

On-line Table: Previously published measurements for CSF, spinal cord, disc, and bone marrow with conventional relaxometry techniques

Spine Element	MRI Field Strength (T)	Imaging Method	Sample (No.)	T1 (ms)	T2 (ms)	PD (pu)	Reference
CSF	1.5	QRAPMASTER	7	4110	1500	105	Krauss et al ¹⁹
	1.5	QRAPMASTER	10	3940	1910	1029 ^a	Warntjes et al ¹
	3	IR-EPI	3	4391			Shin et al ²⁰
		IR LL-EPI SS	3	4522			
	1.5	IR-EPI	10	3836			Lu et al ⁵
	3			3817			
	3	IR-FSE	10	4163			Chen et al ⁴³
Spinal cord	NA	VFA SPGR	3 (females) 5 (males)	6873 4184			Liberman et al ²¹
	3	IR	6	863/900 (WM) 972 (GM)			Smith et al ²²
		GRE		830/853 (WM) 994 (GM)			
		16-echo SE			73/72 (WM) 76 (GM)		
	7	MP2RAGE (7T)	10	1189 (WM) 1313 (GM)			Massire et al ²³
Disc	3	8-echo SE	79 145 123 3		72 (grade I) ^b 59 (grade II) 52 (grade III) 37 (grade IV)		Chen et al ⁴⁴
Bone marrow	NA	32-echo CPMG	1	106			Wang et al ³⁵
	3	SSFSE-IR	6	586			de Bazelaire et al ³
	3	SE	10		40		Pai et al ³⁶
		FSE (ETL 8)	10		160		

Note:—IR indicates inversion recovery; LL, Look-Locker; SS, steady state; VFA, variable flip angle; SPGR, spoiled gradient-recalled; SE, spin-echo; GRE, gradient recalled-echo; NA, not applicable; CPMG, Carr-Purcell Meiboom-Gill; ETL, echo-train length; SSFSE, single-shot fast spin-echo.

^a Considering that “the PD of pure water at 37°C corresponds to 1000” (Warntjes et al¹).

^b Disc grading according to the Pfirrmann score.