11.1.5 Aquilion / CXL Edition
6.11.1.6 Aquilion / RXL Edition
6.11.1.7 Aquilion Lightening
6.11.1.8 Aquilion LB
6.11.1.9 Alexion / Advance Edition
6.11.1.10 Alexion
6.11.2 Magnetic Resonance Imaging
  6.11.2.1 Vantage Titan 3T
  6.11.2.2 Vantage Titan
  6.11.2.3 Vantage Elan
  6.11.3 Ultrasound Systems
  6.11.3.1 Apio 500 Platinum Series
  6.11.3.2 Apio 400 Platinum Series
  6.11.3.3 Apio 300 Platinum Series
  6.11.3.4 Artida
  6.11.3.5 Xario 200
  6.11.3.6 Xario 100
  6.11.4 Angiography
  6.11.4.1 INFX-8000H
  6.11.4.2 INFX-8000V
  6.11.4.3 INFX-8000V Biplane
  6.11.4.4 INFX-8000C
  6.11.4.5 INFX-8000F
  6.11.4.6 INFX-8000C + CT (Aquilion)
  6.11.5 Fluoroscopy
  6.11.5.1 Ultimax-i FPD Version
  6.11.5.2 Zexira FPD Version
  6.11.5.3 Ultimax-i I.I. Version
  6.11.5.4 ZEXIRA I.I. Version
  6.11.5.5 Kalere
  6.11.5.6 Winscope Plessart VIVO
  6.11.5.7 Winscope Plessart EX8
  6.11.6 Radiography
  6.11.6.1 RADREX-i FPD System
  6.11.6.2 RADREX
  6.11.7 Mammography
  6.11.7.1 MGU-1000A
  6.11.8 Mobile C-arms
  6.11.8.1 Surginx (SXT-2000A)
  6.11.8.2 Clearscope 1000
  6.11.9 Mobile X-ray
  6.11.9.1 IME 100L
  6.11.10 PET/CT Scanner
  6.11.10.1 Celesteion
  6.12 Ziehm Imaging
  6.12.1 Ziehm Vision RFD 3D
  6.12.2 Ziehm Vision RFD Hybrid Edition
  6.12.3 Ziehm Vision RFD
  6.12.4 Ziehm Vision R
  6.12.5 Ziehm Vision FD Vario 3D
  6.12.6 Ziehm Vision
  6.12.7 Ziehm Solo
6.13 Shimadzu
  6.13.1 Angiography
  6.13.1.1 Trinias F12/C12 MiX package
  6.13.1.2 Trinias B12 MiX package
  6.13.1.3 BRANSIST alexa F12/C12 MiX package
  6.13.1.4 Trinias F8/C8 MiX package
  6.13.1.5 Trinias B8 MiX package
  6.13.1.6 BRANSIST safire VC17
  6.13.2 Fluoroscopy
  6.13.2.1 SONIALVISION G4
  6.13.2.2 SONIALVISION safire 17
  6.13.2.3 SONIALVISION VERSA 100R/100
  6.13.2.4 FLEXAVISION F3 package
  6.13.2.5 FLUOROSPEED 300
  6.13.2.6 FLEXAVISION SF/HB/FD package
6.13.3 Mobile C-arms
6.13.3.1 OPESCOPE ACTENO
6.13.3.2 OPESCOPE ACTIVO (WHA 200)
6.13.4 Radiography
6.13.4.1 RADspeed Pro EDGE package
6.13.4.2 RADspeed Pro V4 package
6.13.4.3 RADspeed
6.13.4.4 RADspeed MC
6.13.4.5 RADspeed MF
6.13.4.6 RADspeed fit
6.13.4.7 EZy-Rad Pro EFX version
6.13.4.8 EZy-Rad Pro
6.13.5 Mobile X-ray
6.13.5.1 MobileDaRt Evolution EFX Version
6.13.5.2 MobileDaRt Evolution
6.13.5.3 MobileArt Evolution EFX Version
6.13.5.4 MobileArt Evolution
6.13.5.5 MobileArt Eco
6.14 Orthoscan
6.14.1 FD Pulse
6.14.2 FD-OR
6.15 Medtronic
6.15.1 O-arm
6.16 Carestream Health
6.16.1 Digital Radiography Systems
6.16.1.1 CARESTREAM DRX-1 System
6.16.1.2 CARESTREAM DRX-Mobile Retrofit Kits
6.16.1.3 CARESTREAM DRX-Revolution Mobile X-ray System
6.16.1.4 CARESTREAM DRX-Evolution Plus
6.16.1.5 CARESTREAM DRX-Ascend
6.16.1.6 CARESTREAM Motion Mobile X-ray System
6.16.2 Computed Radiography
6.16.2.1 DIRECTVIEW CR Systems
6.16.2.2 CARESTREAM Vita Flex CR Systems
6.16.2.3 CARESTREAM Vita CR Systems
6.16.3 Cone beam CT (CBCT)
6.16.3.1 CS 9000 System
6.16.3.2 CS 9300 System
6.16.3.3 CS 8100 3D
6.16.4 Fluoroscopy
6.16.4.1 DRX-Excel System
6.16.4.2 DRX-Excel Plus
6.16.5 Analog Systems
6.16.5.1 Q-Rad
6.16.6 Ultrasound
6.16.6.1 Touch Prime
6.16.6.2 Touch Prime XE
6.17 Konica Minolta Medical Imaging
6.17.1 Digital Radiography
6.17.1.1 AeroDR X70 X-ray system
6.17.1.2 AeroDR LT
6.17.1.3 AeroDR XE
6.17.1.4 AeroDR
6.17.1.5 Ultra U-arm DR
6.17.1.6 Dual Detector DR
6.17.1.7 Straight Arm DR
6.17.1.8 Weight Bearing Stand
6.17.2 Ultrasound
6.17.2.1 SONIMAGE HS1
6.17.2.2 SONIMAGE P3
6.17.3 Computed Radiography
6.17.3.1 Xpress CR – REGIUS Model 210
6.17.3.2 SIGMA II CS-7s
6.17.3.3 Nano CR – REGIUS Model 110
6.17.3.4 ImagePilot
6.17.4 Digital Mammography
6.17.4.1 Xpress CR
6.17.4.2 REGIUS Model 110 HQ
6.18 iCRco
6.18.1 Direct Radiography
6.18.1.1 AirDR
6.18.1.2 Air DRc
6.18.1.3 AirDRc Gadox
6.18.1.4 iDR
6.18.1.5 iDR 34
6.18.1.6 iDR-L
6.18.1.7 iXRS AirDRc
6.18.1.8 iXRS iDR U-Arm
6.18.2 Computed Radiography
6.18.2.1 ChromeNeo
6.18.2.2 Chrome
6.18.2.3 Chrome+
6.18.2.4 iCR3600sf
6.18.2.5 iCR3600
6.18.2.6 VertX
6.18.3 Mammography
6.18.3.1 iCR3600M
6.18.3.2 ChromeM
6.18.3.3 ChromeDuo CR
6.18.4 Computed Tomography
6.18.4.1 Claris CBCT
6.19 Lodox
6.19.1 Xmplar-dr
6.20 Whale Imaging
6.20.1 GXi 1
6.20.2 GXi 2
6.21 Fujifilm Medical Systems USA
6.21.1 Digital Radiography
6.21.1.1 D-EVO II
6.21.1.2 FDR D-EVO
6.21.1.3 Wired FDR D-EVO
6.21.1.4 FDR Go
6.21.1.5 FDR-flex
6.21.1.6 FDR D-EVO Portable Upgrade System
6.21.1.7 FDR D-EVO Suite II
6.21.1.8 FDR AcSelerate
6.21.1.9 FDR D-EVO Suite FS
6.21.2 Computed Radiography
6.21.2.1 FCR Carbon
6.21.2.2 XG5000 Plus
6.21.2.3 ClearView-CS Plus & ClearView-1 Plus
6.21.3 Digital Mammography
6.21.3.1 Aspire Cristalle
6.21.3.2 Aspire HD Plus
6.21.3.3 Aspire ClearView-Csm Plus
6.21.3.4 Aspire CRM
6.22 Hitachi Medical Systems
6.22.1 MRI
6.22.1.1 Echelon Oval 1.5T
6.22.1.2 Echelon 1.5T
6.22.1.3 Oasis 1.2T
6.22.2 CT Scanners
6.22.2.1 Scenaria SE 64/128 CT
6.22.2.2 Supria
6.22.3 Ultrasound
6.22.3.1 ARIETTA
6.22.3.2 ARIETTA
6.22.3.3 ProSound Alpha 7
6.22.3.4 Noblus
6.22.3.5 ProSound F37
6.22.3.6 ProSound Alpha
6.22.3.7 Prosound F75
6.22.3.8 Artemis
6.22.4 Optical Topography
6.22.4.1 ETG-4000
6.22.5 SOFIA for Whole Breast Imaging

APPENDIX

Appendix 1: X-Ray Usage and Safety
Appendix 1.1: Radiation
Appendix 1.1.1: Radiation in Medical Imaging
Appendix 1.2: Ionizing Radiation: Basic Concepts
Appendix 1.2.1: Action of Ionizing Radiation
Appendix 1.2.2: Regulatory Agencies and Radiation Effects
Appendix 1.2.3: Ionization Radiation: Quantification, Exposure and Risk
Appendix 1.2.4: Ionization Radiation: Proper Protection
Appendix 1.2.5: Ionizing Radiation: The Pregnant Patient
Appendix 1.3: Alternative Non-Radiation Imaging Modalities
Appendix 1.3.1: Ultrasound Imaging
Appendix 1.3.2: Magnetic Resonance Imaging

INDEX OF FIGURES

Figure 2.1: Components of a Projection Radiography System
Figure 2.2: The U.S. Market Share of Mobile C-Arm Systems by Manufacturer, 2015
Figure 2.3: Annual Incidence of Osteoporotic Fracture vs. Other Diseases in U.S. Females
Figure 2.4: Schematic Diagram of a CT Detector Array with Multiple Detector Banks along Z-Axis
Figure 2.5: Siemens’ Somatom Definition Dual X-Ray Source CT Scanner
Figure 2.6: Sources for Mo-99 (for Tc-99m)
Figure 3.1: Deaths Due to Cardiovascular Diseases in European Men
Figure 3.2: Deaths Due to Cardiovascular Diseases in European Women
Figure 4.1: Global Medical Imaging Market, 2015-2021
Figure 4.2: Medical Imaging Market Share by Geography, 2015
Figure 4.3: Medical Imaging Market by Modality, 2015
Figure 4.4: Exam Mix by Modality and Percentage of Total in Hospitals
Figure 4.5: Exam Mix by Modality and Percentage of Total in Outpatient Imaging Centers
Figure 4.6: Medicare Spending for Imaging Services under the Physician Fee Schedule by Type of Service
Figure 4.7: Comparison of Diagnostic Imaging Markets in Europe by Country, 2012-2019
Figure 4.8: Breakdown of Diagnostic Imaging Procedures Involving Ionizing Radiation in Australia
Figure 4.9: Increasing Share of Mobile X-ray Systems in the Global X-Ray Market, 2012-2019
Figure 4.10: The Average Age of CT Systems
Figure 4.11: Deployed MRI Systems by Field Strength in the U.S.
Figure 4.12: Breakdown of Clinical Specialties in the Ultrasound Market
Figure 5.1: Relative Use of CT, MRI, Ultrasound, PET and SPECT, 2008-2025
Figure 5.2: Relative Use of PET/CT, PET/MR, SPECT/CT and SPECT/MRI, 2008-2025
Figure 5.3: Share of the Number of Scans According to Base Modalities, 2008-2025
Figure 5.4: Breakdown of the Shares of SPECT Modalities

INDEX OF TABLES

Table 2.1: Throughput of CR Systems on the Market
Table 2.2: Features of Select DR Systems
Table 2.3: Dimensions (inches) of Select C-Arms
Table 2.4: Comparison of Generator Power (kW @ 100 kVp) in C-Arm Systems
Table 2.5: Image Intensifier Sizes in C-Arm Systems
Table 2.6: Image Display (inches) and Touchscreen Capability in C-Arm Systems
Table 2.7: Depth of C in C-Arm Systems
Table 2.8: Orbital Rotation (degrees) in C-Arm Systems
Table 2.9: Pulsed Fluoro Rates (PPS) in C-Arms Systems
Table 2.10: Detector Technologies Used in Digital Mammography Systems
Table 2.11: Comparison of Select Digital Mammography Systems
Table 2.12: Comparison of FDA-approved Digital Breast Tomography Systems
Table 2.13: Features of Select CT Scanners
Table 2.14: Technical Specifications for Select MRI Systems
Table 2.15: Technical Specifications for Select MRI Systems
Table 2.16: Patient Comfort Specifications for Select Wide Bore MRI Systems
Table 2.17: Radionuclides Used in SPECT Imaging
Table 3.1: Estimates for the Leading Sites of New Cancer Cases in the U.S. by Gender, 2016
Table 3.2: Estimates for the Leading Sites of Cancer Deaths in the U.S. by Gender, 2016
Table 3.3: Deaths Attributable to Neurological Disorders as Percentage of Total Deaths
Table 4.1: Global Medical Imaging Market, 2015-2021
Table 4.2: Global Ultrasound Market, 2015-2021
Table 4.3: Global MRI Market, 2015-2021
Table 4.4: Global CT Market, 2015-2021
Table 4.5: Global X-ray Market, 2015-2021
Table 4.6: Global Nuclear Imaging (PET, PET/CT, SPECT, SPECT/CT) Market, 2015-2021
Table 4.7: Mammography and Breast Imaging Market, 2015-2021
Table A.1.1: Ionizing and Non-Ionizing Sources of Radiation
Table A.1.2: The Contribution of the Common Sources of Radiation
Table A.1.3: Radiation Dose for Various Imaging Procedures Compared to Background Radiation
Table A.1.4: Dose Limits Recommended for Planned Exposure Situations
Table A.1.5: Radiation Induced Malformations from Fetal Exposures
Table A.1.6: Estimates of Fetal Radiation Doses from Common Imaging Diagnostic Procedures

Ordering:
Order Online - [http://www.researchandmarkets.com/reports/2569953/](http://www.researchandmarkets.com/reports/2569953/)
Order by Fax - using the form below
Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit
http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Product Name: Medical Imaging Markets
Web Address: http://www.researchandmarkets.com/reports/2569953/
Office Code: SCBRYRFP

Product Formats
Please select the product formats and quantity you require:

<table>
<thead>
<tr>
<th>Format</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (PDF) - Single User</td>
<td></td>
<td>USD 5500</td>
</tr>
<tr>
<td>Electronic (PDF) - 1 - 10 Users</td>
<td></td>
<td>USD 11000</td>
</tr>
<tr>
<td>Electronic (PDF) - Enterprisewide</td>
<td></td>
<td>USD 16500</td>
</tr>
</tbody>
</table>

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: [ ] Mr [ ] Mrs [ ] Dr [ ] Miss [ ] Ms [ ] Prof
First Name: __________________________ Last Name: __________________________
Email Address: * ______________________________
Job Title: __________________________________
Organisation: ________________________________
Address: ____________________________________
City: ________________________________________
Postal / Zip Code: ____________________________
Country: ____________________________________
Phone Number: ________________________________
Fax Number: _________________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:
Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: 

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp