¹²C Lewanski, ¹³P Woll, ¹⁴B Crosse, ¹⁵K J O'Byrne. ¹Beaumont West of Scotland Cancer Centre, Glasgow, UK; ²New Cross Hospital, Wolverhampton, UK; ³University of Birmingham, Birmingham, UK; ⁴Birmingham Heartlands Hospital, Birmingham, UK; ⁵Derby Royal Hospital, Derby, UK; ⁶Royal Preston Hospital, Preston, UK; ⁷Aberdeen Royal Infirmary, Aberdeen, UK; ⁸Kent Oncology Centre, Kent, UK; ⁹Whittington Hospital, London, UK; ¹⁰Manor Hospital, Walsall, UK; ¹¹Whipps Cross Hospital, London, UK; ¹²Imperial College Healthcare, London, UK; ¹³University of Sheffield, Sheffield, UK; ¹⁴Huddersfield Royal Infirmary, Huddersfield, UK; ¹⁵St James' Hospital, Dublin, Ireland

Background Chemotherapy agents have dose-related effectiveness. The BTOG2 trial is a large phase III trial supported by the British Thoracic Oncology Group patients addressing this issue in which advanced non-small cell lung cancer were randomised to GC80 vs GC50 vs GCb6. Treatment delays and dose reductions due to toxicity mean that patients do not actually receive planned treatments and the BTOG2 trial provides an opportunity to investigate the delivered dose intensity (DDI) of these treatments in a large group of patients.

Methods Carboplatin dose was calculated using the Calvert equation, incorporating estimated GFR based on the Wright equation including creatinine kinase. Delivered dose intensity (DDI) for each patient was calculated as the mean of the per-cycle DDI which is the ratio of the delivered vs planned dose per day, calculated for platinum and gemcitabine separately.

Results Starting doses for cycle 1 were generally as per protocol. Doses of carboplatin are higher using estimated GFR from the novel Wright formula compared to standard Cockcroft–Gault approach. Dose reductions on cycles 2–4 were more apparent for GC80 compared to GC50 (56% vs 42% with =1 dose reduction) but dose delivered remained high with reductions to median of 77 mg/m² by cycle 4. Dose reduction rate was highest on GCb6 with 71% of patients experiencing =1 reduction, with median dose of AUC 4.5 at cycle 4. Gemcitabine dose reductions paralleled those seen with platinum, occurring more frequently with GCb6. Overall DDI for platinum was high for all treatments but lowest for GCb6 (96% vs 99% vs 87%). Response rates were GC50 23%, GC80 33% and GCb6 28%. There was no evidence that dose reductions, treatment delays or DDI was associated with response thus the delivered dose of GC80 was sufficient to generate this 10% difference.

Conclusion Doses of cisplatin at 80 mg/m² and carboplatin at AUC6 based on the Wright formula in combination with gemcitabine are deliverable but individuals have higher chance of treatment delays and dose reductions with carboplatin. However the reduced DDI does not appear to have an effect on clinical outcomes.

S88 DAY CASE CISPLATIN DELIVERY FOR ADVANCED NSCLC PATIENTS: FASTER, CHEAPER, MORE DESIRABLE

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¹H Jarrett, ¹M Hill, ¹L J Billingham, ²K J O'Byrne, ³D Ferry. ¹University of Birmingham, Birmingham, UK; ²St James' Hospital, Dublin, Ireland; ³New Cross Hospital, Wolverhampton, UK

Background The BTOG2 trial was a phase III randomised clinical trial in the treatment of advanced NSCLC. It investigated the optimal dose of cisplatin (50 vs 80 mg/m² 3-weekly), in combination with gemcitabine, and whether carboplatin (AUC6-Wright) could safely and effectively be substituted for the optimal cisplatin

dose. The protocol recommended cisplatin given as an out-patient regimen designed to ensure diuresis while maintaining electrolytic balance. A previously reported audit by these authors, 48% of hospitals surveyed were admitting NSCLC patients for cisplatin /gemcitabine chemotherapy.

Methods Between April 2005 and November 2009, 909 patients were randomised to receive cisplatin, in the UK and Ireland, as part of BTOG2. The trial mandated submission of proposed chemotherapy delivery schedules to ensure standard parameters in terms of: total duration of delivery, mandatory use of mannitol, short 1-h delivery of cisplatin and total fluid volume <4 l. Data mining was used to investigate AEs relating to renal function, electrolyte imbalance and ototoxicity. AEs that could feasibly be related to the manner in which cisplatin was administered.

Results 2853 treatment cycles were available for analysis. Average treatment duration decreased from nearly 9 to 6 h and total fluid volume from as much as 7 to <4 l. As a result of participating in BTOG2, 97% of surveyed hospitals were able to deliver cisplatin in a day case setting. Toxicities feasibly related to the manner in which cisplatin was administered were comparable to the current available literature with <1% experiencing grade >2.

Conclusion Current NHS Tariffs in the UK quote a 60% higher price for patients being inpatient cisplatin treatment as opposed to outpatient. With the prima facie case that patients prefer outpatient treatment, it is important to achieve the maximum benefit from the existing drugs in a clinically deliverable way. The results indicate that administering cisplatin via a short hydration schedule of <6 h, even at 80 mg/m², is safe. It is unlikely that the many hospitals who changed their practice would have done so without the support of a running randomised controlled trial.

S89 A META-ANALYSIS OF LIMITED RESECTION VS LOBECTOMY FOR STAGE I NON-SMALL CELL LUNG CANCER

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M Matsui, H Takagi, H Yamamoto, S Goto, T Umemoto. *Department of Cardiothoracic Surgery, Shizuoka Medical Center, Shizuoka, Japan*

WITHDRAWN

S90 NURSE SPECIALIST INPUT IS INDEPENDENTLY ASSOCIATED WITH ANTI-CANCER TREATMENT IN LUNG CANCER

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¹P Beckett, ¹I Woolhouse, ²R Stanley, ³L J Tata, ¹M D Peake, ⁴L Darlinson. ¹Royal College of Physicians, London, UK; ²The Information Centre for health and social care, Leeds, UK; ³University of Nottingham, UK; ⁴Glenfield Hospital, Leicester, UK

Introduction Lung cancer nurse specialists (LCNS) provide an extremely important service to patients. Their skill and expertise are valued very highly by both patients and colleagues, but it has proven difficult to measure their input objectively, leading to a lack of expansion (and in some areas contraction) of the workforce. Earlier this year the National Lung Cancer Audit (NLCA) reported that for 2009, patients who saw an LCNS were more than twice as likely to

Abstract S90 Table 1

	Number having treatment (%)		OR (95% CI) vs no nurse/unknown	
	Seen by nurse	Not seen by nurse/unknown	All patients	Patients surviving >28 days
Anti-cancer treatment	14 631 (64.5%)	3080 (40.4%)	2.04 (1.91 to 2.18)	1.87 (1.74 to 2.01)
Surgery	3456 (15.3%)	922 (12.1%)	1.06 (0.97 to 1.17)	1.01 (0.91 to 1.11)
Chemotherapy	7708 (34.0%)	1247 (16.4%)	2.05 (1.90 to 1.22)	1.87 (1.72 to 2.02)
Radiotherapy	7140 (31.5%)	1474 (19.3%)	1.57 (1.47 to 1.68)	1.47 (1.38 to 1.59)