

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

**Observer II**

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

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