

Supplemental Figure legends

Supplemental Figure S1

Preoperative (left) and postoperative CT (right) images of four representative patients who developed postoperative AE.

- A) An 84-year-old man with combined pulmonary fibrosis and emphysema underwent surgery for lung cancer. He had two of the predictors: honeycombing on CT (a single subpleural layer of three contiguous cysts visible on preoperative CT images) and a high ARISCAT score.
- B) A 74-year-old woman with systemic sclerosis underwent surgery for lung cancer. She had all three predictors: honeycombing on CT, a per cent predicted FVC <80%, and a high ARISCAT score. Honeycomb lung was identified during a pathologic anatomic evaluation.
- C) A 64-year-old man with IIP underwent surgery for bladder cancer. He had two of the predictors: honeycombing on CT and a per cent predicted FVC <80%.
- D) A 67-year-old man with ILD caused by radiation therapy underwent surgery for esophageal cancer. His preoperative CT revealed a ground glass opacity in the right upper lobe. He exhibited only one of the risk factors, a high ARISCAT score.

Supplemental Figure S2

A complete case multivariable conditional logistic regression analysis. A sensitivity analysis of 133 patients without missing per cent predicted FVC and FEV₁/FVC data was conducted. A p value of <0.05 was considered statistically significant. The results were similar to those obtained in the multivariable analysis after multiple imputation.

ARISCAT score categories: low, <26; intermediate, 26–44; high, ≥45. CI, confidence interval; FVC, forced vital capacity; ARISCAT, Assess Respiratory Risk in Surgical Patients in Catalonia.

Supplemental Figure S3

Receiver operating characteristic curve for per cent predicted FVC as a predictor of acute exacerbation. The Youden index analysis revealed an optimal cut-off value of 79.58% for per cent predicted FVC. FVC, forced vital capacity.