

Supplementary Table 1. Acquisition parameters

	T1 weighted coronal	PD FS coronal	PD FS sagittal	PD FS axial	Sagittal T2* mapping
TR (msec)	390	3180	4250	3490	1220
TE (msec)	12	35	36	35	4.36, 11.9, 19.44, 26.98, 34.52
NEX	1	1	1	1	1
Flip angle	150	150	180	129	60
Slice thickness (mm)	3	3	3	3	3
Matrix	324 × 432	300 × 400	300 × 400	288 × 384	384 × 384
FOV (mm)	160	160	160	160	160

FS, fat suppressed; NEX, number of excitations; PD, proton density; TE, echo time; TR, repetition time; FOV, field of view.

Supplementary Table 2. Trochlear cartilage receiver operating characteristic analysis

Quadrant	AUC	se	P	Asymptomatic 95% CI	
				Lower bound	Upper bound
T1	0.644	0.064	0.024	0.524	0.752
T2	0.554	0.067	0.425	0.422	0.686
T3	0.592	0.067	0.169	0.461	0.722
T4	0.610	0.066	0.097	0.480	0.739
T5	0.585	0.067	0.207	0.453	0.717
T6	0.495	0.068	0.935	0.361	0.628
T7	0.580	0.069	0.245	0.445	0.714
T8	0.586	0.069	0.215	0.450	0.722
T9	0.616	0.067	0.081	0.485	0.747
T10	0.451	0.068	0.469	0.318	0.584
T11	0.532	0.068	0.635	0.399	0.665
T12	0.551	0.068	0.457	0.417	0.684

The value written in bold are statistically significant. AUC, area under the curve; CI, confidence interval; se, standard error.

Supplementary Table 3. Patellar cartilage receiver operating characteristic analysis

Quadrant	AUC	se	P	Asymptomatic 95% CI	
				Lower bound	Upper bound
P1	0.731	0.060	<0.001	0.615	0.827
P2	0.632	0.065	0.044	0.511	0.741
P3	0.521	0.068	0.756	0.387	0.655
P4	0.547	0.069	0.494	0.413	0.681
P5	0.535	0.068	0.606	0.402	0.669
P6	0.574	0.068	0.272	0.442	0.707
P7	0.481	0.068	0.778	0.348	0.614
P8	0.519	0.068	0.783	0.386	0.651
P9	0.447	0.067	0.428	0.314	0.579
P10	0.565	0.067	0.336	0.433	0.697
P11	0.578	0.067	0.239	0.448	0.709
P12	0.480	0.068	0.771	0.347	0.613

The values written in bold are statistically significant. AUC, area under the curve; CI: confidence interval; se, standard error.

Supplementary Table 4. Cut-off T2* relaxation values (milliseconds) determined for the T1, P1, and P2 quadrants

Quadrants	Cut-off	AUC	se	P	Asymptomatic 95% CI		Sensitivity	Specificity
					Lower bound	Upper bound		
T1	>21.7	0.644	0.064	0.024	0.524	0.752	35.90	91.43
P1	>24.1	0.731	0.060	<0.001	0.615	0.827	79.49	62.86
P2	>24.3	0.632	0.065	0.044	0.511	0.741	64.10	62.86

AUC, area under the curve; CI, confidence interval; se, standard error.