

Table 3. Intraobserver variation (observer II) in US measurements of articular cartilage thickness in 17 healthy children

Observer II

	Systematic Variation ¹ (Day I and Day II)		Random Variation ²		Total variation
	Mean difference ³ in mm	<i>p</i>	SD* ^{“within child”} in mm	SD [°] ^{“within joint”} in mm	SD (CV ⁴) in mm
Knee	-0.21	0.053	0.23	0.24	0.34 (9.3%)
Ankle	-0.04	0.555	0.00	0.24	0.24 (20.9%)
Wrist	-0.03	0.751	0.21	0.29	0.36 (25.6%)
MCP	0.09	0.057	0.08	0.13	0.15 (11.9%)
PIP	0.05	0.297	0.09	0.13	0.16 (19.6%)

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)