

Feasibility of whole-body MRI for cancer screening in children and young people with Ataxia Telangiectasia: a mixed methods cross-sectional study

Supplementary file 1 Whole-body MRI protocol

WB-MRI protocol parameters	T ₂ -weighted Brain	3DT ₁ -weighted Brain	STIR Whole-body	DWI brain	DWIBS Whole-body	T ₁ -weighted mDixon	T ₁ -weighted Spine
TR	3000	6.5	4989	5228	8020	4.1	489
TE	90	3.1	75	61	56	(1)1.34 / (2) 2.6	8
Flip angle	90	8	N/A	90	N/A	15	90
b-factors (b-values averages)	N/A	N/A	N/A	b-50 (1) b-900 (3)	b-50 (2) b-900 (5)	N/A	N/A
Slice thickness (mm)	4	1	5	2.5	5	4	3.5
Slices	30	160	35	50	40	125	12
FOV (mm)	182(RL)x 230(AP)x 149(FH)	160(RL)x 224(AP)x 224(FH)	450(RL)x 209(AP)x 450(FH)	484(RL)x 348(AP)x 174(FH)	484(RL)x 348(AP)x 239(FH)	550(RL)x 299(AP)x 250(FH)	53(RL)x 180(AP)x 360(FH)
Acquisition voxel size (mm)	0.55x0.65x 4	1x1x1	1.5x1.5x5	2.5x2.5x2. 5	3x3x5	1.5x1.5x4	0.85x1.13x3.5
Sense/ Compressed sensing	N/A	2	2.5 (RL/FH)	2.5 (AP)	2 (AP)	2 (AP) 1 (FH)	1.5 (FH)
NSA	1	1	1	2	1	1	1
Fat saturation technique	N/A	N/A	N/A	SPIR	SPIR	N/A	N/A
Acquisition mode	Cartesian	Cartesian	Multivane	Cartesian	Cartesian	Cartesian	Cartesian

RL=Right-left; AP= Anterior-posterior; FH= Foot-head