

MS Journal Appendix for MRI methodology

Hardware	
Field strength	3 Tesla
Manufacturer	Siemens
Model	TimTrio
Coil type (e.g. head, surface)	Head
Number of coil channels	32

Acquisition sequence	
Type (e.g. FLAIR, DIR, DTI, fMRI)	MPRAGE, FLAIR
Acquisition time	MPRAGE: 4:24 min; FLAIR: 7:38 min
Orientation	HFS
Alignment (e.g. anterior commissure/posterior commissure line)	anterior to posterior commissure line
Voxel size	MPRAGE & FLAIR: 1mm isotropic
TR	MPRAGE: 1900 ms; FLAIR: 6000 ms
TE	MPRAGE: 3.03 ms; FLAIR: 388 ms
TI	MPRAGE: 900 ms; FLAIR: 2100 ms
Flip angle	MPRAGE: 9°; FLAIR: 120°
NEX	MPRAGE & FLAIR: 1
Field of view	MPRAGE & FLAIR: 256x256x176
Matrix size	MPRAGE & FLAIR: 256x256
Parallel imaging	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If used, parallel imaging method: (e.g. SENSE, GRAPPA)	
Cardiac gating	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If used, cardiac gating method: (e.g. PPU or ECG)	
Contrast enhancement	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Acquisition sequence

If used, provide name of contrast agent, dose and timing of scan post-contrast administration

Other parameters:

Image analysis methods and outputs	
Lesions	
Type (e.g. Gd-enhancing, T2-hyperintense, T1-hypointense)	
Analysis method	
Analysis software	
Output measure (e.g. count or volume [ml])	
Tissue volumes	
Type (e.g. whole brain, grey matter, white matter, spinal cord)	
Analysis method	
Analysis software	
Output measure (e.g. absolute tissue volume in ml, tissue volume as a fraction of intracranial volume, percentage change in tissue volumes)	
Tissue measures (e.g. MTR, DTI, T1-RT, T2-RT, T2*, T2', ¹H-MRS, perfusion, Na)	
Type (e.g. whole brain, grey matter, white matter, spinal cord, normal-appearing grey matter or white matter)	
Analysis method	
Analysis software	
Output measure	
Other MRI measures (e.g. functional MRI)	
Type (e.g. whole brain, grey matter, white matter, spinal cord, normal-appearing grey matter or white matter)	
Analysis method	
Analysis software	
Output measure	

Other analysis details: