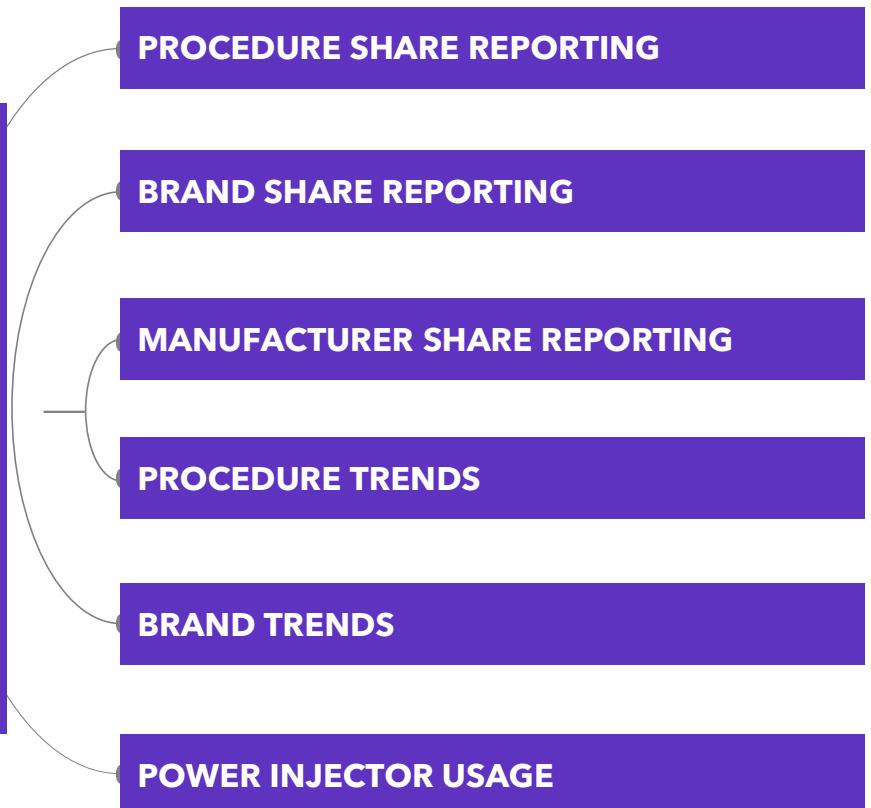
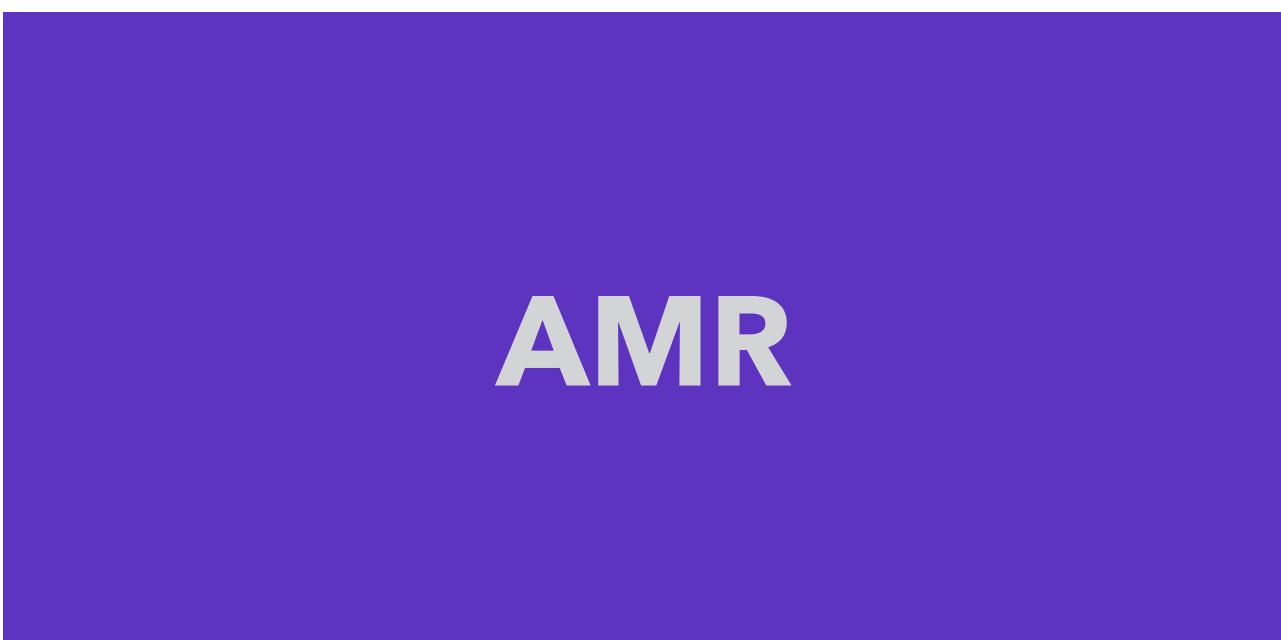




# Clarivate | Medtech AMR Diagnostic Imaging

Prepared by Clarivate Medtech Team | 2025



## AMR Methodology

AMR methodology involves recruiting hospital personnel responsible for the management of medical equipment and procedures to participate by providing procedure volumes, product usage data, and patient demographic information on an ongoing basis.

Sample/ Survey design	End users surveyed	Data collected	Analysis	Data Reports
<ul style="list-style-type: none"><li>• Characterize universe</li><li>• Review literature</li><li>• Identify key respondents</li><li>• Sample stratification</li><li>• Design survey</li><li>• Program survey</li></ul>	<ul style="list-style-type: none"><li>• Imaging Lab Technicians</li><li>• Nurses</li><li>• Interventional Cardiologists</li><li>• Interventional Radiologists</li><li>• Radio pharmacists</li><li>• Radiologists</li></ul>	<ul style="list-style-type: none"><li>• Procedure volumes</li><li>• Manufacturers/Brands</li><li>• Contrast agents</li><li>• Patient demographics</li><li>• Reason for procedure</li><li>• Referring Physicians</li><li>• Hospital size</li><li>• Performing facilities</li><li>• Power injector usage</li></ul>	<ul style="list-style-type: none"><li>• Survey data checks for consistency</li><li>• Data verified with internal &amp; external sources</li><li>• Outliers isolated &amp; verified with respondents</li></ul>	<ul style="list-style-type: none"><li>• Customized reports</li><li>• National Level data splits</li><li>• Excel Reports</li><li>• PDFs</li><li>• PADDS Reports</li></ul>

AMR provides a granular view on procedures, products, manufacturers, reasons for procedure, and referring physician for six imaging modalities

140+

Unique Procedures

100+

Unique Products

50+

MANUFACTURERS

250+

Reasons and Physicians

#### Vast coverage of 6 imaging modalities

- 40 X-ray, 16 CT, 19 MRI, 23 Cath Lab, 27 Nuclear Medicine & 25 Ultrasound procedures listed

#### Broad coverage of brands

- 25+ Iodinated contrast medium brands covered for X-ray, CT & Cath Lab, 15+ Gadolinium based products for MRI
- 50+ unique brands/isotopes reported for nuclear medicine

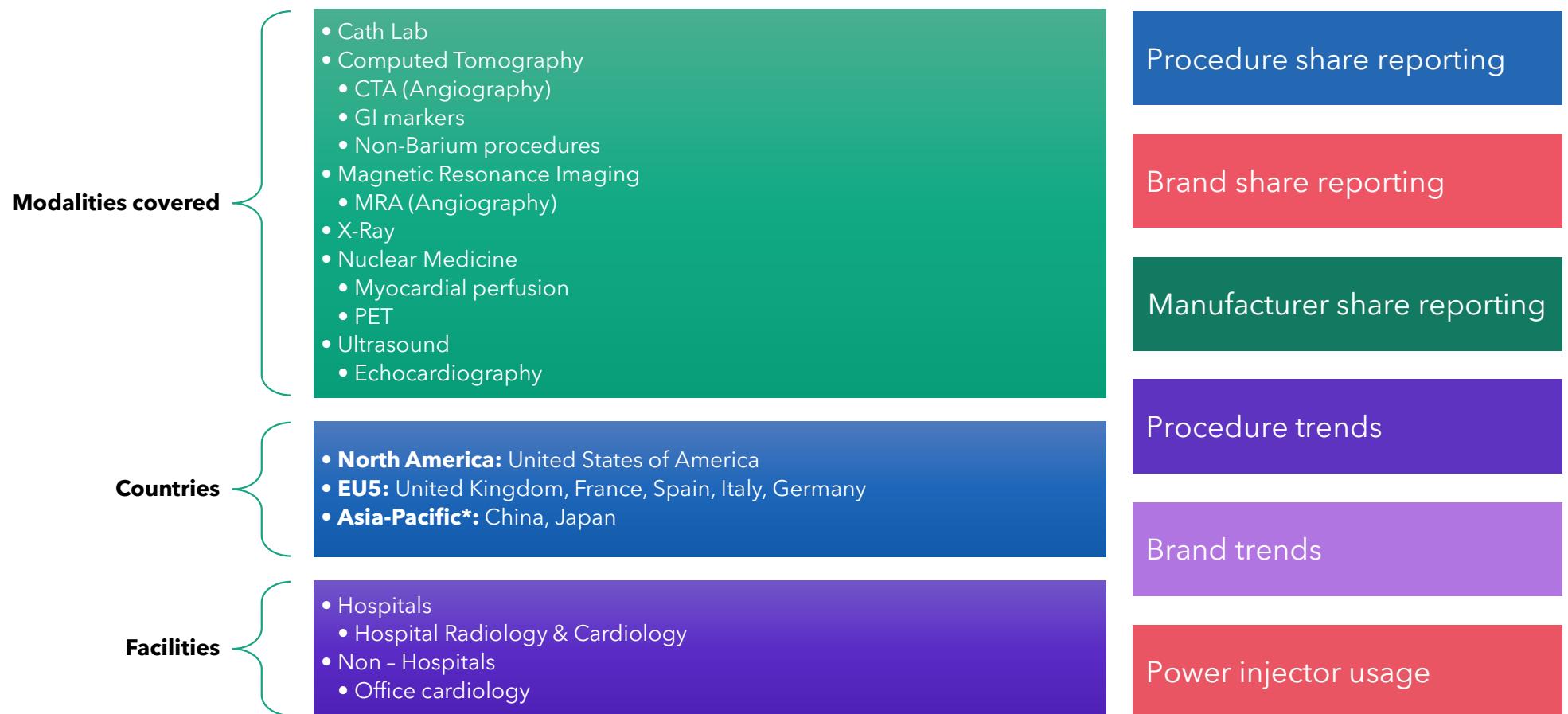
#### Full picture of all competitors in market

- 15+ Manufacturers covered for X-ray, CT & Cath Lab, and MRI
- 30+ Manufacturers reported for Nuclear Medicine

#### Robust reasoning for an imaging procedure

- More than 227 unique reasons for scans reported
- Over 42 unique referring physicians listed

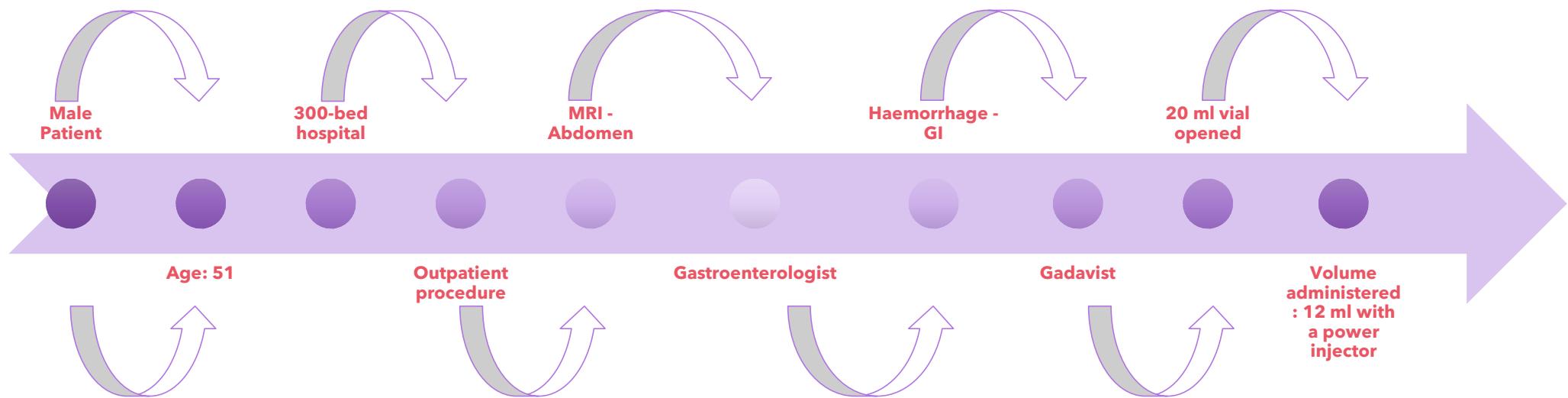
# AMR Coverage



# AMR Segmentation



# Theoretical deduction of an MRI scan of a 51-year-old male patient using AMR data



- AMR data helps establish the *prescribing patterns, usage, and patient preference patterns* such as volume opened vs the volume administered, usage of power injectors and more
- In the above illustration, a journey of a 51-year-old male patient walking into a 300-bed hospital for an outpatient MRI-abdomen procedure prescribed by a Gastroenterologist due to Hemorrhage in GI. He was injected with 12 ml of Gadavist from Bayer using a power injector after a 20 ml vial was opened.

# Patient Journey

Table 1 THE IMAGING MARKET GUIDE July-December, 2023									
PROJECTED CONTRAST PROCEDURES			Hospital Bed Size			Procedure type			
TOTAL		Non-Hospital	Hospital	<200	200-399	400+	IN	OUT	HOCM vs. LOCM
41,541		0.0%	100.0%	0.0%	100.0%	0.0%	25.0%	75.0%	0.0% 100.0%
CONTRAST PATIENT DEMOGRAPHICS									
Gender segmentation		#	%	Age (Years)					
Male		0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Female		41,541	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
PRODUCT USAGE BY PROCEDURE									
Marketer				Mammography		% involving:		TOTAL MARKET	
ISOVIEW				PI usage		Pressure Injector		Average Opened	
Bracco				20,771	50.0%	100.0%		100.0	92.0
OMNIPACQUE				20,771	50.0%	100.0%		100.0	92.0
TOTAL OMNIPACQUE				20,771	50.0%	100.0%		100.0	92.0
TOTAL				41,541	100.0%	100.0%		100.0	92.0

Procedure type

Gender

Age

Hospital bed size

Volume metrics

Power injector usage

Illustrative

## Products & Manufacturers - XR/CT/CL, MRI

### XR/CT/CL



Conray  
Cysto-Conray II  
Cystografin  
Gastrografin / Gastrografine  
Iomeron  
Iopamiro / Iopamiron  
Isovist  
Isovue  
Isovue-m  
Micropaque  
Niopam  
Omnipaque / Accupaque  
Optiject  
Optiray  
Peritраст  
Plenigraf  
Radioselectan  
Solutrust  
Telebrix  
Telebrix Gastro

### XR/CT/CL & MRI



Ultravist  
Unilux  
Urografin  
Visipaque  
Xenetix

### **MRI**

Artirem  
Claricyclic  
Clariscan  
Cyclolux  
Dotagraf  
Dotarem  
Dotavision  
Elucirem  
Eovist/Primovist  
Gadavist/Gadovist  
Multihance  
Omniscan  
Pioxoscan  
Prohance  
Vueway

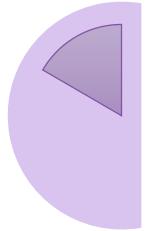
### Manufacturers



Bayer HealthCare LLC  
BE-Imaging GmbH  
Bracco  
Dr. Franz Köhler Chemie GmbH  
GE Healthcare  
Guerbet  
Jenapharm GmbH & Co. KG  
Juste Farma  
ROVI SA  
SANOCHMIA Pharmazeutika GmbH

## Products & Manufacturers -Nuclear Medicine - Myocardial perfusion - PET

### NM Brands



AdreView  
AN-MDP, Osteolite  
AN-Sulfur Colloid  
Axumin  
Cardiogen-82  
Cardiolite/Miraluma  
Ceretec  
Cerianna  
Choletec  
Choline C 11  
CIS Pyro, Pyrolite  
DaTscan  
Detectnet  
Drax Exametazime  
F18-NaF  
FDG F 18  
Gallium Citrate Ga 67  
Illuccix  
Indium In 111 DTPA  
Indium In 111 Oxyquinoline  
Ioflupane I 123]  
Jeanatope  
Locametz

### NM Brands



Megatope  
Myoview  
Netspot  
OctreoScan  
Pylarify  
RUBY-FILL  
SIR-Spheres Y-90 resin microspheres  
Sodium Iodide I 123  
Sodium Iodide I 131  
TechneScan HDP  
TechneScan MDP  
TechneScan PYP  
TechneScan MAA  
TechneScan MAG3  
Technelite  
Thallous Chloride Tl 201  
Ultratag RBC  
Ultra-Techneknow V4  
Vizamyl  
Xeneisol Xe 133  
Xenon Xe 133  
Xofigo  
Yttrium 90

### Manufacturers



Advanced Accelerator Applications (Novartis Company)  
Bayer HealthCare LLC  
Blue Earth Diagnostics (A Bracco Company)  
Boston Scientific  
Bracco  
Cardinal Health  
Curium  
GE Healthcare  
International Isotopes, Inc.  
IsoRx Inc.  
Iso-Tex Diagnostics, Inc.  
Jubilant Pharma  
Lantheus  
Life Molecular Imaging Ltd.  
Mayo Clinic  
Sirtex SIR-Spheres Pty Ltd.  
Sun RadioPharma (Pharmalucence)  
Telix Pharmaceuticals Limited

## Use case - Procedure trends - Q3\_2023\_US - MRI - Hospital market

Procedure/year	Q1_2022	Q2_2022	Q3_2023	Q4_2022	Q1_2023	Q2_2023	Q3_2023	Q4_2023
MRI - Brain/Brain Stem	43,503	47,147	47,330	46,557	46,587	45,613	44,101	40,279
MRI - Spinal Canal & Contents	37,251	39,990	40,576	42,589	43,173	43,159	43,127	38,255
MRI - Upper Extremities, Joint	27,724	27,337	26,769	26,809	27,626	27,475	27,307	23,434
MRI - Lower Extremities, Joint	23,588	23,848	24,408	23,407	23,942	23,860	23,846	22,159
MRI - Abdomen (Complete)	21,247	22,619	24,309	22,859	23,583	23,510	23,285	18,434
MRI - Face/Orbit/Neck	14,013	14,438	14,370	14,798	14,849	14,595	14,374	14,302
MRI - Breast	11,570	10,784	11,573	10,062	10,236	10,080	10,084	7,221

## Use case- Brand & Manufacturer share trend - US-MRI-Non-Hosp

Brand/Year	Q2_2021	Q4_2021	Q2_2022	Q4_2022	Q2_2023	Q4_2023	MNF/Year	Q2_2021	Q4_2021	Q2_2022	Q4_2022	Q2_2023	Q4_2023
EOVIST	0.31%	0.23%	1.44%	1.49%	1.40%	1.41%	Bayer	576,711	490,162	515,514	504,127	517,201	527,729
GADAVIST	47.38%	51.49%	43.95%	43.14%	42.69%	39.19%	Bracco	700,701	697,826	710,763	721,950	767,566	862,298
MAGNEVIST	2.59%	0.00%	0.00%	0.00%	0.00%	0.00%	GE Healthcare	72,839	158,035	104,244	107,288	99,773	140,116
MULTIHANCE	17.35%	18.30%	18.55%	18.43%	18.73%	19.43%	Guerbet	743,729	702,975	694,427	709,615	697,475	650,092
PROHANCE	13.79%	14.50%	13.05%	12.94%	12.76%	13.03%	Various	234,544	354,755	324,663	435,625	546,232	435,313
VUEWAY	0.00%	0.00%	0.00%	0.00%	0.00%	0.52%							
CLARISCAN	1.60%	0.00%	2.05%	2.20%	2.00%	2.13%							
OMNISCAN	0.00%	0.50%	2.13%	1.85%	1.73%	1.80%							
DOTAREM	16.98%	14.48%	18.81%	19.94%	20.69%	21.26%							