**Title:** Patterns of disease in patients with middle lobe predominant non-cystic fibrosis bronchiectasis

**Body:** Background: Right middle lobe and lingular bronchiectasis is classically described in an asthenic female phenotype where prevalence of chest wall and thoracic spine abnormalities is high and there is an association with non-tuberculous mycobacterial infection. Objective: The purpose of this study is to analyse the frequency and clinical characteristics of patients with middle lobe / lingular predominant bronchiectasis in a cohort of Irish patients in order to compare with the classical phenotype. Methods: A retrospective cohort study of 81 consecutive bronchiectasis patients over an 18 month period was performed. Data was collected on baseline demographics, microbiology, and lung function. All scans were reviewed by an independent thoracic radiologist and scored according to the modified Bhalla system. Results: Of the 81 patients, 24 (29.6%) (18FM) were confirmed to have isolated middle lobe / lingular disease on HRCT (12 RML, 5 lingula, 7 both). Of those, 3/24 (12.5%) were associated with NTM, all females, with none in the non-middle lobe / lingular group (p=0.023). In the middle lobe disease group cultures were positive for S aureus in 1/24 and pseudomonas in 0/24 compared to 11/57 (p=0.09) and 4/57 (p=0.31) respectively in the other group. FEV1% was significantly better in the middle lobe / lingular disease group (p=0.049) and these patients were also younger (56.1 versus 65.2 years, p=0.009). Conclusions: Our cohort shows middle lobe / lingular predominant disease in younger patients than classically described. Only 12.5% had NTM infection. Lung function in this patient group is relatively normal, perhaps suggesting a milder phenotype in patients with this form of the disease.