

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 3133

**Publication Number:** 4644

**Abstract Group:** 10.1. Respiratory Infections

**Keyword 1:** Bronchiectasis **Keyword 2:** Infections **Keyword 3:** Spirometry

**Title:** A simple tool to predict hospital admissions in bronchiectasis

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**Body:** Introduction Hospital admissions for bronchiectasis are increasing. Identifying patients at risk may help guide treatment and prevention strategies. Although diseases such as COPD have well established severity scores, there are no prognostic tools in bronchiectasis. The aim of this study was to identify risk factors predicting hospitalisation for severe exacerbations of bronchiectasis. Methods 100 consecutive patients attending a specialist bronchiectasis clinic were studied. Variables recorded: FEV1, age, gender, sputum microbiology, MRC dyspnoea score, smoking status, body mass index and the Reiff radiology severity score. Independent risk factors for hospitalisation during follow-up were identified. Data are presented as odds ratios (OR) with 95% confidence intervals. Results Patients' median age was 66 years (IQR 58-73) with 27% of patients hospitalised during follow-up. Significant risk factors for hospitalisation were MRC dyspnoea score > 3 OR 2.9 (1.7-7.2, p=0.02), FEV1 <50% OR 3.3 (1.1-10.4, p=0.04), >3 lobes involved on CT or cystic bronchiectasis OR 7.7 (2.8-21.3, p<0.0001) and Pseudomonas aeruginosa colonization OR 4.5 (1.3-15.8, p=0.01). A scoring system awarding 1 point for each of these risk factors accurately identified risk of hospital admissions.

The area under the receiver operator characteristic curve for the score was 0.78 (0.73-0.83), p<0.0001. Conclusion Bronchiectasis associated hospital admissions can be predicted using simple severity criteria.