

Supplement 1.

Imaging protocol, WB-MRI.

WB-MRI	1.5 T (Siemens Area)			
Sequence	SSFSE/HASTE Fat ST		DIXON	T2/EPI b50_400_800
	T2		T1	DWI
Orientation	Axial		Axial	Axial
TR/TE (ms)	1000/82		165/	5600/60
Field of view (mm)	400x275		416/315	420/338
Matris	256/123		256/134	192/156
Slice thickness/fsk (mm)	5/1		5/1	5/1
NEX	1		1	4
Number of slice partitions	208		216	210
Pixel bandwidth	500		475	1735
Coverage	Neck-below knees		Neck- below knees	Neck-below knees
Scan time				

Imaging protocol details

The imaging protocol consist of DIXON T1-weighted, single-shot TIRM (turbo inversion recovery magnitude), and DWI-EPI (diffusion weighted echo planar imaging) with three different b-values (50, 400 and 800), all in a transversal plane. For the brain, a transversal T1-weighted MPRAGE (Magnetization Prepared Rapid Gradient Echo) is used. For the women, we add a breast protocol before and after intravenous contrast agent (Gadolinium), which is also used for the brain MRI. Male patients do not receive any contrast agent.