Supplementary

Table S1 Association of pulmonary function tests and pulmonary artery dilation

Clinical factors	β-coefficient (95% CI)[†]	P value
Pulmonary function testing		
FEV1 (L) (n=184)	−0.0267 (−0.0487, −0.0047)	0.018
FEV1% (n=182)	−0.0014 (−0.0021, −0.0008)	<0.001
FEV1/FVC (n=182)	−0.0028 (−0.0042, −0.0014)	<0.001

[†], β-coefficients for categorical variables can be interpreted as "the difference between category k and the reference category". For continuous variables, the β-coefficient can be interpreted as "for every unit increase in X, PA/Ao increases by β". CI, confidence interval; FEV1, forced expiratory volume in 1 s; FVC, forced vital capacity; PA, pulmonary artery; Ao, aorta.

Table S2 Association of exacerbation frequency and pulmonary artery dilation

Clinical factors	Mean PA/Ao (SD)	PA/Ao difference (95% CI)	P value[‡]
Number of exacerbations[†] (n=261)			
None (n=138)	0.77 (0.1)	1–2 *vs.* none =0.03 (0.0, 0.07)	0.047
1–2 (n=81)	0.81 (0.12)	3+ *vs.* none =0.02 (−0.02, 0.06)	0.45
3+ (n=42)	0.78 (0.1)	3+ *vs.* 1–2 =−0.01 (−0.06, 0.03)	0.79

[†], pairwise comparisons were computed for those measures for which an ANOVA F-test P value was <0.05; [‡], confidence intervals and P values are adjusted for multiple comparisons using the Tukey-Kramer method. PA, pulmonary artery; Ao, aorta; SD, standard deviation; CI, confidence interval; ANOVA, analysis of variance.

Table S3 CT measurements of pulmonary artery, aorta and bronchiectasis severity

Factors	Values
Modified Reiff score, mean (SD), n=348	7.2 (3.8)
Modified Reiff score, n (%), n=348	
Normal (score =0)	7 (2.0)
Mild (score =1–6)	148 (42.5)
Moderate (score =7–12)	161 (46.3)
Severe (score =13–18)	32 (9.2)
Ao diameter (mm), mean (SD), n=348	31.5 (4.0)
PA diameter (mm), mean (SD), n=348	24.6 (3.5)
PA/Ao, mean (SD), n=348	0.79 (0.11)

CT, computed tomography; SD, standard deviation; Ao, aorta; PA, pulmonary artery.

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Table S4 Clinical factors associated with pulmonary artery dilation[†]

Clinical factors	Mean PA/Ao (95% CI)	β-coefficient (95% CI)[‡]	P value[§]
Oxygen use			0.001
No (n=306)	0.78 (0.77, 0.80)	Reference	
Yes (n=31)	0.85 (0.81, 0.89)	0.07 (0.03, 0.11)	
Severity of bronchiectasis[¶] (n=348)	0.79 (0.78, 0.80)	0.003 (0.000, 0.006)	0.049
Tobacco use			0.21
Non-user (n=188)	0.78 (0.76, 0.80)	Reference	
Former user (n=138)	0.80 (0.78, 0.82)	0.022 (–0.002, 0.046)	
Current user (n=13)	0.79 (0.73, 0.85)	0.011 (–0.051, 0.074)	
Sputum culture			0.46
Neither NTM nor pseudomonas (n=30)	0.79 (0.75, 0.83)	Reference	
NTM (n=115)	0.79 (0.77, 0.81)	–0.001 (–0.045, 0.044)	
Pseudomonas (n=23)	0.82 (0.77, 0.86)	0.029 (–0.031, 0.089)	
NTM and pseudomonas (n=32)	0.81 (0.78, 0.85)	0.026 (–0.028, 0.081)	

[†], means and β-coefficients were estimated from a series of simple linear regression models in which each clinical factor was the single explanatory variable; [‡], β-coefficients for categorical variables can be interpreted as "the difference between category k and the reference category". For continuous variables, the β-coefficient can be interpreted as "for every unit increase in X, PA/Ao increases by β"; [§], P values for categorical variables with 3 or more categories are type III P values for the overall association of that variable and PA/Ao; [¶], severity of bronchiectasis was measured using the modified Reiff score. PA, pulmonary artery; Ao, aorta; CI, confidence interval; NTM, nontuberculous mycobacteria.

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