

European Respiratory Society Annual Congress 2012

Abstract Number: 1688

Publication Number: P3137

Abstract Group: 11.1. Lung Cancer

Keyword 1: Lung cancer / Oncology **Keyword 2:** Epidemiology **Keyword 3:** Longitudinal study

Title: The histological confirmation rate of lung cancer in the UK using the NLCA database

Mr. Aamir 11418 Khakwani mcxak14@nottingham.ac.uk¹, Dr. Anna 11419 Rich Anna.Rich@nottingham.ac.uk MD¹ and Prof. Richard 11420 Hubbard Richard.Hubbard@nottingham.ac.uk MD¹. ¹ Division of Epidemiology and Public Health, Clinical Sciences Building, University of Nottingham, City Hospital Campus, Nottingham, United Kingdom, NG5 1PB .

Body: Background The optimal histological confirmation rate (HCR) for lung cancer is unknown. However, in the UK, an arbitrary figure of 75% has been recommended by the National Lung Cancer Audit (NLCA) as a benchmark. The aim of this study was to quantify the effect of patient features on the likelihood of having a histological diagnosis of lung cancer. Methods Individuals with a diagnosis of lung cancer were selected from the NLCA database from between 01/01/2004 and 31/12/2010. Percentage and odd ratios with 95% confidence interval were calculated to assess the proportion of patients having histology. Results Our study included a total of 127,099 individuals with NSCLC. HCR for NSCLC in the NLCA was found to be 66.8%. This however was increasing from 62.2% in 2007 to 72.3% in 2010. The histology in patients aged <65, PS of 0/1 and Charlson Index (CI) of 0 was 89.5%, while 56.8% in patients with the same age and CI but PS of 4. This reduced to 30% in patients with age >75 years and CI of 0 and PS of 4. Increasing age and worsening PS were also associated with a reduced odds ratio, whilst stage and CI had little effect on the likelihood of having proven histology. Individuals from least affluent areas were 23% less likely (adj OR 0.77, 95% CI 0.74 to 0.81, p<0.001) to have histology than patients from most affluent areas. Conclusion HCR is crucial in determining the appropriate treatment plan for every patient, especially with the advent of targeted therapies. Our results also show that there is a difference in the histological rate in the sub groups of patients. Therefore achieving 75% HCR in the total population is unreasonable and it should focus on different attainable HCR in sub group of patients.