

**Supplementary Table 5.** Association between fat mass and obesity-related transcript genotypes of rs17817449 and bone mineral density, bone loss and fracture

I. BMD <sup>a)</sup>						
	GG (N=193)	TG (N=571)	TT <sup>b)</sup> (N=415)	TG vs. TT	GG vs. TT	TG vs. GG
FN BMD (g/cm <sup>2</sup> )	0.79±0.14	0.80±0.14	0.79±0.13	0.015 (<-0.001, 0.029)	<0.001 (-0.020, 0.019)	-0.015 (-0.034, 0.004)
LS BMD (g/cm <sup>2</sup> )	1.04±0.20	1.05±0.20	1.05±0.19	-0.005 (-0.028, 0.018)	-0.007 (-0.039, 0.024)	-0.002 (-0.032, 0.028)
II. Rate of BMD change <sup>a)</sup>						
	GG	TG	TT <sup>b)</sup>	TG vs. TT	GG vs. TT	TG vs. GG
FN BMD (g/cm <sup>2</sup> /year)	-0.004 (0.003)	-0.004 (0.003)	-0.004 (3.69)	<0.001 (-0.001, 0.001)	<-0.001 (-0.001, 0.001)	<-0.001 (-0.001, 0.001)
LS BMD (g/cm <sup>2</sup> /year)	0.002 (0.007)	0.002 (0.007)	0.002 (0.006)	<0.001 (-0.001, 0.001)	<0.001 (-0.001, 0.002)	<0.001 (-0.001, 0.002)
III. Fractures						
	Variables	Number <sup>c)</sup>	Age adjusted		Multivariable adjusted <sup>d)</sup>	
			HR (95% CI)	P-value	HR (95% CI)	P-value
Any fracture	GG (N=196)	91 (46.4)	0.99 (0.77–1.27)	0.92	0.99 (0.77–1.28)	0.96
	TG (N=581)	272 (46.8)	1.02 (0.85–1.23)	0.80	1.07 (0.89–1.28)	0.49
	TT (N=424)	196 (46.2)	Reference	-	Reference	-
Hip fracture	GG (N=196)	29 (14.8)	1.59 (0.95–2.45)	0.08	1.59 (0.99–2.55)	0.05
	TG (N=581)	56 (9.6)	0.92 (0.62–1.37)	0.69	0.98 (0.66–1.47)	0.93
	TT (N=424)	43 (10.1)	Reference	-	Reference	-

<sup>a)</sup>Values for BMD and rate of bone change are presented as mean ± standard deviation. The association between fat mass and obesity-related transcript genotype and bone mineral density (BMD) and bone loss are presented as mean difference (95% confidence interval [CI]) derived from a multivariable linear regression (I. BMD) or mixed-effects regression (II. bone loss), adjusted for age and body mass index (BMI).

<sup>b)</sup>Reference genotype: TT.

<sup>c)</sup>The data is presented as N (%) and indicates the number of patients with a fracture.

<sup>d)</sup>Adjusted for age, femoral neck BMD and BMI.

FN, femoral neck; LS, lumbar spine; HR, hazard ratio.