Title: Predicting hospital admissions in non-CF bronchiectasis using COPD specific severity tools

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Body: Introduction There are no accepted clinical severity criteria for bronchiectasis. There are, however, well-validated prognostic tools for COPD. This study tested the ability of 3 COPD specific prognostic tools to predict hospital admissions in patients with bronchiectasis. Method 100 consecutive patients with bronchiectasis attending a specialist clinic were studied 2011-2012. Baseline data recorded were age, FEV1% predicted, MRC dyspnoea score, exacerbation history and body mass index. These were used to calculate 3 COPD prognostic tools: The GOLD 2011, ADO and BOD indices. The primary outcome was hospitalisation for a severe exacerbation during follow-up to February 2013. Scoring systems were assessed using the area under the receiver operator characteristic curve (AUC). Results The median age was 66 years (IQR 58-73). 27% of patients were hospitalised at least once during follow-up. GOLD 2011 stage predicted hospitalisation risk AUC 0.71 (95% CI 0.65-0.77,p<0.0001) as did the BOD index AUC 0.74 (0.68-0.80,p<0.0001) and ADO AUC 0.71 (0.65-0.77). The distribution of patients and hospitalisation risk according to GOLD stage is shown in figure 1.

Conclusion In the absence of specific prognostic tools for bronchiectasis, COPD prognostic tools perform well in predicting hospital admissions in bronchiectasis.