

Supplementary Table 1. Comparison of baseline characteristics according to the presence of bronchiectasis in patients with COPD

Parameter (N=389)	COPD with Bronchiectasis (BE/CB, BE-only group, n=148)	COPD without Bronchiectasis (CB-only, no BE/CB group, n=241)	<i>P</i> value
Age (years)	67.7 ± 6.9	66.4 ± 7.6	0.088
Male	147 (99.3)	233 (96.7)	0.162
Smoking amount (pack-year)	45.3 ± 23.5	46.5 ± 27.8	0.659
Current smoker	42 (28.4)	71 (29.5)	0.908
BMI (kg/m ²)	22.3 ± 3.3	23.5 ± 3.1	0.001 ^a
6MWD (m)	413.1 ± 93.7	436.9 ± 79.7	0.009 ^a
Charlson's comorbidity score	1.38 ± 0.84	1.25 ± 0.54	0.097
Dyspnea (mMRC)	1.69 ± 1.09	1.64 ± 1.06	0.654
SGRQ	33.60 ± 17.89	32.37 ± 17.51	0.505
The modified Bhalla score (median, range)	9.5 (range; 6.5~14.6)		
Chronic bronchitis [†]	52 (35.1)	77 (32.0)	0.517
FEV ₁ decline (mL/year, n=341)	-24.61 ± 23.17	-24.79 ± 25.47	0.950
Lung function			
Pre BD FVC (% predicted)	79.7 ± 17.7	77.1 ± 15.5	0.130

Post BD FVC (% predicted)	83.3 ± 17.3	83.0 ± 15.0	0.848
Pre BD FEV ₁ (% predicted)	48.4 ± 16.7	49.1 ± 14.7	0.640
Post BD FEV ₁ (% predicted)	53.2 ± 17.5	54.6 ± 15.1	0.403
FEV ₁ /FVC (%)	45.5 ± 10.8	47.6 ± 11.2	0.080
DLco (% predicted)	77.3 ± 23.4	77.2 ± 24.3	0.966
Radiologic findings			
Emphysema index (%)	23.0 ± 16.0	20.9 ± 15.0	0.222
Wall area (%)	17.8 ± 3.6	17.4 ± 3.4	0.263
Air-trapping index	0.95 ± 0.04	0.95 ± 0.03	0.131
Blood laboratory findings			
Leukocyte (×10 ³ /μL)	7.3 ± 1.8	7.2 ± 2.1	0.609
Blood eosinophils (cells/μL)	283.1 ± 391.6	267.8 ± 270.6	0.654
Hemoglobin (g/dL)	14.8 ± 1.3	14.9 ± 1.3	0.554
Platelet (×10 ³ /μL)	247.1 ± 69.5	234.3 ± 57.2	0.066
Protein (g/dL)	7.2 ± 0.6	7.1 ± 0.5	0.114
Albumin (g/dL)	4.2 ± 0.5	4.3 ± 0.3	0.339
Cholesterol (mg/dL)	168.3 ± 67.9	174.1 ± 57.6	0.386

Hs-CRP (mg/dL)	0.5 ± 1.5	0.3 ± 0.6	0.214
Creatinine (mg/dL)	1.0 ± 0.2	1.0 ± 0.2	0.687

Data are presented as n (%) or mean ± SD. SD, standard deviation; BE, bronchiectasis; CB, chronic bronchitis; BMI, body mass index; 6MWD, 6-minute walk distance; mMRC, modified Medical Research Council; SGRQ, St. George's Respiratory Questionnaire; CB symptom, cough and sputum by SGRQ; BD, bronchodilator; FEV₁, forced expiratory volume in 1 second; FVC, forced vital capacity; DLco, diffusing capacity of the lung for carbon monoxide; hs-CRP, high-sensitivity C-reactive protein. †, chronic bronchitis by SGRQ questionnaire

^a P value < 0.05 in comparison between groups

Supplementary Table 2. Comparison of baseline characteristics according to the presence of chronic bronchitis in patients with COPD

Parameter (N=389)	CB(+) (n=129)	CB(-) (n=260)	<i>P</i> value
Age (years)	65.7 ± 8.2	67.5 ± 6.9	0.032
Male	129 (100.0)	251 (96.5)	0.033
Smoking amount (pack-year)	44.6 ± 25.0	46.7 ± 26.8	0.445
Current smoker	50 (38.8)	63 (24.2)	0.003 ^a
BMI (kg/m ²)	22.6 ± 3.0	23.2 ± 3.3	0.088
6MWD (m)	431.4 ± 78.5	426.0 ± 89.5	0.569
Charlson's comorbidity score	1.29 ± 0.57	1.30 ± 0.72	0.814
Dyspnea (mMRC)	1.91 ± 1.04	1.53 ± 1.06	0.001 ^a
SGRQ	39.55 ± 17.04	29.50 ± 17.00	<0.001 ^a
Cylindrical bronchiectasis	35 (27.1)	70 (26.9)	0.965
Varicose bronchiectasis	15 (11.6)	15 (5.8)	0.041
Cystic bronchiectasis	3 (2.3)	4 (1.5)	0.661
Bilateral bronchiectasis	29 (22.5)	50 (19.2)	0.668
Modified Bhalla score	6.2 ± 4.0	6.1 ± 3.9	0.805
FEV ₁ decline (mL/year, n=341)	-24.30 ± 28.30	-24.95 ± 22.61	0.832

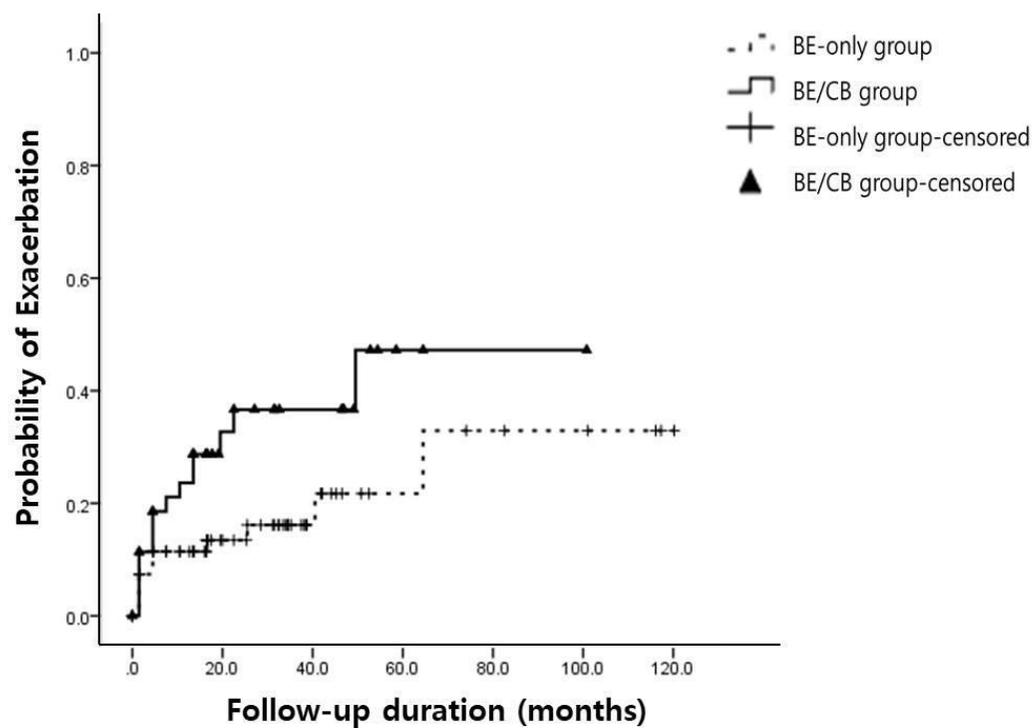
Lung function			
Pre BD FVC (% predicted)	78.1 ± 17.7	78.0 ± 15.8	0.958
Post BD FVC (% predicted)	83.2 ± 16.3	83.0 ± 15.7	0.900
Pre BD FEV ₁ (% predicted)	47.4 ± 15.8	49.5 ± 15.3	0.208
Post BD FEV ₁ (% predicted)	52.1 ± 16.4	55.1 ± 15.9	0.089
FEV ₁ /FVC (%)	45.6 ± 11.7	47.4 ± 10.8	0.132
DLco (% predicted)	75.8 ± 21.5	78.0 ± 25.1	0.370
Radiologic findings			
Emphysema index (%)	22.0 ± 15.6	21.5 ± 15.5	0.782
Wall area (%)	17.4 ± 3.5	17.7 ± 3.5	0.410
Air-trapping index	0.95 ± 0.03	0.95 ± 0.04	0.105
Blood laboratory findings			
Leukocyte (×10 ³ /μL)	7.4 ± 2.0	7.2 ± 2.0	0.347
Blood eosinophils (cells/μL)	285.8 ± 403.2	267.7 ± 274.6	0.609
Hemoglobin (g/dL)	14.9 ± 1.1	14.9 ± 1.4	0.916
Platelet (×10 ³ /μL)	244.4 ± 62.6	236.8 ± 62.3	0.273
Protein (g/dL)	7.0 ± 0.5	7.1 ± 0.5	0.008

Albumin (g/dL)	4.2 ± 0.3	4.2 ± 0.4	0.480
Cholesterol (mg/dL)	164.2 ± 67.4	175.7 ± 58.2	0.095
Hs-CRP (mg/dL)	0.4 ± 0.5	0.4 ± 1.2	0.560
Creatinine (mg/dL)	1.0 ± 0.2	1.1 ± 0.2	0.009 ^a

Data are presented as n (%) or mean ± SD. SD, standard deviation; CB, chronic bronchitis; BMI, body mass index; 6MWD, 6-minute walk distance; mMRC, modified Medical Research Council; SGRQ, St. George's Respiratory Questionnaire; BD, bronchodilator; FEV₁, forced expiratory volume in 1 second; FVC, forced vital capacity; DLco, diffusing capacity of the lung for carbon monoxide; hs-CRP, high-sensitivity C-reactive protein

^a P value < 0.05 in comparison between groups

Supplementary Figure legend



Supplementary Figure 1 Kaplan-Meier plot of time to the first exacerbation according to the presence of CB in BE. Time to the first exacerbation was shorter in the BE/CB group than the BE-only group during the follow-up period ($P = 0.034$).

Abbreviations: BE, bronchiectasis; CB, chronic bronchitis.