

## Supplementary

**Table S1** Patients with IPF (N=23): characteristics, laboratory data, and HRCT findings at diagnosis (comparison between with cough and without cough)

Variables	With cough (n=10)	Without cough (n=13)	P value
Age, years	65 [38–79]	67 [55–79]	0.19
Sex			>0.99
Male	8 (80.0)	11 (84.6)	
Female	2 (20.0)	2 (15.4)	
BMI, kg/m <sup>2</sup>	20.6±3.1	22.5±2.8	0.17
Smoking status			>0.99
Never smoked	1 (10.0)	2 (15.4)	
Current or former smoked	9 (90.0)	11 (84.6)	
Medications			
Anti-fibrotic drugs	7 (70.0)	8 (61.5)	>0.99
Pirfenidone	7 (70.0)	6 (46.2)	0.40
Nintedanib	4 (40.0)	4 (30.8)	0.69
Prednisolone	0 (0.0)	3 (23.1)	0.23
Proton pump inhibitor	5 (50.0)	5 (38.5)	0.69
Expectorant	3 (30.0)	0 (0.0)	0.07
Peripheral blood eosinophil counts, mm <sup>3</sup>	166.2±124.4	345.1±377.6	0.10
Total serum IgE, IU/mL	204.2±325.9	207.4±224.2	0.75
KL-6, U/mL	945.0±291.5	865.8±559.0	0.26
GAP index			0.84
Stage I	7 (70.0)	7 (53.8)	
Stage II	2 (20.0)	4 (30.8)	
Stage III	1 (10.0)	2 (15.4)	
HRCT findings			
Traction bronchial dilatation	5 (50.0)	2 (15.4)	0.17
Honeycombing	10 (100.0)	11 (84.6)	0.49
Emphysema	3 (30.0)	6 (46.2)	0.67

Data are presented as n (%), mean ± SD, or median [range]. IPF, idiopathic pulmonary fibrosis; N, total number of patients evaluated; HRCT, high-resolution computed tomography; n, number in subgroups; BMI, body mass index; IgE, immunoglobulin E; GAP, gender (G), age (A), and two lung physiology variables (P; FVC and DLco); FVC, forced vital capacity; DLco, diffusing capacity of carbon monoxide; SD, standard deviation.

**Table S2** Patients with IPF (N=23): pulmonary function at diagnosis (comparison between with cough and without cough)

Parameters	With cough (n=10)	Without cough (n=13)	P value
FVC, % predicted	91.7±31.9	95.9±21.2	0.54
FEV <sub>1</sub> , % predicted	94.6±30.3	93.3±22.3	0.88
FRC, % predicted	84.7±20.3	83.1±16.6	0.95
RV, % predicted	77.4±19.0	78.0±22.0	0.79
TLC, % predicted	83.9±24.6	84.7±18.2	0.85
RV/TLC, % predicted	95.2±20.6	92.3±17.4	0.95
DLco, % predicted	53.9±18.2	51.5±14.7	>0.99
FeNO, ppb	21.9±7.8	30.5±18.6	0.42
C5, µM (with cough n=9, without cough n=6)	15.8±19.8	14.6±9.8	0.9
Increased cough receptor sensitivity to capsaicin	2/9 (22.2)	1/6 (16.7)	0.56

Data are presented as n (%), mean ± SD, or geometric mean ± geometric standard error. IPF, idiopathic pulmonary fibrosis; N, total number of patients evaluated; n, number in subgroups; FVC, forced vital capacity; FEV<sub>1</sub>, forced expiratory volume in 1 second; FRC, functional residual capacity; RV, residual volume; TLC, total lung capacity; DLco, diffusing capacity of carbon monoxide; FeNO, fractional exhaled nitric oxide; C5, capsaicin concentration eliciting 5 or more coughs; SD, standard deviation.