




Evaluation of the Global Lung Function Initiative 2012 reference values for spirometry in China: a national cross-sectional study

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GLI South East Asian equations fit well across a contemporary North and South Chinese population. This study suggests a single reference equation for spirometry can be applied to the Chinese population. <https://bit.ly/3zhCc2w>

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To the Editor:

China is facing a high burden of respiratory diseases. There are nearly 100 million people living with COPD and more than 45 million people living with asthma [1–3]. Pulmonary function tests are critical for early diagnosis and management of respiratory disease. An accurate interpretation of pulmonary function measurements requires reliable reference values. Due to complex interactions between genetics, socioeconomic status and other factors/exposures, population-specific reference equations are typically used to facilitate interpretation [4]. Currently, there are no nationally recognised spirometry reference values for the Chinese population. There have been several equations published but these have been limited due to small sample sizes, accounted for limited geographical areas, or lacked standardised quality control [5–8]. In 2012, the European Respiratory Society (ERS) Global Lung Function Initiative (GLI) produced the South East and North East Asia reference values for spirometry and recommended using these separate prediction equations based on the Qinling–Huaihe Line [9]. However, these equations were derived from a limited number of healthy Chinese individuals, and only one centre each was included from South and North mainland China, respectively [9]. Thus, there is limited evidence to support the use of GLI equations in China.