



**Figure S1** Sarcopenia evaluation and diagnosis diagram in this study following AWGS guideline. ASMI, appendicular skeletal muscle mass index; AWGS, Asian Working Group for Sarcopenia; F, female; M, male.

**Table S1** Bayesian logistic regression analysis of postoperative complication using a non-informative prior for sarcopenia

Variable	OR	95% CrI	P <sub>(OR &gt;1)</sub>
Sarcopenia	0.76	0.23–2.29	0.324
Age	0.98	0.9–1.07	0.337
Male	4.93	1.64–14.88	0.998
BMI	0.91	0.83–1.01	0.038
Smoking	1.67	0.66–3.99	0.868
ECOG $\geq$ 1	0.69	0.29–1.56	0.191
FVC.percent	0.99	0.97–1.01	0.123
FEV1.percent	1.01	0.99–1.03	0.889
DLCO.percent	1.00	0.98–1.01	0.427
Clinical T stage			
cT1 (reference)			
cT2	1.97	1.02–3.79	0.977
cT3 or 4	1.82	0.7–4.65	0.89
Clinical N stage			
N positive	1.10	0.4–2.86	0.59
Minimally invasive surgery	0.35	0.15–0.82	0.01
Operation extent			
Lobectomy/bilobectomy(reference)			
Sublobar resection	0.96	0.48–1.89	0.456
Pneumonectomy	0.93	0.1–7.67	0.472

BMI, body mass index; CrI, credible Interval; DLCO, carbon monoxide lung diffusion capacity; ECOG, Eastern Cooperative Oncology Group performance status; FEV1, forced expiratory volume in 1 second; OR, odds ratio.

**Table S2** Sensitivity analysis for association between sarcopenia and complication

Method	OR (95% CI or CrI)	P value/ $P_{(OR > 1)}$	Interpretation
Unadjusted logistic regression	1.21 (0.43–3.00)	0.70	No significant association
PSM (1:4 matching)		1.00	No significant association
Bayesian (non-informative prior)	0.76 (0.23–2.29)	0.32	Inconclusive; limited evidence for association
Bayesian (strong prior: OR >2.0)	1.31 (0.64–2.68)	0.77	Robust against prior assumption; consistent with no association