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# Acronyms

<b>A</b> Mass number	<b>BSGI</b> Breast specific gamma imaging
<b>A-mode</b> Amplitude mode	<b>CAD</b> Computer aided detection/diagnosis
<b>ABC</b> Automatic brightness control	<b>CaWO<sub>4</sub></b> Calcium tungstate
<b>ABUS</b> Automated breast ultrasound	<b>CBCT</b> Cone beam computed tomography
<b>AC</b> Alternating current	<b>CBF</b> Cerebral blood flow
<b>AC</b> Acquisition correction	<b>CBV</b> Cerebral blood volume
<b>ACS (AI)</b> Assisted compressed sensing	<b>CCD</b> Charged couple device
<b>ADC</b> Analog-to-digital converter	<b>CD</b> Compact disk
<b>ADC</b> Apparent diffusion coefficient	<b>CDF</b> Cumulative distribution function
<b>AEC</b> Automatic exposure control	<b>CCFL</b> Cold cathode fluorescent lamp
<b>AERB</b> Atomic Energy Regulatory Board	<b>CdTe</b> Cadmium telluride
<b>AGC</b> Automatic gain control	<b>CE</b> Conformité Européenne (European Conformity)
<b>AGD</b> Annual glandular dose	<b>CEM</b> Contrast enhanced mammography
<b>AI</b> Artificial intelligence	<b>CEUS</b> Contrast enhanced ultrasound
<b>AIUM</b> American Institute of Ultrasound in Medicine	<b>CHES</b> Chemical shift selective spectroscopy
<b>AIP</b> Average (mean) intensity projection	<b>CISS</b> Constructive interference at steady state
<b>ALARA</b> As low as reasonably achievable	<b>CMRI</b> Cardiac magnetic resonance imaging
<b>ALARP</b> As low as reasonably practicable	<b>cMUT</b> Capacitive micromachined ultrasonic transducer
<b>ANR</b> Artefact-to-noise ratio	<b>CMOS</b> Complementary metal oxide semiconductor
<b>APD</b> Avalanche photodiode	<b>CNN</b> Convolutional neural network
<b>ARC</b> Auto calibrating reconstruction for cartesian imaging	<b>CNR</b> Contrast-to-noise ratio
<b>ARS</b> Acute radiation syndrome	<b>CNT</b> Carbon nanotube
<b>ARSAC</b> Administration of radioactive substance advisory committee	<b>COL</b> Coefficient of linearity
<b>ART</b> Algebraic reconstruction techniques	<b>CPU</b> Central processing unit
<b>ARFI</b> Acoustic radiation force impulse	<b>CPR</b> Curved planar imaging
<b>ASL</b> Arterial spin labeling	<b>CQC</b> Care quality commission
<b>a:Se</b> Amorphous selenium	<b>CR</b> Computed radiography
<b>a:Si</b> Amorphous silicon	<b>CRT</b> Cathode ray tube
<b>ASIC</b> Application specific integrated circuit	<b>CSI</b> Chemical shift imaging
<b>ASSET</b> Array coil spatial sensitivity encoding technique	<b>CsI</b> Cesium iodide
<b>AVI</b> Audio-video interleave	<b>CT</b> Computed tomography
<b>B-Mode</b> Brightness mode	<b>CTA</b> Computed tomography angiography
<b>BEIR</b> Biological effects of ionising radiation	<b>CTDI</b> Computed tomography dose index
<b>BGO</b> Bismuth germinate oxide	<b>CTDI<sub>vol</sub></b> Computed tomography dose index volume
<b>BIS</b> Bureau of Indian Standards	<b>CTDI<sub>w</sub></b> Computed tomography dose index weighted
<b>BMC</b> Bone mineral content	<b>CTLM</b> Computed tomography laser mammography
<b>BMD</b> Bone mineral density	<b>CUDA</b> Compute Unified Device Architecture
<b>BOLD</b> Blood oxygenation level dependent	<b>CWD</b> Continuous wave Doppler
<b>BPL</b> Reconstruction Bayesian penalized-likelihood reconstruction algorithm	<b>CZT</b> Cadmium zinc telluride
	<b>3D</b> 3-Dimensional
	<b>DAC</b> Digital-to-analog converter
	<b>DAP</b> Dose area product

- DAS** Data acquisition system  
**DBT** Digital breast tomosynthesis  
**DC** Direct current  
**DCE<sub>MRI</sub>** Dynamic contrast enhanced MRI  
**DDR** Direct digital radiography  
**DDREF** Dose and dose rate effectiveness factor  
**DECT** Dual energy computed tomography  
**DEL** Detectors elements  
**DESS** Dual echo at steady state  
**DEXA** Dual energy X-ray absorptiometry  
**DFoV** Display field of view  
**DICOM** Digital imaging and communication in medicine  
**DIR** Double inversion recovery  
**DITI** Digital infrared thermal imaging  
**DLP** Dose length product  
**DPA** Dual photon absorptiometry  
**DPC** PET Digital photon counting positron emission tomography  
**DQE** Detective quantum efficiency  
**DRL** Diagnostic reference level  
**DSA** Digital subtraction angiography  
**DSCE** Dynamic susceptibility weighted contrast enhanced  
**DSC** MRI Dynamic susceptibility contrast MRI  
**DSV** Diameter of spherical volume  
**DT** Digital tomosynthesis  
**DTI** Diffusion tensor imaging  
**DVD** Digital versatile disc  
**DWI** Diffusion weighted imaging  
**DXA** Dual X-ray absorptiometry  
**EAR** Excess absolute risk  
**EBCT** Electron beam computed tomography  
**ECT** Emission computed tomography  
**EDTA** Ethylenediaminetetraacetic acid  
**EEG** Electroencephalography  
**EHR** Electronic health record  
**EID** Energy integrating detectors  
**EIS/T SCAN** Electrical impedance scanning  
**eLORA** Electronic licensing of radiation applications  
**EM** radiation Electromagnetic radiation  
**EMR** Electronic medical records  
**ESF** Edge spread function  
**ETL** Echo train length  
**EPD** Electronic personal dosimeter  
**EPI** Echo planar imaging  
**ERR** Excess relative risk  
**ESD** Entrance surface dose  
**EUS** Endoscopic ultrasound  
**FA** Fractional anisotropy  
**FBP** Filtered back projection  
**FDA** Food and Drug Administration  
**FDG** Fluro deoxy glucose  
**FFDM** Full field digital mammography  
**FFD** Focus-to-film distance  
**FFT** Fast Fourier transform  
**FID** Free induction decay  
**FIESTA** Fast imaging employing steady state acquisition  
**FISP** Fast imaging with steady precession  
**FID** Free induction decay  
**FM** Frequency modulation  
**FLAIR** Fluid attenuation inversion recovery  
**FLASH** Fast low angle shot  
**fMRI** Functional MRI  
**FPM** Fixed postmitotic cells  
**FPD** Flat panel detector  
**FSE** Fast spin echo  
**FT** Fourier transform  
**FT** Fiber tractography  
**FWHM** Full width at half maximum  
**FTWM** Full width at tenth maximum  
**GAN** Generative adversarial network  
**Ga** DOTA ballium tetraazacyclododecane tetraacetic acid  
**Ga** DOTATATE gallium DOTA tyr3 octreotate  
**Ga** DOTATOC gallium DOTA PHE1 tyr3 octreotide  
**Ga** DOTANOC gallium DOTA NaI3 octreotide  
**GIF** Graphics interchange format  
**GPU** Graphic processing unit  
**Gd<sub>2</sub>O<sub>2</sub>S** Tb Gadolinium oxysulphide with terbium activated  
**Gd** DTPA Gadolinium diethylene triamine penta acetic acid  
**GSD** Genetically significant dose  
**GSO** Gadolinium oxysulphide  
**GSI** Gemstone spectral imaging  
**GRAPPA** Generalised auto calibrating partially parallel acquisition  
**GRASE** Gradient and spin echo  
**GSO** Gadolinium oxyorthosilicate  
**HASTE** Half Fourier acquisition single shot turbo spine echo  
**HE** Huffman encoding  
**HDD** Hard disk drives  
**HIS** Hospital information system  
**HIFU** High intensity focused ultrasound  
**HL 7** Health level 7  
**HPC** Hybrid photon counting detectors  
**HRCT** High resolution computed tomography  
**HSC** Health and safety commission  
**HSR** High signal random access memory  
**HTC** Grid high transmission cellular grid  
**HTML** Hypertext markup language  
**HU** Heat unit  
**HU** Hounsfield unit  
**HVL** Half value layer  
**IAEA** International Atomic Energy Agency  
**ICRP** International Commission on Radiation Protection

<b>ICNIRP</b> International Commission on Non-ionising Radiation Protection	<b>MCCs</b> Micro calcification clusters
<b>II</b> Image intensifier	<b>MDCT</b> Multidetector computed tomography
<b>ILAC</b> International Laboratories Accreditation Cooperation	<b>MEDIC</b> Multi echo data image combination
<b>IP</b> Imaging plate	<b>MGD</b> Mean glandular dose
<b>IP Address</b> Internet protocol address	<b>MHU</b> Mega heat unit
<b>IR</b> Iterative reconstruction	<b>MI</b> Mechanical index
<b>IR</b> Inversion recovery	<b>MIBG</b> Meta iodo benzyl guanidine
<b>IR</b> Interventional radiology	<b>MIP</b> Maximum intensity projection
<b>IRMER</b> Ionising radiation medical exposure regulations	<b>MIRD</b> Medical internal radiation dose
<b>iPAT</b> Integrated parallel acquisition technique	<b>MinIP</b> Minimum intensity projection
<b>IQ</b> Intelligence quotient	<b>Mo</b> Molybdenum
<b>ISO</b> International organisation for standardization	<b>MOTSA</b> Multiple overlapping thin slab acquisition
<b>ISP</b> Internet service provider	<b>MPB</b> Mobile protective barrier
<b>ISIS</b> Image selected <i>in vivo</i> spectroscopy	<b>MPR</b> Multiplanar reformation
<b>ISUOG</b> International Society of Ultrasound in Obstetrics and Gynaecology	<b>MPEG</b> Moving picture experts group
<b>IUPAC</b> International Union of Pure and Applied Chemistry	<b>MQSA</b> Mammography Quality Standards Act
<b>JPEG</b> Joint photographic experts group	<b>MRA</b> Magnetic resonance angiography
<b>Kerma</b> Kinetic energy released in matter	<b>MRE</b> Magnetic resonance enterography Magnetic resonance elastography
<b>kVp</b> Kilovoltage peak	<b>MRS</b> Magnetic resonance spectroscopy
<b>keV</b> Kilo electron volt	<b>MRV</b> Magnetic resonance venography
$L_{\max}$ Maximum luminescence	<b>MRI</b> Magnetic resonance imaging
<b>LAN</b> Local area network	<b>MT</b> Magnetization transfer ratio
<b>LAFoV</b> Long axial field of view	<b>MTF</b> Modulation transfer factor
<b>LAR</b> Lifetime attributable risk	<b>MTT</b> Mean transit time
<b>LBS</b> Lutetium-based scintillator	<b>MUIC</b> Medical ultrasound imaging circuits
<b>LCD</b> Liquid crystal display	<b>MVCT</b> Mega voltage computed tomography
<b>LCR</b> Low contrast resolution	<b>NAA</b> N-acetyl aspartate
<b>LD</b> Lethal dose	<b>NABH</b> National Accreditation Board for Hospitals and Healthcare Providers
<b>LDCT</b> Low-dose computed tomography	<b>NABL</b> National Accreditation Board for Testing and Calibration Laboratories
<b>LED</b> Light emitting diode	<b>NaI</b> Sodium iodide
<b>LET</b> Linear energy transfer	<b>NCRP</b> National Council on Radiation Protection
<b>LFS</b> Lutetium fine silicate	<b>NEC</b> Rate Noise equivalent count rate
<b>LOR</b> Line of response	<b>NEMA</b> Test National Electrical Manufacturers Association
<b>LSA</b> Limited specific activity	<b>NIR</b> Near infrared light
<b>LSC</b> Local safety committee	<b>NMR</b> Nuclear magnetic resonance
<b>LSF</b> Line spread function	<b>NMV</b> Net magnetisation vector
<b>LSO</b> Lutetium oxyorthosilicate	<b>NOC</b> No objection certificate
<b>LUT</b> Look-up table	<b>NPP</b> Nuclear power plant
<b>LVOT</b> Left ventricular outflow tract	<b>NSA</b> Number of signal averages
<b>LYSO</b> Lutetium yttrium oxyorthosilicate	<b>OLED</b> Organic light emitting diode
<b>M Mode</b> Motion mode	<b>OID</b> Object image distance
<b>mA</b> Milli ampere	<b>OP</b> Optical density
<b>MAGiC</b> Magnetic resonance image compilation	<b>OPG</b> Orthopantomogram
<b>MAG 3 3</b> Mercaptoacetyltriglycine	<b>OSL</b> Optical stimulated luminescence dosimeter
<b>MARS</b> Metal artifact reduction sequence	<b>OSEM</b> algorithm Ordered subset expectation maximization algorithm
<b>MAVRIC</b> Multi acquisition variable resonance imaging combination	<b>PAI</b> Photoacoustic imaging
<b>MBI</b> Molecular breast imaging	<b>PACS</b> Picture Archiving and Communication System
<b>MCA</b> Multichannel analyser	<b>PC</b> Personal computer
	<b>PCD</b> Photon counting detectors

- PD** Proton density  
**PDI** Power Doppler imaging  
**PEM** Positron emission mammography  
**PET** Positron emission tomography  
**PGSE** Pulsed gradient spin echo  
**PHA** Pulse height analyser  
**PI** Pulsality index  
**PIXEL** Picture elements  
**PMOS** Positive channel metal oxide semiconductor  
**PMT** Photo multiplier tube  
**PMRI** Pre-polarised magnetic resonance imaging  
**pMUT** Piezoelectric micromachined ultrasonic transducer  
**PNG** Portable network graphics  
**PoCUS:** Point of care ultrasound  
**PRRT** Peptide receptor radionuclide therapy  
**PRF** Pulse repetition frequency  
**PRESS** Point resolved spectroscopy  
**PROPELLER:** Periodically Rotated Overlapping Parallel Lines with Enhanced Reconstruction  
**PSF** Point spread function modelling  
**PSMA** Prostate specific membrane antigen  
**PSP** Photostimulable phosphor  
**PSSR** Pressure system safety regulations  
**pSWE** Point shear wave elastography  
**PTG** Photothermography  
**PWD** Pulse wave Doppler  
**PZT** Piezoelectric transducer (lead zirconate titanate)  
**Q:factor** Quality factor  
**QA** Quality assurance  
**QC** Quality control  
**QCT** Quantitative computed tomography  
**QUS** Quantitative ultrasound  
**RAM** Random access memory  
**RARE** Rapid acquisition with relaxation enhancement  
**RAID** Redundant Array of Independent Disks  
**Rh:Rhodium**  
**RF** Radiofrequency  
**RI** Resistivity index  
**RIS** Radiology information system  
**RLE** Run length encoding  
**ROI:** Regions of interest  
**RPL** Radio photo luminescence dosimeter  
**RPM** Reverting post-mitotic cells  
**RPM** Revolution per minute  
**RSI** Repetitive stress injury  
**RSO** Radiological safety officer  
**RVOT** Right ventricular outflow tract  
**SAR** Specific absorption rate  
**SAUE** Significant accidental or unintended exposures  
**SARGE** Steady state acquisition rewind gradient echo  
**SDCT** Spectral detector computed tomography  
**SE** Spin echo (MRI)  
     Strain elastography(USG)  
**SENSE** Sensitivity encoding  
**SEMAC** Slice encoding for metal artifact correction  
**SFM** Screen film mammography  
**SF** Scatter fraction  
**SID** Source to image receptor distance  
**SiPMs** Silicon photomultipliers  
**SMASH** Simultaneous acquisition of spatial harmonics  
**SNR** Signal-to-noise ratio  
**SOFT** Special optimized full tilt  
**SONAR** Sound navigation and ranging  
**SOD** Source-to-object distance  
**SPA** Single:photon absorptiometry  
**SPAD** Single photon avalanche diode  
**SPACE** Sampling perfection with application optimised contrast using different flip angle evolution  
**SPECT** Single photon emission computed tomography  
**SPR** Scatter to primary ratio  
**SPGR** Spoiled gradient echo  
**SSD** Shaded surface display  
**SSDECT** Single source dual energy computed tomography  
**SSFP** Steady state free precession  
**SSTR** Somatostatin receptor  
**STL** Standard tessellation language  
**STIC** Spatio:temporal image correlation  
**STIR** Short Tau Inversion Recovery  
**SUV** Standard uptake value  
**SWAN** Susceptibility weighted angiography  
**SWE** Shear wave elastography  
**SXA** Single X-ray absorptiometry  
**SyntAc** Synthetic acquisition  
**STEAM** STimulated Echo Acquisition Mode  
**TAC** Time activity curve  
**TB** PET Total body positron emission tomography  
**TCD** Trans cranial Doppler  
**TCM** Tube current modulation  
**TDI** Tissue Doppler imaging  
**Tc<sup>99m</sup>:DMSA** Technetium<sup>99m</sup> 2,3 dimercapto succinic acid  
**Tc<sup>99m</sup>:DTPA** Technetium<sup>99m</sup> diethelene triamine penta acetic acid  
**TE** Time of echo  
**TE** Transient elastography  
**TED** Total effective dose  
**TFT** Thin film transistor  
**TG** Thermography  
**TGC/DGC** Time gain compensation/depth gain compensation  
**THI** Tissue harmonic imaging  
**TI** Thermal index  
**TI** Time of inversion  
**TI** Transport index (radiation transport)  
**TOF** Time of flight  
**TLD** Thermo luminescent dosimeter

<b>TM</b> Mode time and motion mode	<b>VCAM</b> Vascular adhesion molecule
<b>TR</b> Repetition time	<b>VEGF</b> Vascular endothelial growth factor
<b>TSE</b> Turbo spin echo	<b>VENC</b> Velocity encoding
<b>TVI</b> Tissue velocity imaging	<b>VOCAL</b> Virtual organ computer aided analysis
<b>TVL</b> Tenth value layer	<b>VRMS</b> Volume root mean square homogeneity
<b>TWIST</b> Time resolved angiography with stochastic trajectories	<b>VISTA</b> Volume isotropic turbo spin echo acquisition
<b>UFoV</b> Useful field of view	<b>VRT</b> Volume rendering technique
<b>UHRCT</b> Ultra high resolution computed tomography	<b>WAN</b> Wide area network
<b>UPS</b> Uninterruptable power supply	<b>Wifi</b> Wireless fidelity
<b>USB</b> Universal serial bus	<b>WL</b> Window level
<b>US</b> Ultrasound	<b>WLAN</b> Wireless local area network
<b>USG</b> Ultrasonography	<b>WRMSD</b> Work related musculoskeletal disorder
<b>VAT</b> View angle tilting	<b>WW</b> Window width
<b>VBM</b> Voxel based morphometry	<b>Z</b> Atomic number