

1 RESPONSIVENESS OF INFRA-PATELLAR FAT PAD VOLUME CHANGE TO BODY WEIGHT LOSS OR GAIN –

2 DATA FROM THE OSTEOARTHRITIS INITIATIVE (OAI)

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6 **Supplement Table 2.** Longitudinal analysis within the 3 sub-strata ($\geq 20\%$, 15-20% and 10-15%) of weight gain and related
7 changes in infra-patellar fat pad morphology and subcutaneous fat content of the thigh between baseline and 2-year follow-up

	Mean \pm SD	Mean \pm SD	Mean difference	95%CI of	SRM
$\geq 20\%$ Weight Gain (n=6)	baseline	Follow-up	abs. (%)	% difference	
IPFP Volume (cm ³)	28.8 \pm 6.4	27.8 \pm 5.5	-1.0 (-3.0%)	-5.7,-0.2	-0.87
IPFP Depth (mm)	11.5 \pm 1.5	11.4 \pm 1.5	-0.2 (-1.3%)	-5.6,3.0	-0.24
IPFP Maximum slice (cm ²)	7.3 \pm 1.4	7.2 \pm 1.1	-0.1 (-0.6%)	-4.3,3.0	-0.14
Subcutaneous fat (cm ²)	43.4 \pm 18.2	53.0 \pm 14.5	9.6 (31.7%)	-1.1,64.4	0.77
15-20% Weight Gain (n=8)					
IPFP Volume (cm ³)	24.2 \pm 3.6	23.4 \pm 3.9	-0.8 (-3.0%)	-10.7,4.7	-0.27
IPFP Depth (mm)	10.7 \pm 1.0	10.9 \pm 0.9	0.2 (2.4%)	-3.3,8.1	0.29
IPFP Maximum slice (cm ²)	6.7 \pm 1.5	6.6 \pm 1.6	0.0 (-0.5%)	-6.8,5.8	-0.06
Subcutaneous fat (cm ²)	34.9 \pm 13.5	45.9 \pm 11.0	10.9 (39.2%)[†]	21.2,57.2	1.51

10-15% Weight Gain**(n=20)**

IPFP Volume (cm ³)	24.0±4.7	24.5±4.6	0.5 (2.5%)	0.0,5.0	0.45
IPFP Depth (mm)	10.5±1.3	10.8±1.0	0.2 (2.7%)	-0.1,5.5	0.42
IPFP Maximum slice (cm ²)	6.3±1.1	6.4±1.2	0.1 (1.4%)	-1.1,4.0	0.24
Subcutaneous fat (cm ²)	43.2±14.7	51.2±18.9	8.0 (19.3%)[†]	11.3,27.3	1.06

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9 Legend: The absolute differences, the percentage differences (%), 95% Confidence Intervals (CI) of the percentage differences,
10 and standardized response means (SRM) for absolute differences were calculated between baseline and 2-year follow-up.

11 [†]P<0.05 is considered to be statistically significant (baseline vs. follow-up);

12 Abbreviations: IPFP = infra-patellar fat pad; SRM = standardized response mean; 95% CI = confidence interval;