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Testing bronchodilator responsiveness

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A paper in the *ERJ* suggests that testing bronchodilator responsiveness is not helpful but the authors have not used the most appropriate method <http://bit.ly/2MJR3KM>

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To the Editor:

The recent paper in the *European Respiratory Journal* by JANSON *et al.* [1] on testing bronchodilator responsiveness suggests that it has no value in distinguishing asthma from COPD. The authors correctly state that “there are many different ways of defining bronchodilator reversibility.” However, they do not then mention any of them other than using the change in forced expiratory volume in 1 s (FEV₁) standardised by the start value. This can lead to a sex and size bias in assessing bronchodilator response [2]. One method, that was recommended by the European Respiratory Society many years ago [3], standardises the change in FEV₁ by the subject’s predicted value and not their start value. Using this method it has been found that a change in FEV₁ of 8% of predicted or more due to a bronchodilator was associated with a survival advantage [2]. This approach avoided all the pitfalls around the clinical diagnosis of COPD *versus* asthma. Previously it has been found that a change in FEV₁ of 4% of predicted in COPD patients was associated with subjects being able to appreciate that their breathlessness was improved [4].