

Supplementary

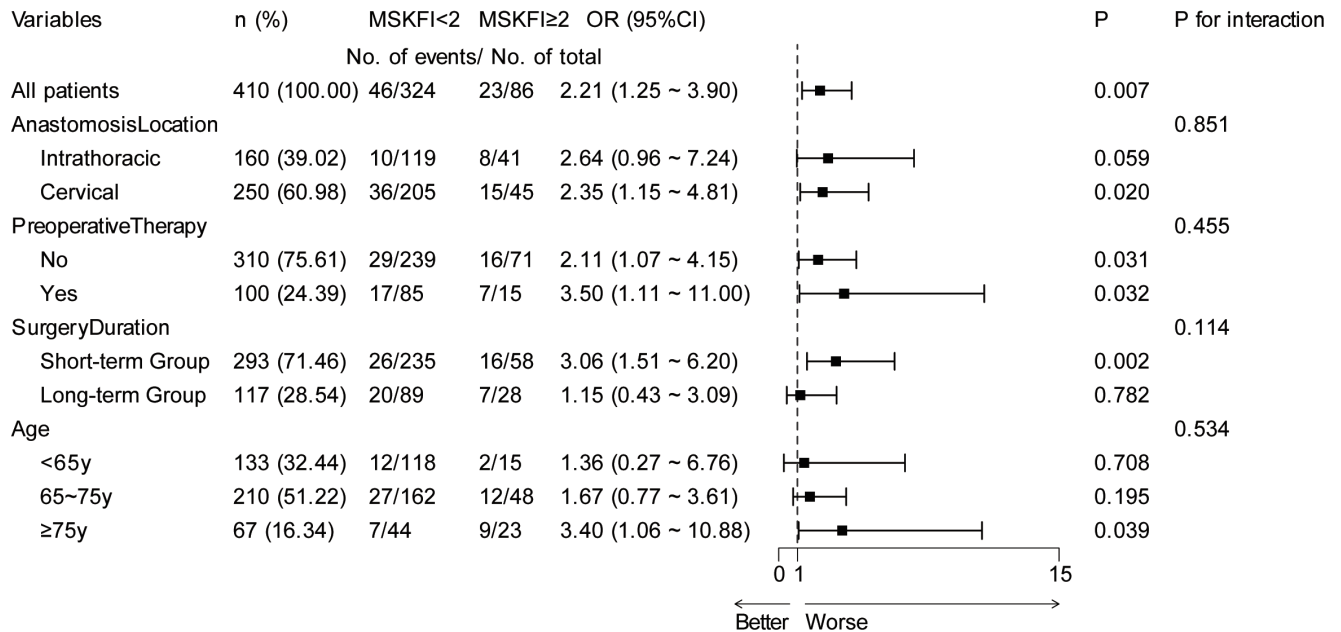


Figure S1 Subgroup analysis of the association between MSK-FI and severe postoperative complications after radical esophagectomy.

Table S1 Variables of the MSK-FI

Variables	Description and statement
Functional status assessment	Based on four basic activities of daily living (e.g., bathing, dressing) and one instrumental activity (e.g., preparing meals), any limitation in these activities was considered an impairment and assigned a value of 1. It was assessed using the KPS score in the study
Chronic obstructive pulmonary disease (COPD) or pneumonia within 30 days before surgery	The diagnosis of COPD was based on pulmonary function tests, whereas pneumonia was identified from medical records or imaging. Moderate-or-greater severity or a positive bronchodilator test was coded as 1. It was showed as Respiratory Disorders in the text
Diabetes	Coded as 1 if insulin or other hypoglycemic medications were required for management
Congestive heart failure	Obtained based on echocardiography and medical records
Myocardial infarction	Obtained based on electrocardiogram, myocardial injury markers, imaging, and medical records
Coronary artery disease	Obtained based on coronary CTA and medical records, cases of moderate or greater severity or those with a history of PCI (percutaneous coronary intervention), or bypass surgery were coded as 1
Hypertension	Hypertension that requires medication for control.
Peripheral vascular disease	Incorporates Alzheimer disease, delirium, dementia, Lewy body disease, mild cognitive impairment, and memory loss. Obtained based on the medical records or scale
Impaired sensorium	Obtained based on the medical records or scale
Cerebrovascular accident	As stated in the article, it was showed together with transient ischemic attack under Cerebrovascular Diseases
Transient ischemic attack	-

Table S2 Variables of MSK-FI used in the cohort

Variables	Total (n=410)	MSK-FI <2 (n=324)	MSK-FI ≥2 (n=86)	P
KPS, n (%)				0.065 [†]
≥80	405 (98.78)	322 (99.38)	83 (96.05)	
<80	5 (1.22)	2 (0.62)	3 (3.95)	
Respiratory disorders, n (%)				<0.001
No	350 (85.37)	297 (91.67)	53 (61.63)	
Yes	60 (14.63)	27 (8.33)	33 (38.37)	
Diabetes, n (%)				<0.001
No	357 (87.07)	311 (95.99)	46 (53.49)	
Yes	53 (12.93)	13 (4.01)	40 (46.51)	
Congestive heart failure, n (%)				0.21 [†]
No	409 (99.76)	324(100.00)	85 (98.84)	
Yes	1 (0.24)	0 (0.00)	1 (1.16)	
Myocardial infarction, n (%)				0.21 [†]
No	409 (99.76)	324 (100.00)	85 (98.84)	
Yes	1 (0.24)	0 (0.00)	1 (1.16)	
Coronary artery disease, n (%)				<0.001 [†]
No	399 (97.32)	322 (99.38)	77 (89.53)	
Yes	11 (2.68)	2 (0.62)	9 (10.47)	
Hypertension, n (%)				<0.001
No	216 (52.68)	210 (64.81)	6 (6.98)	
Yes	194 (47.32)	114 (35.19)	80 (93.02)	
PVD, n (%)				<0.001 [†]
No	401 (97.80)	323 (99.69)	78 (90.70)	
Yes	9 (2.20)	1 (0.31)	8 (9.30)	
Impaired sensorium, n (%)				>0.99 [†]
No	409 (99.76)	323 (99.69)	86 (100.00)	
Yes	1 (0.24)	1 (0.31)	0 (0.00)	
Cerebrovascular accident, n (%)				
No	393 (95.85)	323 (99.69)	70 (81.40)	
Yes	17 (4.15)	1 (0.31)	16 (18.60)	

[†], Fisher's exact test, two-sided. PVD, Peripheral Vascular Disease; KPS, Karnofsky Performance Status.

Table S3 Multivariable logistic regression analysis including the interaction between MSK-FI and age

Variables	β coefficient	Standard error	OR (95% CI)	P value
Intercept	-3.18	0.42	-	<0.001
MSK-FI ≥ 2 vs. <2	0.43	0.83	1.54 (0.30-7.87)	0.61
Age ≥ 65 vs. <65 y	0.67	0.36	1.95 (0.96-3.95)	0.07
Anastomosis location: cervical vs. intrathoracic	0.81	0.31	2.25 (1.22-4.15)	0.009
Preoperative therapy: yes vs. no	0.58	0.30	1.78 (0.99-3.20)	0.06
Surgery duration: long-term group vs. short-term group	0.57	0.29	1.76 (1.01-3.07)	0.05
MSK-FI \times age ≥ 65	0.46	0.89	1.59 (0.27-9.27)	0.60