Patients with radiologically, endoscopically or surgically proven SBNETs were included in this study, patients with unknown primary were excluded. A total of 623 patient year's follow-up, with a mean duration of follow-up of 5 years. The median age 61 years (range 24–84). Statistical analysis was performed using GraphPad Prism 5.1.

Results TNM staging and follow-up data were available in 118 cases. Due to low numbers of Stage 2 and 3 tumours these were group together for comparison. There were four cases with stage 2, 23 cases with Stage 3 and 91 cases with stage 4 small bowel NETs. Kaplan-Meier plots were constructed these demonstrated a significant difference in survival between patients with different stage of disease (p=0.03). There was no significant difference in survival between stage 2 and stage 3 diseases. There was a significant survival difference between G1 (Ki67 ≤2) vs G2 (Ki67 3-20) p=0.049. The overall 5-year and 10-year survival was 79.5% and 48.5% respectively for all patients independent of stage of disease. Of the patients that died the median time to death from diagnosis was 3 years (range 0-14). The cause of death was related to tumour burden in 50% (22 patients), carcinoid heart disease in 11.3% (five patients), post intervention (one case surgery, one case post-embolisation) 4.5%, small bowel obstruction or perforation 13.6% (six patients) and non-tumour related deaths in 24.5% (9) patients.

**Conclusion** This study demonstrates the overall 5-year and 10-year survival is higher than that published in the SEER data. The cause of death demonstrates the non-tumour or disease related deaths account for 24.5% of cases. There is significant survival difference between Stage IV disease and Stage II and III. There was no significant difference in survival between stage II or III. Low grade tumours Ki67  $\leq$ 2% was associated with better survival than Ki67 3–20. No patients had a Ki67 >20; therefore no analysis could be performed.

Competing interests None declared.

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PWE-126

## SURVIVAL AND RECURRENT DISEASE IN PATIENTS WITH RESECTED PRIMARY SMALL BOWEL NEUROENDOCRINE TUMOURS

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**Introduction** Small bowel neuroendocrine tumours (SBNETS) are the most common of all GI NETs. The majority of patients present with metastatic disease. It is unclear whether resection of the primary tumour improves prognosis. Furthermore, the recurrence rate of disease in patients following "curative" resection is not previously been investigated.

**Aims** To demonstrate if primary SBNET resection leads to improved survival and time to development of recurrent disease in patients following resection of primary tumour +/- mesenteric disease in an attempted curative resection.

**Methods** 138 patients with SBNETs seen in our institution; median duration of follow-up was 5 years. Median age 61 (range 24–84 years). Only patients in whom current disease state was known were included in the study. Primary site: Duodenal 2.1% (3),

Jejunal 2.9% (4), ileal 95% (131). Kaplan—Meier plots were constructed to determine survival. Staging was performed retrospectively using the TNM staging system proposed by ENETs.<sup>1</sup>

Results 100 patients had the primary resected, four patients had irresectable disease at laparotomy. The mean time to resection of primary from diagnosis was 5.8 months (range 0-78 months). There were no deaths within 30 days post surgery. Kaplan-Meier survival curves were constructed. There was a significant survival benefit in patients whom underwent resection of primary tumour compared to those who did not have the primary resected (120 vs 56 months, p<0.005). There were four patients with Stage 2, 23 patients with stage 3 disease and 91 with stage 4 disease. There were 10 patients in whom it was not possible to accurately stage of disease since the complete histology was not available, however, all of these patients had no evidence of recurrent disease in the initial post-operative period. No survival data were available for the remaining 10 patients. Of the patients who underwent attempted curative resection without distal metastatic disease at presentation, there were 36 patients suitable for analysis. Of these 15 of 36 (41.7%) patients have developed recurrent disease. Median period for development of recurrence was 55 months (range 11-606 months). There was no recurrence in the four patients with known stage 2 disease (4-168 months). Recurrence occurred in 8 of 23 patients (34.8%) with stage 3 disease.

**Conclusion** This study demonstrated a marked improvement in survival in patients who underwent resection of the primary tumour. Disease recurrence is common in patients following curative resection of locally advanced small bowel NETs. Surveillance for a period of only 5 years will not identify a number of patients who will proceed to develop recurrence.

Competing interests None declared.

## REFERENCE

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PWE-127

## TWO RANDOMISED, DOUBLE-BLIND, PLACEBO-CONTROLLED PHASE 3 TRIALS OF LINACLOTIDE IN ADULTS WITH IRRITABLE BOWEL SYNDROME: EFFECTS ON QUALITY OF LIFE

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**Introduction** Linaclotide, a minimally absorbed guanylate cyclase-C receptor agonist, is an investigational drug for the treatment of irritable bowel syndrome with constipation (IBS-C) that has shown statistically significant improvements in abdominal and bowel symptoms in two Phase 3 clinical trials. IBS-C is a common functional gastrointestinal disorder that affects a significant portion of the population and leads to reduced quality of life (QOL).

**Methods** Data evaluating the efficacy and safety of oral once-daily linaclotide 290  $\mu$ g (N=748) vs placebo (N=742) in patients with IBS-C were pooled from two Phase 3 clinical trials. Patients meeting modified Rome II criteria for IBS-C were randomised to receive either linaclotide or placebo treatment for 12 weeks. The Irritable Bowel Syndrome Quality of Life (IBS-QOL) questionnaire, comprising 34 items, each with a 5-point response scale (1= "not at all" through to 5= "extremely" or "a great deal"), was completed at baseline and also at the end of the treatment period. The IBS-QOL is scored "overall" and by eight subscales (Dysphoria, Interference with Activity, Body Image, Health Worry, Food Avoidance, Social Reaction, Sexual and Relationships). The change from baseline to week

A348 Gut July 2012 Vol 61 Suppl 2