

Supplementary Table S6. General clinical data, serum BTMs and biochemical indices of participants with different BMDs

Variable	Normal (<i>n</i> = 6)	Osteopenia (<i>n</i> = 20)	Osteoporosis (<i>n</i> = 29)	Severe osteoporosis (<i>n</i> = 18)	<i>F</i>	<i>P</i>
Age (years)	59.2 ± 6.3 ^d	61.4 ± 7.8 ^d	65.9 ± 9.3	68.7 ± 5.5 ^{ab}	3.930	0.012
BMI (g/cm ²)	24.4 ± 2.7	23.7 ± 2.6	22.0 ± 3.2	22.7 ± 3.7	1.734	0.168
Age at menopause (years)	53.5 ± 2.9	51.5 ± 3.7	51.0 ± 3.3	52.6 ± 4.3	1.247	0.299
Menopausal duration (years)	5.7 ± 4.5 ^{cd}	10.0 ± 7.0 ^{cd}	14.9 ± 9.0 ^{ab}	16.2 ± 6.5 ^{ab}	4.555	0.006
LS 1–4 BMD (T-score)	0.0 ± 0.9 ^{bcd}	−1.3 ± 0.7 ^{acd}	−2.6 ± 0.9 ^{abd}	−3.5 ± 1.3 ^{abc}	28.679	< 0.001
TH BMD (T-score)	−0.1 ± 0.6 ^{bcd}	−1.4 ± 0.6 ^{acd}	−2.3 ± 0.9 ^{ab}	−2.7 ± 0.6 ^{ab}	22.150	< 0.001
FN BMD (T-score)	−0.6 ± 0.6 ^{bcd}	−1.8 ± 0.5 ^{acd}	−2.7 ± 0.7 ^{ab}	−2.9 ± 0.6 ^{ab}	31.475	< 0.001
LS 1–4 BMD (g/cm ²)	1.110 ± 0.111 ^{bcd}	0.941 ± 0.078 ^{acd}	0.800 ± 0.099 ^{abd}	0.692 ± 0.149 ^{abc}	30.002	< 0.001
TH BMD (g/cm ²)	0.962 ± 0.071 ^{bcd}	0.788 ± 0.082 ^{acd}	0.684 ± 0.111 ^{abd}	0.627 ± 0.084 ^{abc}	23.506	< 0.001
FN BMD (g/cm ²)	0.864 ± 0.066 ^{bcd}	0.713 ± 0.055 ^{acd}	0.616 ± 0.077 ^{ab}	0.578 ± 0.076 ^{ab}	32.011	< 0.001
25(OH)D (ng/mL)	26.7 ± 9.8	23.6 ± 6.4	23.3 ± 6.6	24.3 ± 10.6	0.317	0.813
N-MID (ng/mL)	20.46 ± 6.59	16.79 ± 6.25 ^c	21.43 ± 8.69 ^{bd}	15.37 ± 8.15 ^c	2.772	0.048
P1NP (ng/mL)	57.14 ± 44.01	57.79 ± 29.50	55.48 ± 27.90	49.05 ± 30.41	0.296	0.828
β-CTX (ng/mL)	0.512 ± 0.234	0.526 ± 0.286	0.605 ± 0.518	0.637 ± 0.475	0.283	0.838
UA (μmol/L)	304.0 ± 79.2	300.2 ± 93.4	305.7 ± 73.4	296.3 ± 90.2	0.050	0.985
ALP (U/L)	68.5 ± 17.6 ^d	75.6 ± 31.3 ^d	74.4 ± 21.6 ^d	108.2 ± 36.3 ^{abc}	6.588	0.001
Calcium (mmol/L)	2.30 ± 0.19	2.21 ± 0.18 ^c	2.32 ± 0.12 ^{bd}	2.21 ± 0.19 ^c	2.617	0.058
Phosphorus (mmol/L)	1.34 ± 0.07 ^{bcd}	1.10 ± 0.18 ^a	1.17 ± 0.18 ^a	1.16 ± 0.19 ^a	2.791	0.047

Data are presented as mean ± standard deviation. All *P* values were calculated with the One-Way ANOVA. a, *P* < 0.05 when compared to normal group; b, *P* < 0.05 when compared to osteopenia group; c, *P* < 0.05 when compared to osteoporosis group; d, *P* < 0.05 when compared to severe osteoporosis group.

BTMs, bone turnover markers; BMD, bone mineral density; BMI, body mass index; LS, lumbar spine; TH, total hip; FN, femoral neck; 25(OH)D, 25-hydroxy vitamin D; N-MID, N-terminal middle segment osteocalcin; P1NP, propeptide of type I procollagen; β-CTX, β-C-terminal telopeptide of type I collagen; UA, uric acid; ALP, alkaline phosphatase.