

**Supplementary table 1.** MRI sequence parameters per centre for 1.5T and 3T

Abbreviations: Ax = axial, DIR = double inversion recovery, FLAIR = fluid-attenuated inversion recovery, GE = General Electric, GRE = gradient echo, NA= not applicable, PD = proton density, Sag = sagittal, SE = spin-echo, T = Tesla, TE = echo time, TR = repetition time, TSE = turbo spin-echo

Center	1.5T									3T										
	Vendor	Parameters	Head					Spinal cord			Vendor	Parameters	Head					Spinal cord		
		Sequence	3D T1	3D FLAIR	2D PD/T2	3D DIR	2D T1 +c	2D T1	2D PD/T2		Sequence	3D T1	3D FLAIR	2D PD/T2	3D DIR	2D T1 +c	2D T1	2D PD/T2		
		Type	GRE	TSE	TSE	TSE	SE	SE	TSE		Scantype	GRE	TSE	TSE	TSE	SE	SE	TSE		
		Slice orientation	Sag	Sag	Ax	Sag	Ax	Sag	Sag		Slice orientation	Sag	Sag	Ax	Sag	Ax	Sag	Sag		
VU University Medical Center Amsterdam	GE Signa HDxt	Measured voxel size (mm)	1.0x1.0x1.0	1.4x1.4x1.2	0.65x1.0x3.0	1.4x1.4x1.2	0.65x1.0x3.0	0.9x1.5x3.0	0.9x1.5x3.0		GE Discovery MR750	Measured voxel size (mm)	1.0x1.0x1.0	1.1x1.1x1.2	0.65x1.0x3.0	1.1x1.1x1.2	0.78x1.0x3.0	0.93x1.5x3.0	0.93x1.5x3.0	
		TR (ms)	12.4	6500	4000	6500	480	450	2400			TR (ms)	8.2	8000	9415	8000	660	589	3598/3400	
		TE (ms)	5.2	115	20/102	111	9	14	15/98			TE (ms)	3.2	130	20/112	125	9	8.7	9.6/80	
		Flip angle (degrees)	12									Flip angle (degrees)	12							
		Turbo factor		191	10	191		10				Turbo factor		230	24	230				21
		Inversion times (ms)	450	1994		1694/2692						Inversion times (ms)	450	2340		1450/3148				
University Hospital Basel	Siemens Avanto	Measured voxel size (mm)	1.0x1.0x1.0	1.0x1.0x1.0	1.0x1.0x3.0	1.33x1.33x1.5	1.0x1.0x3.0	0.67x0.84x3.0	0.67x0.84x3.0		Siemens Verio	Measured voxel size (mm)	1.0x1.0x1.0	1.0x1.0x1.0	1.0x1.0x3.0	1.33x1.33x1.5	1.0x1.0x3.0	0.67x0.84x3.0	0.67x0.84x3.0	
		TR (ms)	2700	6000	3980	7500	552	400	2500/4440			TR (ms)	1570	5000	3570	7400	650	500	2500/3450	
		TE (ms)	3.37	352	9.3/112	307	17	12	9.5/102			TE (ms)	2.67	402	9.3/93	324	8.4	10	8.1/102	
		Flip angle (degrees)	8									Flip angle (degrees)	9							
		Turbo factor		141	7	256		6/25				Turbo factor		141	7	256				6/21
		Inversion times (ms)	950	2200		450/3000						Inversion times (ms)	900	1800		450/3000				
St. Josef Hospital Bochum	Siemens Avanto	Measured voxel size (mm)	1.1x1.1x1.0	1.0x1.0x1.0	0.45x0.45x3.0	1.0x1.0x1.5	0.5x0.5x3.0	0.8x0.8x3.0	1.0x1.0x3.0		Philips Achieva	Measured voxel size (mm)	1.1x1.1x1.0	1.0x1.3x1.0	1.0x1.0x3.0	1.0x1.0x1.2	1.0x1.0x3.0	0.48x0.48x3.0	0.48x0.48x3.0	
		TR (ms)	10	4800	4720	7500	450	550	2800			TR (ms)	10	5000	3000	5500	635	462	3696	
		TE (ms)	4.6	291	9.9/89	308	8.7	11	22			TE (ms)	4.2	354	118	328	17	8	120	
		Flip angle (degrees)	8									Flip angle (degrees)	15							
		Turbo factor		204	10	226		12				Turbo factor		182	8	173				34
		Inversion times (ms)	1000	1650		450/3000						Inversion times (ms)	1100	1900		440/2550				
UCL Institute of Neurology London	Siemens Avanto	Measured voxel size (mm)	1.0x1.0x1.0	1.0x1.0x1.0	0.57x0.57x3.0	NA	0.78x0.78x3.0	0.94x0.94x3.3	0.94x0.94x3.3		Philips Achieva	Measured voxel size (mm)	1.0x1.0x1.0	1.2x1.2x1.2	1.0x1.3x3.0	1.2x1.2x1.2	1.0x1.3x3.0	1.0x1.8x3.0	1.0x1.8x3.0	
		TR (ms)	1900	6500	7090	NA	984	476	3030			TR (ms)	6.9	8000	3500	5800	625	600	3500/3900	
		TE (ms)	3.37	202	12/81	NA	8.4	8.6	11/101			TE (ms)	3.1	388	8/19	250	10	8	22/78	
		Flip angle (degrees)	15									Flip angle (degrees)	8							

