

**Table S1** Comparison of airway measurement between the GOLD I + II and GOLD III + IV group

Variable	GOLD I + II	GOLD III + IV	P value
N	21	21	
Age, years	70.00 (62.50–73.00)	65.00 (61.00–72.00)	0.301
Male, n (%)	20	21	1.000
BMI, kg/m <sup>2</sup>	23.88 (20.83–25.90)	21.45 (20.36–25.15)	0.222
Pack-year smoking	37.00 (14.00–51.50)	44.00 (35.00–55.00)	0.082
FEV <sub>1</sub> pred, %	67.00 (55.95–80.00)	40.10 (30.80–43.95)	<0.001*
Inspiratory (mm)			
RB1	2.39 (2.05–2.88)	2.13 (1.87–2.41)	0.113
RB4	1.92 (1.43–2.75)	1.92 (1.42–2.36)	0.377
RB10	2.90 (2.42–3.43)	2.88 (2.48–3.41)	0.929
Average	2.43 (1.92–3.16)	2.23 (2.05–2.44)	0.285
Expiratory (mm)			
RB1	1.79 (1.43–2.34)	1.48 (1.06–1.84)	0.053
RB4	1.39 (1.17–1.92)	1.29 (1.11–1.89)	0.762
RB10	1.76 (1.38–2.38)	1.53 (1.09–2.14)	0.423
Average	1.57 (1.38–2.12)	1.55 (1.29–1.80)	0.291
E/I ratio			
RB1	0.82 (0.66–0.88)	0.71 (0.55–0.87)	0.252
RB4	0.78 (0.61–0.93)	0.77 (0.61–0.98)	0.965
RB10	0.62 (0.55–0.70)	0.55 (0.47–0.76)	0.276
Average	0.73 (0.67–0.83)	0.69 (0.62–0.80)	0.308
Coefficient of variance, %			
RB1	8.59 (6.63–14.86)	14.64 (10.65–25.88)	0.016*
RB4	15.62 (12.51–21.88)	17.24 (11.80–23.81)	0.897
RB10	18.28 (15.62–25.89)	23.44 (16.31–28.89)	0.331
Average	15.31 (10.73–21.30)	18.72 (13.24–25.54)	0.116

Data presented as median (interquartile 25th–75th percentiles). P values are marked with an asterisk (\*, P<0.05). The independent bronchi and average values of minimum lumen diameter in 4th-generation bronchi were from the RB1, RB4 and RB10 bronchial segments. E/I, expiratory/inspiratory ratio; Coefficient of variance, % = 100 × standard deviation/mean; RB1, apical segment of the upper lobe in the right lung; RB4, lateral segment of the middle lobe in the right lung; RB10, posterior basal segmental of the lower lobe in the right lung; GOLD, Global Initiative For Chronic Obstructive Lung Disease.