OWE-27 ANALYSIS OF UC COLECTOMY RATES IN PRE- AND POST- BIOLOGIC ERA SOUTH-EAST SCOTLAND

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Introduction The use of biologic therapy for UC has lagged significantly behind that of Crohn's Disease in part because of restricted guidance from NICE. Following approvals of anti-TNF and vedolizumab for UC in early 2015 a significant increase in prescribing has been reported. Whether this has resulted in a decrease in colectomy rates has not been studied in a real-world setting. The aim of this study was to describe trends in colectomy rates for UC over time spanning the pre- and post-biologic era.

Methods All patients (adult and paediatric) with a diagnosis of UC who received maintenance biologic treatment and/or underwent a colectomy in Lothian, Scotland between 1st January 2005 and 31st December 2018 were identified by interrogating multiple clinical and administrative databases. Patient phenotype, prescribing and surgical data including complications were extracted by manual review of the electronic medical record. Linear and segmental regression were used to identify changes in the trend of biologic prescription and colectomy rates and to estimate the annual percent change. Colectomy rates were described per 100 UC patients, with yearly prevalence data obtained from the Lothian IBD Registry.

Results Of 175 patients treated with maintenance biologic therapy 14 (8%) were initiated 2005 to 2013 and 161 (92%) from 2014 to 2018 (Figure 1A). The number of patients starting treatment per year increased from 0.06 in 2005 to 1.37 in 2018 per 100 UC patients ($p < 0.001$). A total of 448 patients underwent colectomy. Colectomy rates per 100 UC patients fell throughout the study period; from 1.84 in 2005 to 0.45 in 2018 ($p < 0.001$). On segmental regression a join-point was identified at 2014; the annual colectomy rate fell by 5.81% per year from 2005 to 2014 and by 17.41% per year from 2014 to 2018 ($p < 0.05$). 41/175 patients underwent colectomy following biologic treatment (median duration 7.5 months), there was no increase in post-operative complication rates in biologic exposed patients vs no biologics.

Conclusion The increase in biologic prescribing for UC has been paralleled by a significant reduction in colectomy rates without increased post-operative complications. Whilst we cannot ascribe causality further work is under way to expand this cohort across Scotland.

Figure 1A

Abstract OWE-27 Figure 1

OWE-28 POST-IMAGING COLORECTAL CANCER IN THE ENGLISH NATIONAL HEALTH SERVICE BOWEL CANCER SCREENING PROGRAMME

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Introduction Computed tomography colonography (CTC) is the gold standard radiological investigation for colorectal cancer screening. The Post-Imaging Colorectal Cancer (PICRC) rate (i.e. colorectal cancers that develop after a negative CTC) is a key quality indicator of CTC; however, PICRC rates have not been previously reported in a national programme.

The World Endoscopy Organisation has, through a consensus process, agreed a standard methodology for calculating PICRC rates to enable international benchmarking (1). This rate (which the WEO terms PICRC-3y) is calculated by dividing the PICRCs detected 6 months to 3 years after a negative CTC (false negatives) by the sum of the true positives (defined by CTCs with a cancer diagnosis within 6 months) and false negatives (PICRCs). This study aimed to determine the rate of PICRC-3y in the English National Health Service (NHS) Bowel Cancer Screening Programme (BCSP).

Methods Data from each Bowel Cancer Screening Programme (BCSP) CTC is entered into a national database, the Bowel Cancer Screening System (BCSS). All colorectal adenocarcinomas, within and outside the BCSP, are validated and registered by the National Cancer Registration and Analysis Service (NCRAS). This retrospective observational study interrogated these databases to identify BCSP true positive and false negative CTCs. CTCs were included regardless of whether they were preceded or followed by a colonoscopy within a screening episode.

Results

	True Positive CTC	False Negative CTC	To year end	PICRC-3y Rate
200– 008	18	1	200–011	5.26% (95% CI 0.–6)
2009	45	2	2012	4.26% (95% CI 0.–4.5)
2010	55	5	2013	8.33% (95% CI 3.–8.1)
Total	118	8		6.35% (95% CI 2.–2.1)

Figure 1B