Table S1: study definitions

IPF	IPF is a specific form of chronic, progressive, fibrosing interstitial pneumonia of unknown cause. It occurs primarily in older adults, is limited to the lungs, and is defined by the histopathologic and/or radiologic pattern of UIP. It should be considered in all adult patients with unexplained chronic exertional dyspnea, cough, bibasilar inspiratory crackles, and/or digital clubbing that occur without constitutional or other symptoms that suggest a multisystem disease (1)
AE-IPF	An acute, clinically significant respiratory deterioration characterized by evidence of new widespread alveolar abnormality AND: • Previous or concurrent diagnosis of IPF • Acute worsening or development of dyspnea typically <1 mo duration • Computed tomography with new bilateral ground-glass opacity and/or consolidation superimposed on a background pattern consistent with usual interstitial pneumonia pattern • Deterioration not fully explained by cardiac failure or fluid overload (2).
UIP (pathologic definition)	Evidence of marked fibrosis/ architectural distortion, ± honeycombing in a predominantly subpleural/ paraseptal distribution AND Presence of patchy involvement of lung parenchyma by fibrosis AND Presence of fibroblast foci AND Absence of features against a diagnosis of UIP suggesting an alternate diagnosis (1).
UIP (HRCT definition)	Subpleural, basal predominance AND Reticular abnormality AND Honeycombing with or without traction bronchiectasis AND Absence of features listed as inconsistent with UIP pattern (1).
DAD	Presence of hyaline membranes plus at least one of the following: intra-alveolar edema, alveolar type I cell necrosis, alveolar type II cell (cuboidal cell) proliferation progressively covering the denuded alveolar–capillary membrane, interstitial proliferation of fibroblasts and myofibroblasts, or organizing interstitial fibrosis (3).
DIP	Uniform involvement of lung parenchyma, prominent accumulation of alveolar macrophages, mild to moderate fibrotic thickening of alveolar septa, mild interstitial

	chronic inflammation (lymphoid aggregates) (4)
COP	Intraluminal organizing fibrosis in distal airspaces, patchy and peribronchiolar distribution, preservation of lung architecture, uniform and recent temporal appearance, mild interstitial chronic inflammation, foamy macrophages in alveolar spaces, absence of severe fibrotic changes and granulomas, giant cells are rare or absent, lack of prominent infiltration of eosinophils or neutrophils, absence of necrosis or abscess, absence of vasculitis, lack of hyaline membranes or prominent airspace fibrin (5).

1) Raghu G, Collard HR, Egan JJ, Martinez FJ, Behr J, Brown KK, Colby TV, Cordier JF, Flaherty KR, Lasky JA, Lynch DA, Ryu JH, Swigris JJ, Wells AU, Ancochea J, Bouros D, Carvalho C, Costabel U, Ebina M, Hansell DM, Johkoh T, Kim DS, King TE Jr, Kondoh Y, Myers J, Müller NL, Nicholson AG, Richeldi L. An official ATS/ERS/JRS/ALAT statement: idiopathic pulmonary fibrosis: evidence-based guidelines for diagnosis and management. Am J Respir Crit Care Med. 2011 Mar 15;183(6):788-824. doi: 10.1164/rccm.2009-040GL.

2) Collard HR, Ryerson CJ, Corte TJ, Jenkins G, Kondoh Y, Lederer DJ, Lee JS, Maher TM, Wells AU, Antoniou KM, Behr J, Brown KK, Cottin V, Flaherty KR, Fukuoka J, Hansell DM, Johkoh T, Kaminski N, Kim DS, Kolb M, Lynch DA, Myers JL, Raghu G, Richeldi L, Taniguchi H, Martinez FJ. Acute Exacerbation of Idiopathic Pulmonary Fibrosis. An International Working Group Report. Am J Respir Crit Care Med. 2016 Aug 1;194(3):265-75. doi: 10.1164/rccm.201604-0801CI.

3) Thille AW, Esteban A, Fernández-Segoviano P, Rodriguez JM, Aramburu JA, Peñuelas O, Cortés-Puch I, Cardinal-Fernández P, Lorente JA, Frutos-Vivar F. Comparison of the Berlin definition for acute respiratory distress syndrome with autopsy. Am J Respir Crit Care Med 2013;187:761–767.

4) Henry D Tazelaar, Joanne L Wright, Andrew Churg. Desquamative interstitial pneumonia. Histopathology (2011);58:509–516.

5) King TE Jr. Organizing pneumonia. In: Interstitial lung disease, 5, Schwarz MI, King TE Jr (Eds), People's Medical Publishing House, Shelton, CT 2011. p.981.