



# MRI Acronyms

## Cross-Vendor Comparisons

 [siemens-healthineers.us/mri](https://siemens-healthineers.us/mri)



	Siemens Healthineers	GE	Philips	Canon	Fujifilm
Basic Sequences					
Spin Echo	SE	SE	SE	SE	SE
Turbo Spin Echo/ Fast Spin Echo	TSE (Turbo Spin Echo)	FastSE (Fast Spin Echo)	TSE (Turbo Spin Echo)	FastSE (Fast Spin Echo)	FastSE (Fast Spin Echo)
Single-Shot TSE	HASTE	Single-Shot FSE	Single-Shot TSE	FASE	Single-Shot FSE
TSE with 90° Flip-Back Pulse	RESTORE	Fast Recovery FSE (FRFSE)	DRIVE	T2 Plus FSE	DE-FSE, DE-FIR
Hyperechoes	Hyperecho				
3D TSE with variable Flip Angle	SPACE	CUBE	VISTA	FASE3D mVox	isoFSE
Reduced-FoV Imaging for 3D TSE	ZOOMit SPACE	HyperCube			
Number of Echoes in TSE	Turbo Factor	Echo Train Length (ETL)	Turbo Factor	Echo Train Length (ETL)	Echo Factor
Gradient Echo	GRE	GRE	Fast Field Echo (FFE)	Field Echo (FE)	GE
Spoiled Gradient Echo	FLASH	SPGR	T1-FFE	T1-FFE	RF Spoiled SARGE, RSSG
Coherent Gradient Echo	FISP	GRASS	FFE	FFE	Rephased SARGE
Steady State Free Precession	PSIF	SSFP	T2-FFE	SSFP	Time-Reversed SARGE, TRSG
True FISP	TrueFISP	FIESTA, COSMIC	Balanced FFE	True SSFP	Balanced SARGE, BASG

	Siemens Healthineers	GE	Philips	Canon	Fujifilm
True FISP/Dual Excitation	CISS	FIESTA-C			Phase Balanced SARGE, PBSG
Double Echo Steady State	DESS				
Multi-Echo Data Image Combination	MEDIC	MERGE	M-FFE	mEcho & Dual 3D	ADAGE
Ultrafast Gradient Echo 2D with preparation pulse	TurboFLASH	Fast GRE, Fast SPGR	TFE	FastFE	RSSG
Ultrafast Gradient Echo 3D with preparation pulse	MPRAGE	3D FGRE, 3D Fast SPGR, BRAVO	3D TFE	3DFFE-IR/ MPRAGE	3D-GEIR
Ultrafast Gradient Echo 3D with dual echo train	MP2RAGE			MP2RAGE	
Volume-Interpolated 3D GRE	VIBE	LAVA-XL	THRIVE	3D Quick	TIGRE
Susceptibility- Weighted Sequences SWI	SWI	SWAN 2.0	SWIp	FSBB	BSI
SWI with Parallel Imaging (3D)	Wave-CAIPI SWI				
Arterial Spin Labeling	ASL	ASL	ASL	ASL	ASL

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Inversion Recovery	IR, Turbo IR (TIR)	IR, MPR, FastIR	IR-TSE	IR	IR, FIR
Short-Tau IR	TIRM, STIR	STIR	STIR	FastSTIR	FIR-STIR
Long-Tau IR	TIRM, Dark Fluid	FLAIR	FLAIR	FastFLAIR	FIR-FLAIR
Dual Inversion Recovery	DIR SPACE	CUBE DIR	Dual IR-TSE	Double IR	DIR
True IR	TIR, True IR		Real IR	Real IR	Real-IR
Echo Planar Imaging, Diffusion	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	Computed b-values	MAGiC-DWI	Computed DWI	cDWI (computed DWI)	Calculated DWI (cDWI)
Diffusion Tensor Imaging	DTI (Diffusion Tensor Imaging), MDDW (Multi-Directional Diffusion Imaging)	DTI (Diffusion Tensor Imaging)	DTI (Diffusion Tensor Imaging)	DTI (Diffusion Tensor Imaging)	DTI (Diffusion Tensor Imaging)
DTI Tractography (Fiber Tracking)	DTI Tractography	FiberTrak	FiberTrak	DTT (Diffusion Tensor Tractography)	DTI Tractography
High-resolution Diffusion Imaging	RESOLVE	MUSE PROPELLER DWI	DWI with segmented EPI	FASE DWI	RADAR DWI
Reduced-FoV Imaging for Diffusion and BOLD EPI	ZOOMit ZOOMit <sup>pro</sup>	FOCUS	Zoom Diffusion		
Turbo Gradient Spin Echo	TurboGSE, TGSE		GRASE	Hybrid EPI	

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Applications					
Body Imaging					
Free breathing, motion-free 3D T1 imaging	StarVIBE (FREEZEit)	HyperSENSE LAVA	3D VANE XD	QuickStar	TIGRE NAVI
Dynamic contrast- enhanced 3D with k-space re-ordering	TWIST-VIBE (FREEZEit)	DISCO	4D Thrive	Centric/ Swirl	FatSep-TRAQ
Dynamic contrast- enhanced 3D with compressed sensing	Compressed Sensing GRASP-VIBE	DISCO Star	CS THRIVE		
Body Diffusion	REVEAL	eDWI	DWIBS	Body Vision	(DWI)
Fat & Iron Evaluation	LiverLab	IDEAL-IQ	mDixon Quant		
MR Elastography	Elastography	MR-Touch	Elastography		
Women's Health					
High-resolution Bilateral Breast Imaging	VEWS	VIBRANT-XV	BLISS	RADIANCE	TIGRE
Men's Health					
Diffusion Weighted Imaging	RESOLVE ZOOMit PRO	PROPELLER-DWI MUSE (multiplexed sensitivity encoding) DWI FOCUS	TSE-DWI Zoom DWI		
Spectroscopy	3D CSI Spectroscopy	PROSE	Elite Prostate Spectro		
Dynamic Imaging	CS GRASP-VIBE	DISCO Star	4D FreeBreathing		
Comprehensive Prostate Imaging	SEEit				
AI supported applications	Deep Resolve Sharp Deep Resolve Gain AI Rad Companion Prostate MR	Air Recon DL PROVIEW DL			

	Siemens Healthineers	GE	Philips	Canon	Fujifilm
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	TWIST	TRICKS-XV	Keyhole (4D-TRAK)	DRKS	TRAQ
Non-contrast MR Angio, TSE-based	NATIVE-SPACE	Inhance Deltaflow	TRANCE	FBI, CIA	
Non-contrast MR Angio, TrueFISP-based	NATIVE-TrueFISP	Inhance Inflow IR	B-TRANCE	Time-SLIP	VASC
Non-contrast MR Angio, QISS	QISS				
Magnetization Transfer Contrast	MTC	MTC	MTC	SORS-STC	MTC
Ramped RF Pulse	TONE	Ramped RF	TONE	ISCE	SSP
Multi-slab acquisition	Multi-Slab	MOTSA	Multi-Chunk	Multi-Slab	Multi-Slab
Contrast Bolus Timing/Visualization	CARE Bolus	Smart Prep; Fluoro Triggered MRA	BolusTrak	Visual Prep	FLUTE
Automation	myExam Angio Assist				
Cardiac Imaging					
High-resolution, free-breathing cardiac function	Compressed Sensing Cardiac Cine				
Comprehensive Cardiac Tool	BEAT (2D/3D)				

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T1, T2, T2* Mapping	MyoMaps	CardioMaps	T1 Mapping, StarQuant	MOLLI (T1), T2* mapping (FFE2D mEcho)	
Implant imaging	High Bandwidth IR				
Free breathing on delayed enhancement	HeartFreeze PSIR				
Automation	myExam Cardio Assist Inline LVF				
MSK Imaging					
Metal-Implant Imaging (2D correction)	WARP with VAT		O-MAR VAT	VAT	
Metal-Implant Imaging (3D correction)	Advanced WARP with SEMAC	MAVRIC SL	O-MAR XD	mART EXP	
Parametric Mapping	MapIt	CartiGram (T2)		T2 Mapping	T2* Relax Map
Accelerated Metal-Implant Imaging (3D correction)	Compressed Sensing SEMAC	HyperMAVRIC SL			
Spectroscopy					
Prostate Spectroscopy	3D CSI	PROSE	(Prostate Spectroscopy)	MRS CSI-Multi Voxel	
Breast Spectroscopy	GRACE	BREASE	(Breast Spectroscopy)	MRS CSI-Multi Voxel	Breast MRS
Weighted Elliptical Excitation for CSI	WET				
Quiet Scanning					
"Inaudible" 3D sequence with half radials	PETRA	SILENZ		mUTE 3D T1 (Pianissimo Zen)	

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Quiet scanning with optimized gradient waveforms	QuietX	Silent Scan	ComforTone	(rounded gradient shapes)	
Quiet scanning with reduced slew rates (longer scan times)	Whisper sequences	Acoustic Reduction Technology (ART)	SofTone		SoftSound
Motion Correction					
Flow Compensation with Gradient Moment Nulling	GMR/Flow Comp	Flow Comp	Flow Comp; Flag	FC	GR
Motion Correction with Radial Blades	BLADE	PROPELLER 3.0	MultiVane XD	JET	RADAR
1D Navigators for Cardiac Imaging	1D PACE	Navigators	Navigators	Echo-Navigator	
2D Navigators for Abdominal Imaging	2D PACE			2D RMC	
3D Prospective Motion Correction for fMRI	3D PACE		PMC		
3D Retrospective Motion Correction for fMRI	3D ART	(BrainWave)	MC		
Elastic 3D Motion Correction in Abdomen	DynaVIBE				
Soft-Tissue Motion Correction	BRACE				
Fat Suppression, Spatial Saturation					
Fat saturation—chemically	Fat Sat	Fat Sat/Chem Sat	SPIR	MSOFT	SINC, H-SINC

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Fat saturation—chemically with adiabatic pulse	SPAIR	ASPIR	SPAIR	SPAIR	
Water Excitation	Water Excitation	Water Excitation	Proset	PASTA	Water Excitation
Dixon Fat-Water separation for TSE	Dixon TSE	IDEAL	mDixon XD, mDixon TSE	WFOP	FatSep
Dixon Fat-Water separation for 3D GRE	Dixon VIBE	LAVA-Flex	mDixon	WFS	FatSep
Spatial saturation	Sat Region	SAT	REST	Presat	Presat
Moving Sat Pulse	Tracking Sat	Walking Sat	Travel REST	Moving Presat	Sequential Pre Sat
Acceleration and Parallel Acquisition Techniques (PAT)					
PAT: Image-based Algorithm	mSENSE	ASSET	SENSE, dS SENSE	SPEEDER	RAPID
PAT: k-space-based Algorithm	GRAPPA	ARC			k-RAPID
CAIPIRINHA for 3D sequences	CAIPIRINHA				
Integrated Calibration	Integrated, Auto-Calibration	Self-Calibration (with ARC)			
Separate Calibration	Separate Calibration	(Calibration for ASSET)	(Calibration for SENSE)/CLEAR	(Calibration for SPEEDER)	(Calibration for RAPID)
Multiple datasets calibrate each other	Self-Calibration, T-PAT				
Simultaneous Multi Slice (SMS) EPI	SMS EPI	HyperBand	MultiBand SENSE	MultiBand SPEEDER	
Simultaneous Multi Slice (SMS) TSE	SMS TSE				
Compressed Sensing	Compressed Sensing	HyperSense	Compressed SENSE	Compressed SPEEDER	IP-RAPID

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AI Based Image Acceleration					
Noise Reduction	Deep Resolve Gain	Air Recon	SmartSpeed	AiCE	
Deep Neural Network	Deep Resolve Sharp	Air Recon DL	SmartSpeed		
Deep Neural Network with Resolution	Deep Resolve Sharp				
Deep Neural Network with Resolution & SMS	Deep Resolve Sharp & Boost				
AI Based Protocol Workflow					
Overall Branding of Workflow Cardiac Tool	myExam Assist	AIR Workflow*	SmartExam*	AutoLine*	AutoExam*
Brain	myExam Brain Assist	Auto- ReadyBrain*	SmartExam Brain*	NeuroLine*	
Spine	myExam Spine Assist		SmartExam Spine*	SpineLine*	
Large Joint	myExam Large Joint Assist		SmartExam Shoulder/Knee*		
Abdomen	myExam Abdomen Assist				
Whole Body	myExam Whole-Body Assist				
Breast	myExam Breast Assist		SmartExam Breast*		
Angio	myExam Angio Assist				

\*Includes AutoAlign component only.

	<b>Siemens Healthineers</b>	<b>GE</b>	<b>Philips</b>	<b>Canon</b>	<b>Fujifilm</b>
<b>Cardiac</b>	myExam Cardiac Assist			CardioLine*	
<b>Liver</b>	myExam LiverLab Assist			LiverLine*	
<b>Prostate</b>	myExam Prostate Assist			ProstateLine*	
<b>Radiation Therapy</b>	myExam RT Assist				
<b>Parallel Transmission</b>					
<b>B1 Shimming</b>	TimTX TrueForm	MultiDrive	MultiTransmit	MultiPhase Transmit	(Quartet)
<b>Platform for advanced pTX applications, e.g., with accelerated multi-dimensional RF pulses</b>	TimTX TrueShape				
<b>Scanning with Continuous Table Move</b>	<b>TimCT</b>				
<b>Fast 2D GRE Localizer</b>	TimCT FastView				
<b>Contrast-enhanced Angio, 3D Coronal</b>	TimCT Angio				
<b>Multiple Contrasts, 2D Axial</b>	TimCT Onco Tim CT Whole Body				
<b>Patient Orientation Sequence</b>	<b>Localizer, Scout</b>	<b>Localizer</b>	<b>Plan Scan</b>	<b>Locator</b>	<b>Scanogram</b>
<b>Automated Slice Positioning</b>	AutoAlign	AIR x,Ready Brain	SmartExam	NeuroLine, SpineLine	

\*Includes AutoAlign component only.

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Sequence Parameters					
Repetition Time, Echo Time (in msec)	TR, TE	TR, TE	TR, TE	TR, TE	TR, TE
Inversion Time (in msec)	TI	TI	TI	TI	TI
Inter-Echo Spacing (TSE, EPI)	Echo Spacing	Echo Spacing	Echo Spacing	ETS (Echo Train Spacing)	Inter-Echo Time (IET)
Averages	Averages	NEX	NSA	NAQ	NSA
Scan Measurement Time	Acquisition Time, TA	Acquisition Time	Scan Time	Acquisition Time	Scan Time
Field of View (FoV)	FoV [mm]	FoV [cm]	FoV [mm]	FoV	FoV [mm]
Rectangular FoV	FoV Phase, Rectangular FoV	Asymmetric FoV	Rectangular FoV	Rectangular FoV	RectFOV
Shifting Slices Off Center	Off-center Shift	Off-center FoV	Off-center FoV	Phase & Frequency Shift	Off-center FoV
Distance Between Slices	Distance Factor (% of slice thickness)	Gap	Gap	Gap	Slice Interval
Simultaneous Excitation	Simultaneous Excitation	POMP (Phase Offset Multiplanar)	Multi-Slice	QuadScan	Dual Slice
RF Excitation Pulse in Gradient Echo	Flip Angle	Flip Angle	Flip Angle	Flip Angle	Flip Angle
Bandwidth	Bandwidth [Hz/Px]	Receive Bandwidth [kHz]	Fat/Water Shift [pixel]	Bandwidth [Hz/px]	Bandwidth [kHz]
Variable Bandwidth	Optimized bandwidth	Variable Bandwidth	Optimized bandwidth	MBW (Matched Bandwidth)	Variable Bandwidth

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<b>Half Fourier Imaging</b>	Half Fourier, Phase Partial Fourier	Half NEX; fractional NEX	Half Scan	AFI	Half Scan
<b>Partial Echo</b>	Asymmetric Echo	Partial Echo	Partial Echo	Matched Bandwidth	Half Echo
<b>Frequency Oversampling</b>	Oversampling	Anti-Aliasing	Frequency Oversampling	Frequency Wrap Suppression	Frequency Oversampling
<b>Phase Oversampling</b>	Phase Oversampling	No Phase Wrap	Fold-over Suppression	Phase wrap suppression	Anti-Wrap
<b>Segmented k-Space</b>	Lines/Segments	Views per segment	Views/Segment	Segments	Segments
<b>Time Delay/Block k-Space</b>	Time Delay	Intersegment Delay	TD	TD	
<b>Scan Synchronization with ECG</b>	ECG triggered	Cardiac Gated/ Triggering	ECG Triggered/ VCG	Cardiac Gated	ECG Triggered
<b>Delay after R-Wave</b>	Trigger Delay; TD	Trigger Delay; TD	Trigger Delay; TD	Trigger Delay; TD	Delay Time
<b>Respiratory Gating</b>	Respiratory Gated	Respiratory Comp	Trigger; PEAR	Respiratory Gated	MAR
<b>Multi-channel RF coil sensitivity normalization</b>	Prescan Normalize	PURE	CLEAR		NATURAL
<b>Central k-space filling arterial visualization</b>	Central Elliptical	Elliptic Centric	CENTRA		PEAKS

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