

Supplementary Table 4. Association between fat mass and obesity-related transcript genotypes of rs1121980 and bone mineral density, bone loss and fracture

I. BMD ^{a)}						
	AA (N=214)	GA (N=535)	GG ^{b)} (N=374)	GA vs. GG	AA vs. GG	GA vs. AA
FN BMD (g/cm ²)	0.79±0.14	0.80±0.14	0.79±0.13	0.012 (-0.003, 0.027)	0.006 (-0.013, 0.026)	-0.005 (-0.024, 0.013)
LS BMD (g/cm ²)	1.05±0.22	1.04±0.19	1.06±0.19	-0.015 (-0.040, 0.010)	<0.001 (-0.031, 0.032)	0.015 (-0.014, 0.045)
II. Rate of BMD change ^{a)}						
	AA	GA	GG ^{b)}	GA vs. GG	AA vs. GG	GA vs. AA
FN BMD (g/cm ² /year)	-0.004±0.003	-0.004±0.004	-0.004±0.004	<-0.001 (-0.001, 0.001)	<-0.001 (-0.002, 0.001)	<-0.001 (-0.001, 0.001)
LS BMD (g/cm ² /year)	0.002±0.007	0.002±0.007	0.002±0.006	<0.001 (-0.001, 0.002)	<0.001 (-0.001, 0.002)	<-0.001 (-0.002, 0.002)
III. Fractures						
	Variables	Number ^{c)}	Age adjusted		Multivariable adjusted ^{d)}	
			HR (95% CI)	P-value	HR (95% CI)	P-value
Any fracture	AA (N=217)	102 (47.0)	0.97 (0.76–1.24)	0.82	1.00 (0.78–1.27)	0.97
	GA (N=545)	262 (48.1)	1.03 (0.85–1.24)	0.78	1.06 (0.87–1.28)	0.58
	GG (N=381)	181 (47.5)	Reference	-	Reference	-
Hip fracture	AA (N=217)	35 (16.1)	1.68 (1.06–2.65)	0.02	1.76 (1.11–2.79)	0.01
	GA (N=545)	57 (10.5)	1.03 (0.68–1.56)	0.89	1.03 (0.68–1.56)	0.88
	GG (N=381)	38 (10.0)	Reference	-	Reference	-

$P < 0.05$ is statically significant. Bold values indicate statistical significance.

^{a)}Values for BMD and rate of bone change are presented as mean \pm 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).

^{b)}Reference genotype: GG.

^{c)}The data is presented as N (%) and indicates the number of patients with a fracture.

^{d)}Adjusted for age, femoral neck BMD and BMI.

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