## Supplemental material

Prognosis of acute exacerbation in idiopathic pulmonary fibrosis with pulmonary emphysema: a retrospective cohort study in Japan

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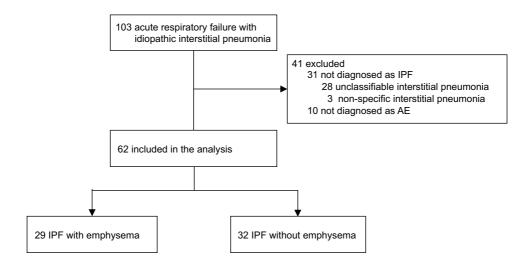
# Supplemental Table 1. Cox proportional hazards regression analysis of mortality within 90 days including data of forced vital capacity (FVC)

	Hazard ratio	95% confidence interval	P value
Emphysema	0.30	0.09-0.98	0.04

adjusting by age, sex, and %FVC>60%

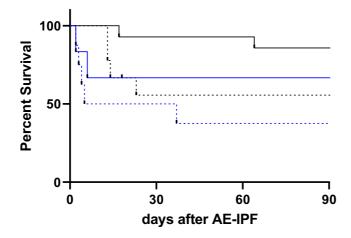
FVC, forced vital capacity

#### Supplemental Figure 1.



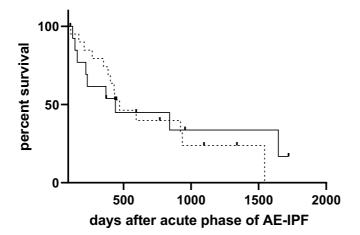
Flow diagram of patient selection. During the study period, 103 patients with idiopathic interstitial pneumonia admitted to hospitals due to acute respiratory failure. Thirty-one cases were not diagnosed as idiopathic pulmonary fibrosis (IPF) based on multidisciplinary discussion [unclassifiable interstitial lung disease (n = 28) and non-specific interstitial pneumonia (n = 3)] and excluded from the analysis. Another ten cases were excluded because the major cause of respiratory failure at admission was considered as infection or heart failure, but not an acute exacerbation (AE) of IPF, based on the clinical course after treatments. Patients with AE-IPF (n = 62) were divided into two groups according to the presence of concomitant pulmonary emphysema.

## **Supplemental Figure 2**



Kaplan-Meier survival curves for the patients admitted to the hospitals due to acute exacerbation of idiopathic pulmonary fibrosis. The patients were divided into four subgroups according to the presence or absence of pulmonary emphysema and baseline forced vital capacity (FVC;  $\geq$ 60% or <60% of the predicted value); Group 1 (black solid line, n = 14, with emphysema and baseline FVC  $\geq$  60%), group 2 (black dotted line, n = 9, without emphysema and baseline FVC  $\leq$  60%), and group 4 (blue dotted line, n = 8, without emphysema and baseline FVC < 60%).

# **Supplemental Figure 3**



Kaplan-Meier survival curves for the survivor of acute phase (90 days) after acute exacerbation of idiopathic pulmonary fibrosis with pulmonary emphysema (solid line, n = 22) and without emphysema (dotted line, n = 16).