has been seen, both have developed CIS at distant sites to the resection margin. Nine patients (41%) were found to have no evidence of CIS at the resection margin and during a median surveillance period of 37 months (range 19–126), all were found to have normal bronchial epithelium. One patient in this group developed a second primary lung cancer that was surgically resected.

Conclusion CIS at the bronchial resection margin is a strong indicator of its fate to progression to invasive carcinoma. Its persistence sets precedent for the development of multiple, consecutive CIS lesions and invasive squamous cell carcinomas, and highlights the importance of routine AFB surveillance following surgery in these cases.

P78 CAN PET STANDARD UPTAKE VARIABLE (SUV) PREDICT DISEASE PROGRESSION IN EARLY-STAGE NON-SMALL CELL LUNG CANCER (NSCLC)?

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Introduction The correlation between SUV on PET-CT and prognosis in NSCLC has been the subject of much debate. We were interested in whether SUV_{max} values could be used to determine which cases of early stage (1–2) NSCLC were likely to progress.

Methods We reviewed all 93 histologically proven early stage NSCLCs seen at our tertiary centre over a one year period. We defined those with SUV_{max} in the upper quartile as the high SUV group and compared these with the remainder. Historical data were considered to allow subsequent outcomes to be established.

Results Median follow up was 772 days during which time there was a 17% mortality rate [all-cause median time to death 338 days]. The median SUV_{max} for the cohort was 10.1, and those in the upper quartile all had results over 15.0.

The high SUV_{max} group (n = 27) and low SUV_{max} group (n = 68) had similar baseline characteristics, received similar treatment regimens and there were no significant differences in tumour size between the groups. Disease progression and mortality were both significantly higher in those with SUV_{max} in the upper quartile, despite this group tending to have earlier disease (see Table 1).

Retrospective analysis using Youdin's index suggested that the optimal threshold for predicting disease progression was not significantly different when cases with nodal involvement were excluded [SUV_{max} 15.0 vs 15.5]

Conclusions Our results suggest that SUV_{max} may indeed help identify those patients with early stage NSCLC at higher risk of progression. In our large cohort those with an SUV_{max} of >15 were over 3 times more likely to develop progressive disease than those with lower results and this was independent of tumour size or nodal involvement. Whether individuals in the

higher-risk group would benefit from increased surveillance or adjuvant therapy remains to be established.

Clinical management of pulmonary infection

P79 BRONCHIECTASIS SEVERITY IN PRIMARY IMMUNODEFICIENCY - A TWO CENTRE STUDY

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Introduction Up to 70% of patients with Primary Immunodeficiency syndromes such as Common Variable Immunodeficiency (CVID) have bronchiectasis. Within this population it is a major driver of morbidity.¹

The Bronchiectasis Severity Index (BSI) is capable of accurately categorising non-cystic fibrosis bronchiectasis patients into three severity groups that predict risk of hospitalisation and mortality at one and four years.² It consists of nine clinical parameters, and was derived and validated in a diverse international bronchiectasis population. Mild disease is defined as a BSI score of <4, moderate 5–8 and severe >9.

This study aims to assess the relative severity of bronchiectasis associated with primary immunodeficiency.

Methods 24 Patients from the Royal Free Hospital, London and 22 patients from the Freeman Hospital Newcastle were recruited. Age, body mass index, % predicted FEV1, number of hospitalisations in the last 2 years, number of exacerbations in the last year, medical research council dyspnoea (MRC) score, Pseudomonas and other pathogen colonisation status and number of lobes involved on CT chest were obtained to calculate the BSI. Statistical analysis was carried out using SPSS V11.

Results The 46 patients were 67.4% female with a mean age of 55.9. There were no significant differences in age, gender or disease severity between the two centres. The median BSI was 4 (i.e. mild disease).

56% of patients had mild disease, 21.7% were moderate and 21.7% severe bronchiectasis. These patients had markedly less severe disease than the mixed aetiology population of 603 patients used to derive the scoring tool.

Conclusion Patients with primary Immunodeficiency associated bronchiectasis were younger with less severe disease compared to the BSI cohort population previously reported. This suggests good multidisciplinary care in Primary Immunodeficiency with earlier referral to respiratory specialists. It also correlates with our prior longitudinal data that FEV1 decline in immunodeficiency-related bronchiectasis is less rapid than other aetiologies.¹

Abstract P78 Table 1 Early stage NSCLC

	Age	% female	Predicted FEV1%	Median PS	%treated with curative intent	Median Stage	Disease Progression*	All cause Mortality*
High SUV [†] (n = 27)	70.5	50%	80.8%	1	89.5%	1b	40.7%	30.8%
Low SUV [†] (n = 68)	70.8	53%	77.6%	1	92.3%	2a	13.2%	11.9%

[†]Cut off SUV_{max} =15; *Denotes significant statistical difference p < 0.05.