

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 **Supplemental Table 1.** Longitudinal analysis within the 3 sub-strata ($\geq 20\%$, 15-20% and 10-15%) of weight loss 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
	baseline	Follow-up	abs. (%)	% difference	
$\geq 20\%$ Weight Loss (n=8)					
IPFP Volume (cm ³)	25.2 \pm 2.9	24.5 \pm 3.4	-0.7 (-2.4%)	-6.8,2.0	-0.37
IPFP Depth (mm)	10.5 \pm 0.9	10.7 \pm 0.7	0.2 (2.4%)	-1.0,5.7	0.49
IPFP Maximum slice (cm ²)	6.6 \pm 0.9	7.0 \pm 1.3	0.5 (8.9%)	-7.8,25.6	0.37
Subcutaneous fat (cm ²)	54.5 \pm 17.4	35.6 \pm 11.1	-18.8 (-33.4%)[†]	-40.6,-26.3	-3.22
15-20% Weight Loss (n=7)					
IPFP Volume (cm ³)	23.6 \pm 2.7	23.5 \pm 2.4	-0.1 (-0.1%)	-3.9,3.7	-0.02
IPFP Depth (mm)	11.3 \pm 1.5	10.2 \pm 0.8	-1.2 (-9.6)[†]	-14.9,-4.3	-1.33
IPFP Maximum slice (cm ²)	6.2 \pm 0.9	5.8 \pm 0.8	-0.4 (-5.8%)[†]	-8.3,-3.4	-1.76
Subcutaneous fat (cm ²)	37.6 \pm 9.0	30.5 \pm 11.5	-7.1 (-20.1%)	-35.8,-4.4	-0.95

10-15% Weight Loss (n=23)

IPFP Volume (cm ³)	24.6±4.6	24.0±4.7	-0.7 (-2.8%)^{†*}	-5.3,-0.4	-0.47
IPFP Depth (mm)	10.9±1.2	10.7±1.2	-0.2 (-1.7%)	-4.0,0.7	-0.29
IPFP Maximum slice (cm ²)	6.8±1.2	6.6±1.1	-0.2 (-2.6%)^{†*}	-4.9,-0.3	-0.46
Subcutaneous fat (cm ²)	42.8±16.3	33.5±11.4	-9.3 (-18.5%)^{†*}	-25.0,12.1	-1.17

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9 Legend: The absolute differences, the percentage differences (%), 95% Confidence Intervals (CI) of the percentage differences, and
10 standardized response means (SRM) for absolute differences were calculated between baseline and 2-year follow-up. [†]P<0.05 is
11 considered to be statistically significant (baseline vs. follow-up);

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