



Testing Bronchodilator Responsiveness – authors response

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Abstract:	

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Dear Editor

We thank Professor Miller for his comments on our paper regarding bronchodilator reversibility in asthma and COPD [1]. We agree that it is important to look at different ways of defining bronchodilator reversibility. In our analysis, we investigated both flow-related bronchodilator reversibility, defined by the change in FEV₁, and volume-related bronchodilator reversibility, defined by the change in FVC. We also looked at both the change in lung function parameters expressed as % of the baseline value and the change in FEV₁ standardised by the subject's predicted value. The latter was evaluated to control for the sex, age- and height-dependency of lung function. The results when reversibility was expressed as % of the predicted value (supplemental tables E3 and E4) [1] were the same as when reversibility was expressed as % of the baseline value. Our interpretation was therefore that, in the present study, neither flow-related nor volume-related bronchodilator reversibility were independently associated with the symptom burden, health status or dyspnoea in the COPD population.

It should be noted that our study was population-based and thus it may better reflect real life conditions as that encountered by a GP. However, we agree that cohort studies on patients, which include a higher number of subjects with a severe COPD, could yield different results that may be more applicable to decision making in specialist practice. Furthermore, as our analysis was cross-sectional, we could not assess a possible association between bronchodilator responsiveness and prognosis over time. We therefore agree with Prof Miller that further studies are needed before the respiratory community can dismiss testing of bronchodilator responsiveness in COPD.

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28 Bronchodilator reversibility in asthma and COPD: findings from three large population
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