Table 2. Intraobserver variation (observer I) in US measurements of articular cartilage thickness

in 17 healthy children

Observer I

Systematic Variation ¹ (Day I and Day II)	Random Variation ²			Total variation
Mean difference ³ in mm	р	SD* _{"within child} " in mm	SD° _{"within joint} " in mm	SD (CV ⁴) in mm
0.01	0.916	0.07	0.20	0.21 (5.9%)
0.03	0.623	0.16	0.14	0.21 (19.9%)
0.08	0.707	0.58	0.35	0.68 (34.1%)
0.04	0.294	0.02	0.15	0.15 (12.9%)
-0.05	0.316	0.12	0.12	0.17 (25.8%)
	(Day I and Day II) Mean difference ³ in mm 0.01 0.03 0.08 0.04	(Day I and Day II) Mean difference ³ in mm p 0.01 0.916 0.03 0.623 0.08 0.707 0.04 0.294	(Day I and Day II) p SD^* "within child" in mm Mean difference ³ in mm p SD^* "within child" in mm 0.01 0.916 0.07 0.03 0.623 0.16 0.08 0.707 0.58 0.04 0.294 0.02	(Day I and Day II) p SD^* "within child" in mm SD° "within joint" in mm 0.01 0.916 0.07 0.20 0.03 0.623 0.16 0.14 0.08 0.707 0.58 0.35 0.04 0.294 0.02 0.15

1: Two weeks between the first a second measurement of cartilage thickness. ²Random variation (e.g. biological variation within children) ³Difference between cartilage thickness measurement day I and day II in mm. *SD=Standard deviation within child, refers to the variation in SD in mm between the right and left extremity °SD=Standard deviation within joint, refers to the SD in mm between observers within the same side extremity ⁴ Coefficient of variation is calculated from the relative differences of measurements (CV=SD/mean x 100)