investigated for cystic fibrosis (17.9% vs. 4.9% $p = 0.007$). They were significantly more likely to have grown a pseudomonas, staph aureus or a gram negative bacteria in their sputum in the last 12 months (29.4% vs. 5.4%, $p = 0.0036$) and be treated with either oral or nebulised long term antibiotics (35.0% vs. 12.5%, $p = 0.012$) graph 1.

Conclusions Patients attending specialist bronchiectasis clinics were more likely to be managed according to BTS quality standards. Specialist non-CF bronchiectasis clinics may improve quality of care. Further longitudinal studies are needed to investigate if specialist clinics improve clinical outcomes.

Abstract P109 Figure 1 Comparison between specialist and non specialist clinics for management of bronchiectasis

P110 DOES PREVIOUS EXACERBATION HISTORY PREDICT FUTURE EXACERBATIONS IN NON-CF BRONCHIECTASIS?

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Introduction The British Thoracic Society bronchiectasis guidelines recommend consideration of long term antibiotic therapy in patients with 3 or more exacerbations per year. A major goal of treatment in bronchiectasis is to reduce future exacerbation risk. It is not known how reliably a past history of frequent exacerbations predicts future exacerbations in bronchiectasis.

Methods Consecutive patients with non-CF bronchiectasis attending a specialist clinic in Tayside 2011–2012 were included. Patients commencing long term antibiotic therapy were excluded. Exacerbation frequency was obtained from patient histories verified against electronic antibiotic prescription data. Hospital admissions for severe exacerbations were recorded and the ability of prior exacerbation history to predict future hospital admissions assessed using the area under the receiver operator characteristic curve (AUC).

Results 90 patients with bronchiectasis were included. 54% were female with a median age of 67 years. The majority had idiopathic bronchiectasis (58%), followed by allergic bronchopulmonary aspergillosis (13.3%), post-infective bronchiectasis (8%) and connective tissue disease (5%). The median FEV1 was 74% (51–94) predicted.

In the first year of review, patients had a mean of 2.9 exacerbations (standard deviation 2.4), while in the second year, the mean number of exacerbations was 2.1 (standard deviation 1.9), $p = 0.02$.

Patients with a history of 3 exacerbations in year 1 had a higher frequency of exacerbations in year 2 (2.5 vs 1.8,

$p = 0.03$). The sensitivity of year 1 exacerbations to predict 3 or more exacerbations in year 2 was 52% (95% confidence interval 31.9–71.3%) with a specificity of 64% (50.4–75.3%)

Figure 1 shows the relationships between year 1 and year 2 exacerbation frequencies.

In a linear regression model, additional predictors of exacerbation in year 2 were FEV1% predicted and chronic bacterial colonisation, independent of previous exacerbation frequency.

24 patients were hospitalised for severe exacerbations in year 2. Prior exacerbation frequency was only a modest predictor of future hospitalisation risk, AUC 0.72 (95% CI 0.61–0.83), $p < 0.0001$). (Figure 1)

Conclusion Prior history of exacerbations predicts future exacerbations and risk of severe exacerbations, but large variations in annual exacerbation frequency are observed. Other factors may need to be considered to more accurately identify patients at risk of future exacerbations and hospital admissions.

Abstract P110 Figure 1.

P111 AZITHROMYCIN PRESCRIPTIONS IN A TEACHING HOSPITAL—DO WE NEED TO MONITOR FOR ADVERSE EFFECTS?

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Introduction Azithromycin appears to have an important role in management of a number of conditions including non-CF bronchiectasis and COPD but with possible adverse effects including hearing loss and liver dysfunction that necessitate appropriate patient monitoring. We have examined our use of azithromycin and how we screen for complications in our Chest clinics.

Methods Data was collected on all azithromycin prescriptions provided at the Chest Clinic in a large UK teaching hospital over a 12 month period commencing 30-1-2012. In those patients receiving long-term azithromycin (≥ 12 Months), we collected data on parameters including sputum microbiology, previous NTM, liver function tests (LFTs), audiology testing and Qtc interval recording.