survival 259 days). The unadjusted hazard ratio for death at 1 year in those with an emergency presentation was 2.2 (95% CI 2.16–2.24, p<0.001), and after adjustment for age, sex, stage, performance status, co-morbidity and socioeconomic status, the corresponding value was 1.56 (95% CI 1.53–1.60, p<0.001).

Conclusions Emergency presentations are associated with poorer outcomes, but they also consume large amounts of healthcare spending which could be better utilised in a rapid and efficient referral and diagnostic pathway. Efforts to better understand the gaps in current service provision that allow so many patients to present so late are long overdue.

S93 COPD AND RISK OF LUNG CANCER: THE IMPORTANCE OF SMOKING AND TIMING OF DIAGNOSIS OF COPD

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Background The majority of cases of both lung cancer and COPD are attributable to cigarette smoking. Some consider COPD to be an independent risk factor for lung cancer, even after accounting for smoking, with estimates of increased risk up to 9-fold in previous studies. We undertook a large case-control study using prospectively collected data which allowed us to quantify this association in the UK population, whilst carefully controlling for smoking and the impact of timing of diagnoses.

Methods We used The Health Improvement Network, a UK general practise database, to identify incident cases of lung cancer and controls matched on age, sex and the practise with which they were registered. Using conditional logistic regression, we assessed the effects of timing of first diagnoses of COPD, pneumonia and asthma on the odds of lung cancer, adjusting for smoking habit and socioeconomic status.

Results Of 11,888 incident cases of lung cancer, 23% had a prior diagnosis of COPD compared with only 6% of the 37,605 controls. The odds of lung cancer in patients who had COPD diagnosed within 6 months of their cancer diagnosis were eleven-fold those of patients without COPD. However, when restricted to earlier COPD diagnoses, with adjustment for smoking, the effect markedly diminished (for COPD diagnoses >10 years before lung cancer diagnosis OR 2.18, 95% CI 1.87–2.54). The pattern was similar for pneumonia (see table). There was some diagnostic overlap between asthma and COPD but analyses which accounted for this produced similar results.

Conclusion The association between COPD and lung cancer is largely explained by smoking habit, strongly dependent on the timing of COPD diagnosis and not specific to COPD. There is, however, an extremely strong unadjusted relationship of both COPD and pneumonia with lung cancer in the 6 months immediately prior to lung cancer diagnosis. This is useful in a clinical context highlighting the need to consider a diagnosis of lung cancer when making new diagnoses of COPD or pneumonia, and supporting the current NICE recommendation that all patients should have a chest radiograph looking for evidence of lung cancer at the time of COPD diagnosis.

S94 STEREOTACTIC RADIOTHERAPY FOR STAGE 1 NON SMALL CELL LUNG CANCER: HOW MUCH OCCULT NODAL DISEASE ARE WE MISSING?

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Introduction and Objectives Stereotactic Ablative Body Radiotherapy (SABR) has been developed over the last two decades as a

Abstract S93 Table 1 Odds ratios for lung cancer (N=49493, 11,888 cases and 37,605 controls)

		Odds ratio (OR) 95% CI		Adjusted OR* 95% CI	
Smoking	Never	1.00		1.00	
Highest ever recorded	Trivial/light	6.00	5.42–6.65	5.88	5.31–6.52
prior to index date	Moderate	9.67	8.87–10.54	9.33	8.56–10.18
	Heavy/very heavy	15.58	14.35–16.91	14.88	13.71–16.16
	Smoker but unknown quantity	3.48	3.20–3.78	3.44	3.17–3.74
	Missing smoking status	1.79	1.59–2.02	1.76	1.56–1.99
COPD	No diagnosis prior to index date	1.00		1.00	
Interval between	within 6 months	11.47	9.38–14.02	6.81	5.49–8.45
first diagnosis &	6 months up to 1 year	4.76	3.85–5.89	2.52	2.00–3.19
index date	1 year up to 5 years	4.34	3.95–4.78	2.48	2.24–2.75
	5 years up to 10 years	4.83	4.29–5.44	2.68	2.36–3.05
	10 years or more	3.74	3.25–4.31	2.18	1.87–2.54
Pneumonia	No diagnosis prior to index date	1.00		1.00	
Interval between	within 6 months	14.91	11.75–18.94	13.33	10.24–17.35
first diagnosis &	6 months up to 1 year	3.37	2.42–4.70	2.89	1.99–4.18
index date	1 year up to 5 years	2.59	2.22–3.02	2.16	1.82–2.57
	5 years up to 10 years	2.52	2.04–3.10	2.11	1.66–2.67
	10 years or more	1.68	1.35–2.09	1.46	1.15–1.86

OR, Odds ratio. CI, confidence interval. COPD, Chronic obstructive pulmonary disease.
*Adjusted for smoking & Townsend quintile (a measure of socioeconomic status).