rigid bronchoscopy at a tertiary referral centre and to review the referral frequency over the last 6 years.

Methods We reviewed monthly referrals for rigid bronchoscopy since 2007 and analysed indications, physiological parameters and outcomes for the last 500 cases.

Results Referrals and consequently the number of rigid bronchoscopies have risen from 10 to 30 per month over the last 6 years (see graph 1). Of the most recent 500 consecutive referrals only one case was considered unsuitable (requesting therapeutic intervention for a small subsegmental tumour with end stage interstitial lung disease and pulmonary hypertension). Indications were: laser of granulation tissue n=180; biopsy of proximal tumour n=166 (100% diagnostic); insertion of stent (bronchial and tracheal) n=86; dilation of stricture n=24; percutaneous tracheostomy insertion n=16; stent removal n=11; bioglue administration n=10 and foreign body removal n=7. Median preoperative PaO₂ was 7.8 kPa (range 6.4–11.8kPa) and CO₂ 5.9 kPa (range 4.9–7.2kPa). There were no fatalities and 2 patients (0.4%) were transferred to intensive care post procedure. Three procedures were complicated by pneumothorax (2 required drain insertion) and 5 resulted in haemorrhage >100mls (100, 200, 250, 400, 600mls). Haemostasis was achieved in all cases. No other complications were observed.

Conclusions The annual referral rate for rigid bronchoscopy has been rising since 2007. These results demonstrate the varying diagnostic and therapeutic modalities available and highlight the favourable morbidity rates and 100% diagnostic rates for this safe procedure, despite many patients with respiratory failure. It is important that respiratory physicians are aware of the potential benefit that large airway intervention can offer.

Increase in Referrals for Rigid Bronchoscopy

Abstract P200 Figure 1

P201 SINGLE-PORT VATS LOBECTOMY. MINIMISING MINIMALLY INVASIVE SURGERY

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Introduction Only around 10% of lobectomies in the UK are performed by VATS via 3 or 4 incisions. We now offer routinely VATS lobectomy via a very novel single port access to our patients.

Methods We aim to evaluate the early outcomes of our initial experience with Single-Port VATS lobectomy. From December 2011 until July 2012, 24 cases [13 male and 11 female, age 68 (45–85)

years] were intended to undergo lobectomy via Single-Port technique. Data in Median (Range).

Results Thoraco score was 1.57 (0.1–11.8) and FEV₁ was 74 (34–157) % predicted. Thirteen operations were right-sided (5 upper, 2 middle and 6 lower lobectomies), and eleven left-sided (6 upper and 5 lower).

Operations lasted 127 (65–194) minutes. One intercostal drain was used in all cases, and it was removed at 3 (1–9) days. Patients were discharged home at 3 (range 1–21) days. There was one post-operative death in our experience, a patient who was ready for discharge 3 days after surgery when he suffered a dense middle cerebral artery stroke that led to his death by contralateral pneumonia 20 days later. One case was converted to thoracotomy due to bleeding and another case a retractor was used in the incision to enable safe suture of a branch of the pulmonary artery after partial failure of the stapler.

In 10 of the 24 patients the patients started oral analgesia on the day of surgery without the use of epidurals or paravertebral catheters.

Conclusion Single-Port VATS lobectomy is feasible and safe. It is becoming our approach of choice for early stage lung cancer due to its low incidence of complications and the very fast recovery with some patients going home as early as the day after surgery. This technique will make the case for surgery against newest techniques of radiotherapy for lung cancer.

P202 RISK FACTORS FOR EARLY MORTALITY AFTER LUNG CANCER RESECTION: A STUDY OF THE UK NATIONAL LUNG CANCER AUDIT

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Introduction Surgical resection is the best chance of cure for most patients with non-small cell lung cancer (NSCLC), for whom 5-year survival is otherwise poor. Selection of patients for surgery should include an estimation of the likely post-operative mortality risk but the tool often used in UK practise is a predictive score that was developed using a French database of thoracic surgical procedures, not specific to lung cancer.

Methods We used data from the National Lung Cancer Audit linked with Hospital Episode Statistics to estimate the influence of pre-operative patient and tumour factors, and the type of procedure on the odds of death at 30 and 90 days after potentially curative surgery for NSCLC. We used logistic regression to determine which factors were associated with early post-operative mortality and then calculated the percentage of patients who died within 90 days of surgery, stratified by the strongest predictors of early post-operative mortality.

Results We identified 12,096 patients who had potentially curative surgery for NSCLC in England between January 2004 and March 2010. Three per cent (n=387) and 6% (n=792) of patients died within 30 and 90 days respectively. Of the 12 clinical and socio-demographic factors assessed, age and type of procedure were consistently the most important predictors of early post-operative mortality: Odds ratio (OR) for death at 30 days for pneumonectomy compared with lobectomy 3.03, 95% confidence interval (CI) 2.32–3.94; and for each year increase in age OR 1.06, 95% CI 1.04–1.07. Performance status, co-morbidity score and sex and were also significantly associated with the outcomes. Table 1 shows the percentage of patients who died within 90 days of either lobectomy or pneumonectomy, stratified by age and performance status.

Conclusion The estimation of post-operative mortality risk is a crucial part of management of patients with NSCLC. Overall mortality following surgery for NSCLC in England is currently 3% at 30-days and 6% at 90-days. We present UK data, stratified by age and performance status, which could be used in clinical practise to assist with the estimation of early post-operative mortality risk.

Abstract P202 Table 1 Proportion of patients who died within 90 days of lobectomy or pneumonectomy for NSCLC (*italics show total number of patients who underwent the procedure in each category; # no deaths occurred in these groups*)

Performance status							
Age	0	1	2	3–4	0	1	2
<70	1% <i>1,611</i>	4% <i>974</i>	7% <i>160</i>	10% <i>30</i>	8% <i>307</i>	12% <i>205</i>	6% <i>31</i>
70–80	4% <i>831</i>	7% <i>833</i>	9% <i>128</i>	13% <i>30</i>	19% <i>106</i>	14% <i>94</i>	22% <i>18</i>
>80	7% <i>151</i>	6% <i>209</i>	24% <i>29</i>	# <i>4</i>	22% <i>9</i>	19% <i>16</i>	# <i>0</i>
	LOBECTOMY			PNEUMONECTOMY			

P203 ADDRESSING LOW SURGICAL RESECTION RATES FOR NON SMALL CELL LUNG CANCER: LOCAL INTERVENTION TO ADDRESS HIGH LEVELS OF EMERGENCY PRESENTATIONS AT LATE STAGE SHOULD BE EFFECTIVE.

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Introduction The National Lung Cancer Audit is a benchmarking tool for cancer networks and individual MDT's. The national average resection rate for all lung cancer patients is 13.7%. The NLCA recommend that all MDTs with a resection rate for NSCLC below 14%, and for stage 1a-2b below 52% should be reviewed to ensure that patients are being offered appropriate access to thoracic surgical expertise.

In the 2011 report our MDT had a resection rate for NSCLC of 7.8%. In light of this a review of all cancer patients was carried out. **Results and discussion** The resection rate for stage 1a-2b NSCLC patients was 48% which is similar to the national average. However the number of patients presenting with operable stage 1a-2b disease was unusually low at 12%.

An in depth review of 18 patients with operable NSCLC showed that there were four patients that did not have a curative resection. Two were performance stage 3-4 at presentation, one had a tumour in an inoperable location and the fourth had significant co-morbidities precluding surgery.

The opportunity for patients to be offered surgical treatment of stage 1a-2b NSCLC at this MDT is within national targets. However the low figure on the LUCADA data is due to an unusually high proportion of patients (88%) presenting with stage 3-4 disease. This is reflected locally where we also have very high rates of lung cancer presenting via emergency admissions, around 70%. The national average is around 30-40%, a figure which is already considered unacceptable.

Conclusion In order to improve the rate of curative resection and improves survival for our population the key intervention is to diagnose more NSCLC at an early stage. We need to target the local population to present early, and empower primary care to refer early. We will study the impact of the 2012 National Lung Cancer Awareness Programme with interest, although it is likely that a further local campaign targeted at our specific community may be needed if we are to turn around local resection rates.

P204 FRACTIONATED CARBOPLATIN AND VINOEBINE FOR ELDERLY AND POOR PERFORMANCE STATUS PATIENTS WITH NSCLC

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Patients with advanced NSCLC who are elderly and/or have poor Performance Status are generally considered unsuitable for chemotherapy and usually excluded from the possible benefits of systemic treatment. The outlook for this group of patients is poor, with typical survival times of four months or less.

If a tolerable form of systemic chemotherapy could be identified for elderly and poor PS patients, this would enable consideration of active rather than supportive care, and might improve overall survival rates.

We have treated 110 patients who were either aged over 70; (16%, n=18), PS 2 or greater (36%, n=40) or both; (46%, n=52) with systemic chemotherapy using fractionated Carboplatin and Vinorelbine. Carboplatin was administered at AUC 2.5 on day 1 and day 8, with oral Vinorelbine 60 mg/m² on a 21 day cycle. 40 patients had Stage III and 68 had Stage IV disease. Prophylactic levofloxacin 500 mg daily was given from day 9 to 20 of each treatment cycle. Renal function for Carboplatin dosage was measured using EDTA clearance. 67 patients were aged 70 or greater, and 22 more than 80 years. 90 patients were PS 2 or 3 and 51 patients were both over 70 and had poor PS.

The average number of cycles given to each patient was 3. 7% of patients died within 30 days of receiving chemotherapy treatment. The median survival for the whole patient group was 7.5 months. 72% percent of patients lived for 6 months or longer from commencement of chemotherapy. 40% of patients lived 9 months or longer and 22% of patients lived for a year or longer after starting chemotherapy. There was a strong statistical correlation between response to chemotherapy and survival.

In conclusion, systemic chemotherapy using fractionated Carboplatin and Vinorelbine should be considered as a possible treatment option for patients with advanced NSCLC who are elderly or have moderate to poor PS.

P205 SMOKING PREVALENCE AND SMOKING CESSATION AMONGST ACUTE MEDICAL ADMISSIONS

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Introduction and Objectives In 2009/10 there were 1.5 million hospital admissions in adults aged >35yrs with a smoking related illness. Smoking cessation is a cost effective clinical intervention, producing better health outcomes for patients and saving NHS resources. In 2010/11 total expenditure on 'NHS Stop Smoking Services' in England excluding prescriptions was £84.3million. NICE guidelines recommend that every smoker should be offered smoking cessation advice and prescription of nicotine replacement therapy (NRT).

The purpose of this study was to identify smoking prevalence in a general medical inpatient population at the time of admission and evaluating the hospital's provision of smoking cessation advice and NRT prescription.

Methods Using a cross-sectional study design, contemporaneous data was collected from the Acute Medical Unit (AMU) on 6 separate days. All admitted patients were eligible and interviewed using a standardised questionnaire. Three interviewers agreed a standard approach to questioning. Contemporaneous hospital notes and drug charts were reviewed. Exclusions to the study included cognitive impairment, language, not being present on the ward, being significantly clinically unwell and patient refusal.