intracellular IL-17A. Infected animals also developed peribronchial B220$^+$ cellular foci.

In mediastinal LNs following infection, PA-specific responses were dominated by B220$^+$ CD19$^+$ CD43$^+$ CD23$^-$B5$^+$ cells expressing and producing IL-17A and IL-22 as well as PA-specific IgM but not IgG. This PA-specific B1 response was not seen in the thoracic lymph nodes of sterile-bead treated animals. In splenocytes, there was a pre-existing B cell response to PA with identical features. Peritoneal B1a cells isolated from untreated controls also produced IL-17A, IL-22 and anti-PA IgM following infection, confirming the existence of pre-existing B1 cells that can respond to PA. In MT animals, chronic colonisation rates, bacterial burden and neutrophilic inflammation did not differ from WT littermates. However, classical PA-specific Th17 responses dominated following infection in MT animals, suggesting alternative compensatory IL-17 sources acting in the absence of B cells.

Conclusions In chronic pulmonary PA infection, innate-like B1 cells migrate to the site of infection and are a novel source of pro-inflammatory IL-17 cytokines.

Lung cancer: reasons to be cheerful

S106 "REASONS TO BE CHEERFUL"–DATA FROM YEAR 8 OF THE NATIONAL LUNG CANCER AUDIT

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Introduction The National Lung Cancer Audit, now in its 8th year, is run jointly by the Royal College of Physicians and The Information Centre for health and social care, and is commissioned by the Healthcare Quality Improvement Partnership (HQIP). Over this period, the audit has collected rich data of increasing quality and has charted improving standards of care for patients, as well as persistent variation across organisations which in most cases is independent of case-mix.

Methods Although several other countries also submit data to the audit, this abstract presents provisional results for England only for patients first seen in 2012.

Results 31,003 patient records were submitted with the improvement in recording of stage being the most noteworthy change in data quality. Full details are given in **Table 1**. Spirometry data is available for 63% of Stage I-II/PS 0–1 NSCLC patients. The histological confirmation rate has risen slightly after a dip in the previous year, and the proportion of patients with non-subtyped NSCLC continues to fall. There have been small but incremental rises in the anti-cancer treatment rate, the resection rate in histologically-confirmed NSCLC, and the proportions of patients having the input of specialist nurses and having the nurse present at the time of diagnosis. Increases are also noted in the proportion having CT scan before bronchoscopy (90%) and having chemotherapy for locally advanced NSCLC with good PS (57%).

Variation in practice still exists–for example, the resection rate in Stage I-II NSCLC varies from 35% to 62% across the cancer networks.

Our final presentation will contain further analyses of survival across the audit lifespan.

Conclusions The lung cancer community should be very proud of the quality of data that they provide to the audit, data which provides clear evidence of gradually improving standards of care. Demonstrating that these improved diagnostic pathways and increased treatment rates translate into longer survival has so far proven elusive since short-term survival is heavily influenced by the large numbers of patients presenting with advanced incurable disease, but as the data matures it is hoped that longer-term survival will indeed increase.

Abstract S106 Table 1.

	2005	2006	2007	2008	2009	2010	2011	2012
Data Completeness								
Number of cases	10,920	16,922	20,639	25,757	30,158	30,329	31,429	31,003
PS	66%	77%	80%	87%	88%	84%	89%	91%
Staging	51%	55%	70%	77%	80%	82%	84%	94%
Treatment	66%	72%	79%	82%	89%	89%	91%	91%
Process and Outcomes								
HCR	68%	66%	65%	66.7%	69.5%	76.5%	73.8%	75.5%
NSCLC NOS rate	-	36%	32%	33.6%	30%	24%	19%	16%
Discussed at MDT?	79%	84.3%	86.8%	88.6%	93.2%	96.1%	95.9%	95.6%
Anti-cancer treatment?	45%	50%	52%	54%	58.9%	58.5%	60.5%	61.0%
Overall resection rate	9%	9.4%	10.3%	11.2%	13.9%	13.9%	15.3%	15.5%
NSCLC resection rate	13.8%	14.3%	15.2%	16%	19%	18.3%	21%	22%
SCLC chemotherapy rate	57.7%	61.7%	64.5%	63%	66%	65%	68%	68%
Seen by LCNS	-	-	-	50.9%	64.4%	75.5%	79.4%	81.9%
LCNS at diagnosis	-	-	-	28.5%	41%	51.9%	58.7%	61.2%

HCR = histo-cytological confirmation rate; LCNS = lung cancer specialist nurse; NOS = not otherwise specified

S107 TREATMENT AND OUTCOMES FOR LOCALLY ADVANCED (STAGE IIIA) LUNG CANCER; 4 YEAR EXPERIENCE FROM THE NATIONAL LUNG CANCER AUDIT

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Background Surgery for lung cancer patients with mediastinal lymph node involvement (N2 disease) remains controversial. In one study (Albain 2009), progression-free (but not overall) survival was higher for patients who received induction chemoradiotherapy followed by lobectomy but post operative mortality was high in pneumonectomy patients. We describe treatment and outcomes for patients with pre-treatment IIIA disease using data submitted from England to the National Lung Cancer Audit (NLCA) 2008–2011.

Methods Patients with pre-treatment staging of T1–3, N2, M0 were included. Small cell cancer, mesothelioma and carcinoid were excluded. The extent and histological nature of pre-treatment N2 disease is not recorded in the NLCA. Survival analyses were performed according to treatment received.

Results 6,775 of 98,403 (6.9%) patients met the inclusion criteria. 2,669 (39%) patients had either chemotherapy or radiotherapy recorded and 2,250 (33%) patients had no treatment recorded. 948 (14%) patients received chemotherapy and radiotherapy however radiotherapy treatment intent was recorded as curative in only 12%. 907 (13%) patients had surgery recorded as part of their treatment plan. Of these, 70% had post operative pathological nodal status recorded (25% N0, 14% N1, 30% N2). Median survival following surgery for the 271