

Table S1 The clinical characteristics between Grades 1–2 and Grades 3–4 groups

Variables	Total (n=314)	Grades 1–2 (n=297)	Grades 3–4 (n=17)	P-value
Age (years)	77 (69, 86)	77 (69, 85)	82 (75, 87)	0.238
Sex				0.239
Male	199 (63.4)	191 (64.3)	8 (47.1)	
Female	115 (36.6)	106 (35.7)	9 (52.9)	

P values indicate statistical significance across groups.

Table S2 Body composition analysis between Grades 1–2 and Grades 3–4 groups

Variables	Total (n=314)	Grades 1–2 (n=297)	Grades 3–4 (n=17)	P value
SAT area (mm ²)	8,916.3 (6,741.4, 11,521)	8,876.6 (6,671.6, 11,320.5)	10,473.3 (8,517.3, 12,547.5)	0.094
VAT area (mm ²)	14,382.4 (8,652.1, 19,215.1)	14,270.2 (8,666.8, 19,357.2)	14,642.1 (7,220.9, 16,250)	0.395
PM area (mm ²)	3,827.1±1,122.9	3,815.3±1,133.1	4,033.4±930.5	0.428
The proportion of PIMF	0.1 (0.1, 0.2)	0.1 (0.1, 0.2)	0.1 (0.1, 0.1)	0.024
Mean CT values of PM (HU)	29.4 (22, 36.2)	29.4 (22.3, 36.5)	24.5 (15.2, 32.8)	0.259

Data are presented as median (interquartile range) or mean ± standard deviation. SAT, subcutaneous adipose tissue; VAT, visceral adipose tissue; PM, paravertebral muscle; PIMF, paravertebral intramuscular fat.

Table S3 The result of binary logistic regression analysis for low-grade (Grades 1–2) versus high-grade (Grades 3–4) groups

Variables	Coef	SE	Wald Z	P value
Intercept	−2.273	3.229	0.495	0.482
SAT area	0.000	0.000	1.691	0.193
VAT area	0.000	0.000	4.344	0.037
PM area	0.000	0.000	1.738	0.187
The proportion of PIMF	15.666	6.696	5.743	0.019
Mean CT values of PM	−0.053	0.033	2.658	0.103

SAT, subcutaneous adipose tissue; VAT, visceral adipose tissue; PM, paravertebral muscle; PIMF, paravertebral intramuscular fat.