

**Supplementary Table 6.** Segment-wise effective diameter by sex after realignment to acetabular start ( $\Delta$  seg)

$\Delta$ Seg	Number		Mean $\pm$ SD (mm)		P-value	P_FDR
	Male	Female	Male	Female		
-8	0	7	NA	8.05 $\pm$ 2.08	NA <sup>a)</sup>	NA <sup>a)</sup>
-7	36	37	8.94 $\pm$ 1.89	8.40 $\pm$ 2.32	0.282	0.282
-6	42	40	8.59 $\pm$ 1.54	7.57 $\pm$ 1.52	0.003	0.003
-5	42	40	8.85 $\pm$ 1.28	7.20 $\pm$ 1.35	<0.001	<0.001
-4	42	40	8.15 $\pm$ 1.45	7.05 $\pm$ 1.32	<0.001	<0.001
-3	42	40	8.83 $\pm$ 1.77	7.27 $\pm$ 1.56	<0.001	<0.001
-2	42	40	11.17 $\pm$ 2.70	8.42 $\pm$ 1.95	<0.001	<0.001
-1	42	40	11.22 $\pm$ 2.68	8.39 $\pm$ 1.57	<0.001	<0.001
0	42	40	10.81 $\pm$ 1.88	7.94 $\pm$ 1.43	<0.001	<0.001
1	42	40	9.12 $\pm$ 1.49	7.01 $\pm$ 1.15	<0.001	<0.001
2	42	40	8.32 $\pm$ 1.29	6.59 $\pm$ 1.23	<0.001	<0.001
3	39	32	12.61 $\pm$ 3.79	9.96 $\pm$ 3.47	0.003	0.003
4	13	1	18.72 $\pm$ 5.15	10.28	NA <sup>a)</sup>	NA <sup>a)</sup>

Values are presented as mean $\pm$ SD (mm) when number $\geq$ 2; single observations are shown as a single value.

Number denotes the number of models contributing data at each  $\Delta$  seg position after realignment to the acetabular start segment. P-values are from two-sided independent-samples t-tests at each  $\Delta$  seg position;

P\_FDR indicates false discovery rate-adjusted P-values.

$\Delta$  Seg, segment index relative to acetabular start segment; FDR, false discovery rate; SD, standard deviation; NA, not applicable.

<sup>a)</sup>Not tested because number <2 in either sex.