

Table S6. The spirometry quality grading criteria for FEV1 and FVC.

Grade	Number of measurements	Repeatability
A	3 acceptable tests; of which, 2 repeatable	Variation within 0.150 L
B	3 acceptable tests; of which, 2 repeatable	Variation within 0.200 L
C	At least 2 acceptable tests	Variation within 0.250 L
D	At least 2 acceptable tests, but not repeatable	NA
F	No acceptable tests	NA

The A, B, C, D, and F grading criteria are used for quality assessment for FEV1 (flow) and FVC (volume), which are consistent with the ATS/ERS¹ and Chinese² guidelines on spirometry. The grading criteria applies to both pre- and post-bronchodilator spirometry tests. For each participant, three acceptable and repeatable tests are preferred; the maximum number of tests is eight.

Abbreviations:

FEV1: forced expiratory volume in one second; FVC: forced vital capacity; NA: not applicable.

References:

1. Miller MR, Hankinson J, Brusasco V, et al. Standardisation of spirometry. *Eur Respir J* 2005; **26**(2): 319-38.
2. Chinese Thoracic Society, Lung Function Group. Guidelines on Lung Function Test (Part II): the Spirometry. (in Chinese). *Chinese Journal of Tuberculosis and Respiratory Diseases* 2014; **37**(7): 481-6.