

SUPPLEMENTARY MATERIALS

Table S1. Association osteosarcopenia_frailty (osteoporosis) status with poor health conditions

		Crude model	Full model ^{a)}
History of falls	Robust	Ref.	Ref.
	Osteosarcopenia only	1.21 (0.86, 1.71)	1.21 (0.84, 1.74)
	Frailty only	1.98 (1.27, 3.10)	1.96 (1.23, 3.14)
	Osteosarcopenia with frailty	1.57 (0.93, 2.67)	1.69 (0.96, 2.97)
History of fracture	Robust	Ref.	Ref.
	Osteosarcopenia only	1.79 (1.34, 2.39)	1.78 (1.25, 2.52)
	Frailty only	1.24 (0.78, 1.96)	1.35 (0.82, 2.45)
	Osteosarcopenia with frailty	1.76 (1.09, 2.84)	1.50 (0.84, 2.67)
Poor ADL	Robust	Ref.	Ref.
	Osteosarcopenia only	1.33 (0.97, 1.83)	0.81 (0.57, 1.16)
	Frailty only	5.78 (3.85, 8.69)	3.92 (2.48, 6.20)
	Osteosarcopenia with frailty	4.95 (3.14, 7.82)	2.67 (1.59, 4.51)
Poor IADL	Robust	Ref.	Ref.
	Osteosarcopenia only	1.87 (1.41, 2.49)	1.03 (0.72, 1.47)
	Frailty only	9.23 (5.77, 14.79)	4.88 (2.82, 8.43)
	Osteosarcopenia with frailty	11.27 (6.43, 19.72)	4.50 (2.30, 8.83)
MCS score of QoL	Robust	Ref.	Ref.
	Osteosarcopenia only	-0.49 (-1.81, 0.83)	-1.08 (-2.65, 0.49)
	Frailty only	-6.67 (-8.62, -4.73)	-8.61 (-10.79, -6.43)
	Osteosarcopenia with frailty	-3.04 (-5.22, -0.85)	-5.03 (-7.63, -2.44)
PCS score of QoL	Robust	Ref.	Ref.
	Osteosarcopenia only	-1.40 (-2.54, -0.27)	1.41 (0.15, 2.67)
	Frailty only	-13.14 (-14.81, -11.46)	-10.06 (-11.81, -8.32)
	Osteosarcopenia with frailty	-11.05 (-12.93, -9.17)	-7.28 (-9.35, -5.20)

Values are presented as adjusted odds ratio (95% confidence interval) in multivariate logistic regression or linear regression analyses. Bold font indicates statistical significance

ADL, activity of daily living; IADL, instrumental activity of daily living; QoL, quality of life; MCS, mental component summary; PCS, physical component summary.

^{a)}In full model, the outcome variables of each health condition: history of falls (age, sex, smoking, education, high waist circumference, diabetes, physical activity), history of fracture (age, sex, education, high waist circumference, diabetes, protein intake, energy intake, Ca/VitD supplement), poor ADL (age, sex, smoking, education, high waist circumference, diabetes, physical activity, hypertension, protein intake, energy intake), poor IADL (age, sex, smoking, education, high waist circumference, diabetes, physical activity, hypertension, protein intake, energy intake, Ca/VitD supplement), MCS (age, sex, smoking, education, high waist circumference, diabetes, physical activity, protein intake, energy intake, Ca/VitD supplement), and PCS (age, sex, smoking, education, high waist circumference, diabetes, physical activity, protein intake, energy intake, Ca/VitD supplement).