

Capitolo 16

MRI ACRONYMS

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MRI Acronyms	PHILIPS	GE	SIEMENS	CANON	HITACHI
Basic Sequences					
Spin Echo	SE	SE	SE	SE	SE
Turbo spin-echo	TSE	FSE	TSE	FSE	FSE
Single-Shot TSE/FSE	SS-TSE	SS-FSE	HASTE	FASE	SS-FSE
FSE/TSE with 90° Flip-Back Pulse	DRIVE	FRFSE	RESTORE	T2 PLUS FSE	Driven equilibrium FSE
Gradient Echo	Fast Field Echo (FFE)	GRE	GRE	GE	Field Echo FE
Spoiled (incoherent) Gradient Echo	T1-FFE	SPGR	FLASH	RF Spoiled SARGE, RSSG	FastFE
Coherent Gradient Echo	FFE	GRASS	FISP	Rephased SARGE	SSFP
Steady-State Free Precession (reverse-echo gradient-echo)	T2-FFE	SSFP	PSIF	Time-Reversed SARGE	SSFP
Balanced gradient-echo True FISP	Balanced FFE	FIESTA	TrueFISP	Balanced SARGE	True SSFP
True FISP/Dual Excitation (balanced dual excitation)	-	FIESTA-C	CISS	Phase Balanced SARGE, PBSG	-
Double Echo Steady State	-	MENSA	DESS	-	-
Multi Echo Data Image Combination	M-FFE	MERGE	MEDIC	mECHODual 3D	ADAGE
Ultrafast Gradient Echo	TFE	Fast GRE, Fast SPGR	TurboFLASH	RGE	Fast FE
Ultrafast Gradient Echo 3D	3D TFE	MPRAGE, BRAVO	MPRAGE	MPRAGE	3D Fast FE
T1 with white matter	FGATIR	WM Nulled	FGATIR		

suppression (for DBS)		BRAVO			
Volume Interpolated GRE	THRIVE	LAVA-XV	VIBE	TIGRE	3D Quick
Body Diffusion	DWIBS	eDWI	REVEAL	Body Vision	Body DWI
Susceptibility-Weighted Imaging	(Venous BOLD) SWIp	(SWAN)	SWI	FSBB	BSI
Arterial Spin Labeling	ASL	ASL	ASL	ASL	ASL
Dynamic MRA with k-space Manipulation	Keyhole (4D-TRAK)	TRICKS-XV	TWIST	-	
High-Resolution Bilateral Breast Imaging	BLISS	VIBRANT	VEWS	RADIANCE	TIGRE
Non-contrast MR Angio, TSE based	TRANCE	-	NATIVE-SPACE	VASC FSE	FBI, CIA
Non-contrast MR angio, TrueFISP-based	B-TRANCE	Inhance Inflow IR	NATIVE-TrueFISP	VASC ASL	Time-SLIP
Parametric Mapping	-	CartiGram	MapIT	-	
T1, T2, T2* Mapping	T1 Mapping, StarQuant	CardioMaps	MyoMaps	MOLLI (T1), T2* mapping (FFE2D mEcho)	
Metal-Implant Imaging (2D correction)	O-MAR VAT	High bandwidth FSE/MARS	WARP with VAT	mORTHO/mART+	HiMAR
Metal-Implant Imaging (3D correction)	O-MAR XD	MAVRIC SL and HyperMAVRIC SL	Advanced WARP with SEMAC		
Parametric Mapping		CartiGram (T2)	MapIt	T2 Mapping	T2* Relax Map
Automated Slice Positioning	SMART Exam	AIRx/READY brain	AutoAlign	Cardioline, SpineLine, NeuroLLn	Autopose
DL RECON		AIR Recon DL	Deep Resolve	AiCE	
4D flow – Cardiac	4D Flow	ViosWorks	4D Flow		
Fat Suppression, Spatial Saturation					
Fat saturation—chemically	SPIR	Fat Sat/Chem Sat	Fat Sat	MSOFT	SINC, H-SINC
Fat saturation—chemically with adiabatic pulse	SPAIR	ASPIR	SPAIR	SPAIR	
Water Excitation	Proset	Water Excitation	Water Excitation	PASTA	Water Excitation
Dixon Fat-Water separation for TSE	mDixon XD, mDixon TSE	FLEX (2-pt) or IDEAL (3-pt)	Dixon TSE	WFOP	FatSep

Dixon Fat-Water separation for 3D GRE	mDixon	LAVA-Flex	Dixon VIBE	WFS	FatSep RSSG
Spatial saturation	REST	SAT	Sat Region	Presat	Presat
Moving Sat Pulse	Travel REST	Walking Sat	Tracking Sat	Moving Presat	Sequential Pre Sat
Inversion Recovery	IR	IR, MPR, FastIR	IR, Turbo IR (TIR)	IR	IR
Fast IR	IR-TSE	Fast IR	TIR	IR	IR
Short Tau IR	STIR	STIR	STIR, TIRM	STIR	Fast STIR
Long Tau IR – fluid attenuated IR	FLAIR	FLAIR	Turbo Dark Fluid, TIRM	FLAIR	Fast FLAIR
Dual Inversion Recovery	Dual IR-TSE	CUBE DIR	DIR SPACE	Double IR	
True IR	Real IR		True IR	Real IR	Real IR
Hyper Echoes			Hypercho		
3D TSE with Variable Flip Angle	VISTA	CUBE	SPACE	FASE3D mVox	isoFSE
Number of Echoes in	Turbo Factor	Echo Train Length (ETL)	Turbo Factor	Echo Train Length (ETL)	Echo Factor
Echo Planar Imaging (EPI)	EPI	EPI	EPI	EPI	EPI
Number of Echoes IN EPI	EPI Factor	ETL	EPI Factor	Echo Train Length (ETL)	Echo Factor
Diffusion-Weighted Imaging	DWI	DWI	DWI	DWI	DWI
Apparent Diffusion Coefficient Map	ADC	ADC	ADC	ADC	ADC
Computed b-values	cDWI (computed DWI)	MAGiC-DWI	Computed b-values	cDWI (computed DWI)	
Diffusion Tensor Imaging	DTI (Diffusion Tensor Imaging)	DTI (Diffusion Tensor Imaging)	DTI (Diffusion Tensor Imaging), MDDW (Multi-Directional Diffusion Imaging)	DTI (Diffusion Tensor Imaging)	DTI (Diffusion Tensor Imaging)

High-resolution Diffusion Imaging	DWI with segmented EPI	PROPELLER DWI	RESOLVE	FASE DWI	RADAR DWI
Multishot Diffusion		MUSE	RESOLVE		
Reduced-FoV Imaging for Diffusion and BOLD EPI	Zoom Diffusion	FOCUS	ZOOMit EPI		
Reduced FOV Imaging for 3D FSE	Zoom Imaging	HyperCUBE	ZOOMit SPACE		
Turbo Gradient Spin Echo (Hybrid sequence)	GRASE		TurboGSE, TGSE	Hybrid EPI	
Dynamic contrastenhanced 3D with k-space re-ordering		DISCO	TWIST-VIBE (FREEZEit)		
Fat & Iron Evaluation	mDixon Quant	IDEAL-IQ	LiverLab		
MR Elastography	Elastography	MR-Touch	Elastography		
MR Angiography					
Time of flight	ToF	ToF, Inhance Inflow	ToF	ToF	ToF
Phase Contrast	Phase Contrast (PC)	Phase Contrast, Inhance Velocity	Phase Contrast (PC)	Phase Shift (PS)	Phase Contrast (PC)
Dynamic MRA with k-space Sharing	Keyhole (4D-TRAK)	TRICKS	TWIST	DRKS	TRAQ
Non-contrast MR Angio, TSE-based	TRANCE	Inhance Deltaflow	NATIVE-SPACE	FBI, CIA	
Non-contrast MR Angio, TrueFISP-based	B-TRANCE	Inhance Inflow IR	NATIVE-TrueFISP	Time-SLIP	VASC
Non-contrast MR angio, QISS			QISS	mASTAR, mUTE 4D-MRA	
Motion Correction					
Flow Compensation with Gradient Moment Nulling	Flow Comp; Flag	Flow Comp	GMR/Flow Comp	FC	GR
1D Navigators for Cardiac Imaging	Navigators	Navigators	1D PACE	Echo-Navigator	

2D Navigators for Abdominal Imaging			2D PACE	2D RMC	
3D Prospective Motion Correction for fMRI	PMC		3D PACE		
3D Retrospective Motion Correction for fMRI	MC	(BrainWave)	3D ART		
Motion Correction with Radial Blades	MultiVane	Propeller	BLADE	JET	RADAR
Prospective Motion Correction (with navigators)		PROMO			
Motion free, free breathing 3D T1 Imaging	VANE XD	LAVA Star	StarVibe	Quickstar	TIGRE NAVI
Non-cartesian Motion Free dynamic 3D T1		DISCO Star	GRASP VIBE		
Dynamic Contrast Enhanced 3D with K-space Ordering	4D Thrive	DISCO	Twist VIBE	Centric/Swirl	FatSep TRAQ
Dynamic Contrast Enhanced 3D with Compressed Sensing	CS THRIVE	HyperSense LAVA			
Soft Tissue Motion Correction			BRACE		
PARALLEL ACQUISITION TECHNIQUES					
Image-based Algorithm	SENSE, dS SENSE	ASSET	mSENSE	SPEEDER	RAPID
K-space-based Algorithm		ARC	GRAPPA		k-RAPID
Integrated Calibration		Self-Calibration (with ARC)	Auto-Calibration		k-RAPID

Separate Calibration	(Calibration for SENSE)/CLEAR	(Calibration for ASSET)	Turbo-Calibration	(Calibration for RAPID)	(Calibration for SPEEDER)
Simultaneous Multi-Slice/Multi-Band	MultiBand SENSE	HyperBand	SMS (Simultaneous Multi-Slice)	MultiBand SPEEDER	
Compressed Sensing	Compressed SENSE	HyperSense	Compressed Sensing	Compressed SPEEDER	RAPID
Spectroscopy					
Prostate Spectroscopy	(Prostate Spectroscopy)	PROSE	3D CSI	(Prostate Spectroscopy)	
Breast Spectroscopy	(Breast Spectroscopy)	BREASE	GRACE	MRS CSI-Multivoxel	Breast MRS
Patient Orientation Sequence	Plan Scan, Survey	Localizer	Localizer, Scout	Locator	Scanogram
Automated Slice Positioning	SmartExam	ReadyBrain	AutoAlign	NeuroLine, SpineLine	
Contrast Bolus Timing/Visualization	BolusTrak	Smart Prep; FluoroTriggered MRA	CARE Bolus	FLUTE	Visual Prep
Quiet scanning					
"Inaudible" 3D sequence with half radials		SILENZ	PETRA	mUTE 3D T1	
Quiet scanning with optimized gradient waveforms	ComforTone	Silent Scan	QuietX	(rounded gradient shapes)	
Quiet scanning with reduced slew rates (longer scan times)	SofTone	Acoustic Reduction Technology (ART)	Whisper sequences	Pianissimo Zen	SoftSound
Sequence Parameters					
Repetition time (in msec)	TR, TE	TR, TE	TR, TE	TR, TE	TR, TE
Inversion Time (in msec)	TI	TI	TI	TI	TI
Time Between Echoes	Echo Spacing	Echo Spacing	Echo Spacing	Echo Spacing	Inter-Echo Time (IET)
Averages	NSA	NEX	Average	NAQ	NSA
Simultaneous Excitation	Multi-slice	POMP (Phase Offset Multiplanar)	Simultaneous Excitation	QuadScan	Dual Slice

RF Pulse in Gradient Echo	Flip Angle	Flip Angle	Flip Angle	Flip Angle	Flip Angle
Scan Measurement Time	Acquisition time	Acquisition time	Acquisition time, TA	Scan Time	Acquisition time
Distance between Slices	Gap	Gap	Distance Factor (% of slice thickness)	Gap	Slice interval
Shifting Slices off center	Off-center FoV	Off-center FoV	Off-center Shift	Off-center FoV	Phase&Frequency Shift
Field of View (FoV)	FoV (mm)	FoV (cm)	FoV (mm)	FoV	FoV
Rectangular FoV	Rectangular FoV	Partial FoV (PFoV) Phase FOV	FoV Phase/Rectangular FoV	Rectangular FoV	Rectangular FoV
Bandwidth	Fat/Water shift (pixel)	Receive Bandwidth (kHz)	Bandwidth (Hz/Px)	Bandwidth	Bandwidth
Variable Bandwidth	Optimized Bandwidth	Variable Bandwidth	Optimized Bandwidth	Matched Bandwidth	Variable Bandwidth
Frequency Oversampling	Frequency oversampling	Anti-aliasing	Oversampling	Frequency Wrap Suppression	Frequency oversampling
Phase Oversampling	Fold-over Suppression	No phase Wrap	Phase Oversampling	Phase Wrap Suppression	Anti-Wrap
Segmented k-Space	Views/Segment	Views per segment	Lines/Segments	Segments	Segments
Time Delay/Block k-space	TD	Intersegment Delay	Time Delay	TD	
Half Fourier Imaging	Half scan	½ Nex; fractional NEX	Half Fourier	AFI	Half scan
Partial Echo	Partial Echo	Partial Echo, minTE	Asymmetric Echo	Matched Bandwidth	Half Echo
Gradient Moment Nulling	Flow Comp; Flag	Flow Comp	GMR/Flow Comp	GR	FC
Ramped RF Pulse	TONE	Ramped Pulse	TONE	SSP	ISCE
Magnetization Transfer Contrast	MTC	MTC	MTC; MTS	SORS-STC	MTC
Multi-slab acquisition	Multi-Chunk	MOTSA	Multi-Slab	Multi-Slab	Multi-Slab
Contrast Bolus	BolusTrak	Smart Prep;	CARE Bolus	Visual Prep	FLUTE

Timing/ Visualization		Fluoro Triggered MRA			
Prep Pulse – Chemically	SPIR	Fat sat/Chem Sat	Fat Sat	Fat Sat	MSOFT
Prep Pulse – Fat Sat Inversion	SPAIR	SPECIAL, ASPIR	SPAIR	SPAIR	STIR
Water excitation	Proset		Water Excitation	Water Excitation	PASTA
Fat-Water separation		IDEAL	DIXON	FatSep	
Prep Pulse – Spatially	REST	SAT	Presat	Pre sat	Pre sat
Moving Sat Pulse	Travel REST	Walking Sat	Travel Sat; Tracking Sat	Sequential Pre Sat	BFAST
Scan Synchronization with ECG	ECG Triggered/VCG	Cardiac Gated/Triggering	ECG Triggered	Cardiac Gated	ECG Triggered
Delay after R-Wave	Trigger Delay; TD	Trigger Delay; TD	Trigger Delay; TD	Trigger Delay; TD	Delay Time
Respiratory Gating	Trigger; PEAR	Respiratory Comp	Respiratory gated	Respiratory gated	MAR
Signal Intensity Correction	Homogeneity Correction	SCIC	Normalize	IC (Intensity Correction)	NATURAL
Multi-Channel RF Coil Sensitivity Normalization	CLEAR	PURE/SCENIC	PURE Prescan Normalize	IC (Intensity Correction)	NATURAL
Reverse Polarity Gradient Distortion- Correction	EPIC	PROGRES			
Central k-space Filling Arterial Visualization	CENTRA	Elliptic Centric	Elliptical Scanning		PEAKS

https://www.edumedag.com/wp-content/uploads/2019/05/MR-Akronymliste_Standardkurse_2019.pdf

<https://www.imaios.com/en/e-Courses/e-MRI/MRI-Sequences/Sequences-acronyms>

<https://www.mr-tip.com/serv1.php?type=cam>

GE MRI Vendor Acronym Chart