12 scores were analysed using an analysis of covariance model. The IBS-QOL response rates (ie, patients with ≥10-point and ≥14-point increase) for the treatment groups were compared using Cochran-Mantel-Haenszel stratified by geographical region.

**Results** The changes from baseline in the IBS-QOL “overall” score and seven of the eight subscale scores (Dysphoria, Body Image, Health Worry, Food Avoidance, Social Reaction, Sexual and Relationships) were statistically significant for linacotide-treated patients vs placebo-treated patients (p<0.0001 for each comparison). The percentage of responders for the IBS-QOL “overall” score was statistically significantly greater for linacotide-treated patients vs placebo-treated patients at week 12 (64.3% linacotide-treated patients vs 52.6% placebo-treated patients for ≥10-point change; 53.8% linacotide-treated patients vs 59.1% placebo-treated patients for ≥14-point change). The most common adverse event among linacotide-treated patients was diarrhea.

**Conclusion** Compared with placebo, once-daily linacotide treatment for 12 weeks significantly improved “overall” QOL scores and seven out of eight important QOL domains, as measured by the IBS-QOL, in adults with IBS-C.

**Competing interests** R T Carson Employee of: Forest Research Institute, S Tourkodimitris Employee of: Forest Research Institute, B E Lewis Employee of: Ironwood Pharmaceuticals, J M Johnston Employee of: Ironwood Pharmaceuticals.

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**PWE-129** REVIEW OF SEHCAT USE AT ST. GEORGE’S 2005–2010: AN UNDERUTILISED INVESTIGATION?

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**Introduction** Bile acid malabsorption (BAM) is a frequently overlooked but easily treatable cause of chronic diarrhoea. The SeHCAT study is a simple non-invasive technique for diagnosing this condition. Three types of BAM are described. Type 1 is seen in patients with terminal ileal disease/resection or bypass. Type 2, known as primary or idiopathic BAM, is characterised by lack of discernable change in ileal histology or obvious clinical history or pathology to account for the malabsorption. Type 3 comprises all other causes of BAM including gastric surgery, pancreatitis, cholecystectomy or associated with microscopic colitis, coeliac disease, diabetes and small bowel bacterial overgrowth.

**Methods** Retrospective review of all SeHCAT studies performed between 2005 and 2010 at St George’s Hospital.

**Results** Between 1 January 2005 and 31 December 2010 55 SeHCAT studies were performed. Basic details were available on all 55, however only 44 sets of notes were available. 36 (65%) patients were female and 19 were male. Age ranged from 19 to 77 years old. 62% of studies were abnormal showing <15% retention at 7 days. Of these 11 (52%) demonstrated mild BAM, 8 (24%) moderate BAM and 15 (44%) severe BAM. Of the 34 patients with BAM 28 sets of notes were available. 10 (56%) had Type 1, 8 (29%) had Type 2 and 10 (56%) had Type 3 BAM. In those with proven BAM 46% underwent a trial of bile acid sequestrant (BAS). 88% of patients with follow-up details had good resolution of their symptoms. Response rates to treatment ranged between 60 and 100%. Six of the 10 type 1 BAM subjects had a trial of BAS; follow-up details are only available on 5, 2 of whom had noticed an improvement in symptoms (66%). Six of the 8 type 2 BAM subjects had a BAS, follow-up details are available on 5, 3 of whom had improvement of their symptoms (60%). Four of the 10 type 3 BAM subjects had a BAS, at follow-up details are only available on three all of whom had a good response (100%).

**Conclusion** As chronic diarrhoea is a common reason for GI referral, the small number of studies performed over a 5-year period suggests that SeHCAT is probably underused and bile acid malabsorption under diagnosed. As bile acid sequestrants provide good symptomatic relief, bile acid malabsorption is a useful diagnosis to make.

**Competing interests** None declared.

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**PWE-130** THE HUMAN GUT MUCOSAL COGNATE CELLULAR RESPONSE TO LIVE ORAL TYPHOID VACCINATION

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**Introduction** The human gut mucosal cellular response to oral vaccination has never been directly assessed. We studied the cognate cellular immune response to the live oral typhoid Ty21a vaccine in the gut mucosa of human volunteers, and compared it with that seen in peripheral blood.