

**Supplementary Table A.** Comparison of airway conditions with emphysema and air trapping index between phenotypes

CT parameters	LA type (N=40)	SA type (N=6)	NN type (N=24)	mLA type (N=13)	mSA type (N=8)	<i>p</i> -value
BT severity	2.0 [ 1.0; 2.0] <sup>* # ‡</sup>	0.0 [ 0.0; 1.0] <sup>* ††</sup>	0.0 [ 0.0; 1.0] <sup>#l</sup>	2.0 [ 1.0; 2.0] <sup>††l**</sup>	0.0 [ 0.0; 1.0] <sup>‡**</sup>	0.000
BT extent	3.0 [ 2.0; 5.0] <sup>* # ‡</sup>	0.0 [ 0.0; 2.0] <sup>* ††</sup>	0.0 [ 0.0; 3.5] <sup>#l</sup>	4.0 [ 1.0; 5.0] <sup>††l</sup>	0.0 [ 0.0; 3.5] <sup>‡</sup>	0.001
MP severity	1.0 [ 1.0; 1.0] <sup>* #</sup>	0.0 [ 0.0; 1.0] <sup>*</sup>	0.0 [ 0.0; 1.0] <sup>#l</sup>	1.0 [ 0.0; 2.0] <sup>l</sup>	1.0 [ 0.0; 1.0]	0.001
MP extent	2.0 [ 1.0; 3.0] <sup>* #</sup>	0.0 [ 0.0; 1.0] <sup>*</sup>	0.0 [ 0.0; 1.0] <sup>#l</sup>	2.0 [ 0.0; 3.0] <sup>l</sup>	1.0 [ 0.0; 2.5]	0.002
BE severity	0.0 [ 0.0; 1.0] <sup>†‡</sup>	0.0 [ 0.0; 0.0] <sup>††</sup>	0.0 [ 0.0; 0.0] <sup>l</sup>	1.0 [ 1.0; 2.0] <sup>†††**</sup>	0.0 [ 0.0; 0.0] <sup>‡**</sup>	0.001
BE extent	0.0 [ 0.0; 2.0] <sup>†</sup>	0.0 [ 0.0; 0.0] <sup>††</sup>	0.0 [ 0.0; 0.0] <sup>l</sup>	1.0 [ 1.0; 2.0] <sup>†††**</sup>	0.0 [ 0.0; 0.0] <sup>**</sup>	0.001
Emphysema index	2.6 [ 1.5; 8.0] <sup>* †‡</sup>	31.1 [21.5;44.2] <sup>* §</sup>	1.2 [0.6; 8.1] <sup>§l¶</sup>	17.2 [13.3;21.3] <sup>†l</sup>	19.2 [15.0;29.3] <sup>‡¶</sup>	0.000
Air trapping index	25.9 [ 7.3;37.4]	45.1 [17.8;62.2]	26.4 [ 4.1;39.9]	14.4 [10.3;60.8]	23.3 [ 7.3;26.0]	0.786

Post-hoc analysis was performed when the Kruskal-Wallis test was positive (*p*-value < 0.05). \* significant difference between LA and SA type; † between LA and mLA type; ‡ between LA and mSA type; § between SA and NN type; l between NN and mLA type; ¶ between NN and mSA type; # between LA and NN type; †† between SA and mLA type; \*\* between mLA and mSA type

Abbreviations: LA type, large or medium airway remodeling type; SA type, small airway remodeling type; NN type, near-normal type; mLA type, mixed type with a dominant pattern of large or medium airway remodeling; mSA type, mixed type with a dominant pattern of small airway remodeling; BT, bronchial wall thickening; MP, mucus plugging; BE, bronchiectasis; CT, computed tomography