

From June to November 2018, a sample of 207 patients with UC under standard hospital follow-up, actively using TCUC was examined. For each OPA, the probability of escalation was calculated using their most recent SCCAI and IBD-Control reports. Clinic letters were assessed for the outcome of escalation of therapy or intervention.

**Results:** Of the 207 patients, 48 had a total of 53 OPAs over the 6-month period. Most, 33/53 (62%), OPAs resulted in no treatment escalation; 16/53 (30%) had escalation and 4/53 (8%) had de-escalation of therapy. De-escalation included stopping 5-ASA suppositories ( $n = 1$ ), prednisolone enemas ( $n = 1$ ), mycophenolate ( $n = 1$ ), or methotrexate ( $n = 1$ ). By setting the threshold for a timely OPD at a 5% estimated probability of treatment escalation, 13/16 (81%) escalation events would have been correctly identified. Of the 3 patients that would have been missed, the escalations involved increasing the dose of oral 5-ASA ( $n = 2$ ) or flexible sigmoidoscopy ( $n = 1$ ). By setting the estimated probability of escalation at 25%, only 9/16 (56%) would have been correctly identified. Of the 4 further patients that would have been missed, the escalation events involved starting topical therapy ( $n = 2$ ), increasing the dose of azathioprine ( $n = 1$ ), or increasing the frequency of vedolizumab ( $n = 1$ ).

**Conclusions:** Models that predict the likelihood of the need for escalation of therapy or intervention during an outpatient appointment, based on remotely collected PROMs, have the potential to improve outpatient clinic resource utilisation. Using the ETI calculator, up to 62% of planned outpatient appointments could have been deferred if the agreed threshold for an appointment was a 5% chance of treatment escalation or intervention.

## P568

### Bowel ultrasonography is useful to evaluate disease activity in ulcerative colitis patients

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**Background:** Colonoscopy (CS) is the gold standard for evaluating disease activity in ulcerative colitis (UC). However, CS is invasive and especially so for patients with severe UC. We therefore evaluated the usefulness of bowel ultrasonography (BUS), as a non-invasive and potentially cost-effective alternative to CS.

**Methods:** UC patients followed at Kagawa Prefectural Central Hospital from September 2014 to August 2018 were included in this study. One gastroenterologist performed BUS, and the UC-BUS Grade was scored from 0 to 4 at six segments of the large bowel: caecum, ascending colon, transverse colon, descending colon, sigmoid colon and rectum based on colonic wall thickness, structure and irregularity. Right after BUS, a different gastroenterologist performed CS and the Mayo Endoscopic Score (MES) was scored from 0 to 3 at the six segments of the large bowel mentioned above. The Spearman's rank correlation was calculated at each of the large bowel segments.

**Results:** A cumulative total of 230 UC patients (73 women and 157 men) were prospectively included. The median patient age at examinations was 45.5 years (range, 13–82 years). The highest MES in the six segments was as follows: MES 0: 61 patients,

MES 1: 60 patients, MES 2: 54 patients and MES 3: 55 patients. The success rate of ultrasound visualisation was 100% (230/230) in the caecum, ascending colon, transverse and sigmoid colon, and 99.6% (229/230) in the descending colon, and 96.5% in the sigmoid colon. Spearman's rank correlation was 0.32 (caecum), 0.56 (ascending colon), 0.52 (transverse colon), 0.55 (descending colon), 0.61 (sigmoid colon), 0.52 (rectum) and 0.56 (all segments) ( $p < 0.0001$  in all segments).

**Conclusions:** BUS is useful to evaluate disease activity in all the segments of the large bowel of UC patients.

## P569

### A national, retrospective, observational study on the use of 5-aminosalicylates (5-ASA) in Crohn's disease (CD)

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**Background:** 5-ASA is an established first-line therapy for CD, though there are few recent studies on its use in routine clinical practice. The aim of this database investigation was to provide real-world evidence on the use of 5-ASA utilising data from the UK Clinical Practice Research Datalink (CPRD).

**Methods:** Adult patients (aged  $\geq 18$ ) at the time of first prescription of 5-ASA (index date) with a diagnosis of CD, having been prescribed a 5-ASA at any time between 01 January 2006 and 07 May 2018, were included for analysis. Outcomes included continuation rates, treatment patterns, and resource use.

**Results:** Of 21456 patients with CD, 9492 (44.2%) had been prescribed 5-ASA, with the majority (5761; 60.7%) starting on oral 5-ASA as monotherapy (Table). Of the total population on 5-ASA, 58.3% (5537) did not require a dose change, 67.6% (6416) did not require supplementary treatment (eg, corticosteroids, immunosuppressants, etc.) during 5-ASA treatment, and 4.6% (436) required a switch to another treatment. Resource use was significantly decreased in the year after 5-ASA initiation compared with the year before 5-ASA initiation (specialist referrals [285 vs. 110], hospitalisations [2475 vs. 1567] and hospitalisation days [19645 vs. 11574]; [all  $p < 0.001$ ]). Significantly fewer patients required GI surgery during 5-ASA treatment than before treatment (5.3% [501] vs. 7.6% [721];  $p < 0.001$ ). In this type of study potential confounding factors, such as evolution or modification of the disease by treatment, are likely to be present and need to be considered. Patients remained on 5-ASA for a mean of 6.4 years (SD 6.1; median 4.7 years, IQR 1.2–10.1) before discontinuation. 77.4% (7347) of patients were still on 5-ASA at year 1, 68.1% (6464) at year 2, 48.5% (4604) at year 5, and 25.5% (2416) at 10 years. Longer retention on 5-ASA was associated with: a shorter time from CD diagnosis to first 5-ASA script (correlation:  $p < 0.001$ ); use of an oral 5-ASA formulation at initiation (correlation: tablets:  $p < 0.001$ ; granules:  $p = 0.008$ ); and dose optimisation (increase: 89.3 months, decrease: 111.4 months vs. 45.5 months for no change; both  $p < 0.001$ ).