

Table SI. Patient characteristics and comparison between non-surgical and surgical groups during hospitalisation at baseline.

Data are presented as median (25th–75th percentile), n (%), or mean $\pm$ standard deviation.

ASMI, appendicular skeletal muscle index; STAR, sonographic thigh adjustment ratio; ISarcoPRM, the Sarcopenia Special Interest Group of the International Society of Physical and Rehabilitation Medicine; AWGS, Asian Working Group for Sarcopenia; FAC, functional ambulation categories; MMSE, Mini-Mental State Examination; BMI, body mass index; MNA-SF, Mini Nutritional Assessment Short Form; ECW/TBW, extracellular water/total body water.

	Non- Surgical (n = 43)	Surgical (n = 110)	P value
Age (years)	81.0 (79.5–84.5)	79.0 (73.0–84.0)	0.02*
65–74	6 (13.9)	39 (35.5)	0.04***
75–84	26 (60.5)	48 (43.6)	
≥ 85	11 (25.6)	23 (20.9)	
Sex women	33 (76.7)	87 (79.1)	0.76***
Length of stay (days)	46 (25–62)	47 (32–66)	0.44*
Handgrip strength (kg)	15.4 (11.6–19.4)	16.7 (12.5–22.1)	0.50*
low muscle strength (ISarcoPRM) ^a	36 (83.7)	83 (75.5)	0.39***
low muscle strength (AWGS2019) ^b	34 (79.1)	78 (70.9)	0.31***
STAR (mm/BMI)	0.97 $\pm$ 0.27	0.94 $\pm$ 0.25	0.44**
low muscle mass (ISarcoPRM) ^c	28 (65.1)	80 (72.7)	0.35***
ASMI (kg/m ²)	5.65 (5.24–6.75)	6.01 (5.46–6.71)	0.13*
low muscle mass (AWGS2019) ^d	25 (58.1)	45 (40.9)	0.06***
Sarcopenia ^e			
ISarcoPRM	24 (55.8)	62 (56.4)	0.95***
AWGS2019	19 (44.2)	37 (33.6)	0.22***
FAC score at hospital admission ^f	5 (4–5)	5 (5–5)	0.02*
3	5 (11.6)	3 (2.7)	0.03***
4	11 (25.6)	18 (16.4)	
5	27 (62.8)	89 (80.9)	

FAC score at hospital discharge	4 (3–5)	5 (4–5)	0.002*
2	1 (2.3)	1 (0.9)	0.02***
3	13 (30.2)	12 (10.9)	
4	11 (25.6)	25 (22.7)	
5	18 (41.9)	72 (65.5)	
FAC score worse	15 (34.9)	26 (23.6)	0.16***
Disease			
Fracture (hip, vertebra, pelvic and others)	40 (93.0)	58 (52.7)	<0.001***
Arthroplasty (Hip and Knee)	0 (0)	38 (34.6)	
Lumbar spinal stenosis and disc herniation	3 (7.0)	14 (12.7)	
MMSE score	26 (24–29)	28 (25–29)	0.15*
Cognitive decline ^g	6 (14.0)	7 (6.4)	0.20****
BMI (kg/m ²)	22.3 ± 3.7	23.1 ± 4.2	0.29**
<18.5	8 (18.6)	16 (14.5)	0.35***
18.5–24.9	27 (62.8)	61 (55.5)	
≥25.0	8 (18.6)	33 (30.0)	
MNA-SF score	8 (6.5–10)	9 (8–10)	0.11*
Malnutrition ^h	16 (37.2)	25 (22.7)	0.07***
ECW/TBW (%)	49.0 ± 3.7	50.4 ± 3.5	0.03**

*: Mann-Whitney U test, **: Student's t-test, ***: chi-square test, ****: Fisher's exact test; bold values indicate $p < 0.05$.

^a low muscle strength: male <32 kg, female <19 kg (ISarcoPRM cut-off value).

^b low muscle strength: male <28 kg, female <18 kg (AWGS2019 cut-off value).

^c low muscle mass: STAR male <1.4 mm/BMI, female <1.0 mm/BMI (ISarcoPRM cut-off value).

^d low muscle mass: ASMI male <7.0 kg/m², female <5.7 kg/m² (AWGS2019 cut-off value).

^e Sarcopenia: low muscle mass + low muscle strength (ISarcoPRM or AWGS2019 cut-off value).

^f FAC categories: 2: ambulator, dependent on physical assistance; 3: ambulator, dependent on supervision; 4: ambulator, independent, level surface only; and 5: ambulator, independent.

^g Cognitive decline: MMSE score ≤ 21.

^h Malnutrition: MNA-SF score ≤ 7.