Methods IF proteins were extracted from individual biopsies in patients with long-standing pan-colitis (LSPC) in clinical, endoscopic and histological remission ($n = 10$) and with recent onset ulcerative colitis (ROUC) also in remission ($n = 8$). Each sample was dot-blotted on a membrane followed by immunoblotting for identification and quantification of keratins (8, 18 and 19) sequentially. MCF-7 cell line was used as control in each experiment. Relative Keratins concentration for each dot-blotted sample was inferred by determining its signal intensity relative to the MCF-7 keratins signal intensity measured in turn by densitometry. Statistical analysis to compare the two groups was made separately for K8, K18, K19 using Mann-Whitney U test.

Results Median relative IF protein levels in patients with LSPC were 1.54, 0.41 and 2.12 for K8, K18 and K19, respectively were significantly higher than those with ROUC: 0.03, 0.05 and 0.07 for K8 ($p = 0.001$), K18 ($p = 0.002$) and K19 ($p = 0.021$), respectively. Median Baron's endoscopy score in patients with LSPC and ROUC were 0 (range 0–1) and 1 (range 0–1), respectively. Median histological activity index in both groups were 0 (range 0–1).

Conclusion This study confirms increased expression of insoluble keratins in colonic epithelial cells during LSPC in remission relative to the levels in ROUC and validate our previous MS observations. Restoration of keratins in quiescent LSPC may be a protective mechanism against recurrent inflammation and colorectal cancer.

Disclosure of Interest None Declared.

PTU-065 IS THERE A ROLE FOR FAECAL CALPROTECTIN IN THE INVESTIGATION OF DIARRHOEA IN PATIENTS WITH HIV?

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Introduction Diarrhoea is the most common gastrointestinal symptom in patients with HIV. Faecal calprotectin (FCP) is a useful test in the investigation of chronic diarrhoea in the general population.¹ The sensitivity of this test in HIV-patients with chronic diarrhoea is unknown.

Methods HIV-positive patients undergoing investigation for CD between January 2011 and August 2013 were identified. Demographics and clinical data including measurement of FCP and endoscopy findings were taken from the patients medical records

Results 60 patients were referred by the HIV team to Gastroenterology clinic for investigation of CD. There were 55 (92%) males, mean age was 44 years. All were receiving antiretroviral therapy. No patients had a previous history of Inflammatory Bowel Disease (IBD), 59/60 had negative stool cultures. One patient was diagnosed with giardiasis and excluded from the study. Of the remaining, 54/59 (92%) patients had FCP measured, of which 36 (67%) demonstrated inflammation. Of these 31/36 (87%) patients with elevated FCP underwent lower GI endoscopy. 9/31 (30%) patients had abnormal macroscopic findings including mild non-specific inflammatory changes (4/31), polyps (2/31), threadworms (1/31) and ileitis (2/31). None had evidence of IBD.

Conclusion In HIV positive individuals receiving antiretroviral therapy 30% patients with elevated FCP had macroscopic disease. No patients had a diagnosis of IBD. No cause beyond anti-retroviral medication was found. FCP is not a useful test to investigate chronic diarrhoea in this patient cohort.

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Disclosure of Interest None Declared.

PTU-066 A MODEL TO ASSESS THE COST OF FLARE IN ULCERATIVE COLITIS (UC) TO THE NHS

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Introduction Disease flare in ulcerative colitis (UC) can result in substantial cost implications to the NHS. While the costs associated with treatment and management of UC are well-documented, estimates of the cost of flare are lacking. A cost analysis was performed to construct a model to estimate the costs associated with managing a flare across variable pathways.

Methods A decision tree model was developed in Excel to estimate the direct medical costs of flares of various clinical severity. Within the model, the baseline UC patient cohort was maintained on Asacol® (mesalazine) at a maximum dose of 2.4 g/day. Simplified care pathways were mapped, assuming that patients would either be treated and managed in primary care, or as an outpatient, or admitted to hospital. Taking a conservative approach, costs for surgery and other procedures e.g., stoma care were excluded as these outcomes are rare and inclusion would significantly increase average flare cost estimates. Treatment and management strategies were based on best practice guidelines, published data sources and clinical expert opinion. Drug costs were calculated using the British National Formulary (BNF) and healthcare management costs were based on published unit costs. The relative proportions of patients likely to follow each route of the treatment pathway were estimated and weightings were applied to enable calculation of an average cost of flare.

Results The estimated annual cost to manage a patient with UC in remission was £955. The estimated cost to control a flare in primary care was £175 and for secondary care outpatient management was £578. For secondary care inpatient management, the estimated cost was £3488. If a biologic/ciclosporin was needed, the estimated cost rose to £4272. All costs were inclusive of clinical investigations and treatment reviews. The proportions of patients managed via each pathway were applied to calculations resulting in an estimated average cost of flare of £984.

Conclusion A model was developed, based on simplified decision tree pathways to enable estimation of the cost of flare in UC. Depending on the severity of the flare episode, costs ranged from £175 to £4272. In the future, this model can be used for economic evaluations of interventions to reduce the risk of flare in UC and to help understand the costly aspects of managing ulcerative colitis.

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PTU-067 THE FATE OF FLAT LOW-GRADE DYSPLASIA IN ULCERATIVE COLITIS

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Introduction The natural history of low- grade dysplasia (LGD) found during colonoscopic surveillance of ulcerative colitis is not clear. The optimum strategy, either continued surveillance or immediate colectomy, is debated. The rate of progression of LGD to more advanced neoplasia has been reported to be as low as 0% after 10 years and as high as 53% after a mean follow-up of 5 years.^{1,2}

Methods All cases of LGD detected at colonoscopy in patients with ulcerative colitis performed between May 1995 and May 2010 were identified, retrospectively, from the pathology database at a single tertiary centre. Endoscopy records and case notes were reviewed and the outcomes for patients undergoing either immediate colectomy or further surveillance endoscopy were included.

Results 22 patients with LGD were identified. 9 patients had endoscopically resectable adenoma – like lesions, and were excluded from further analysis. 13 patients were identified as having unifocal, flat, LGD. The median age was 68 (range 44–87). The median time from diagnosis of ulcerative colitis was 14 years (range 1 to 29 years). All patients were on 5-ASA's throughout the time period sampled.

8 patients elected to have an immediate colectomy. 5 of 8 resection specimens were negative of LGD, with features of the underlying Ulcerative Colitis. Unifocal LGD was identified in 3 of 8 patients. No advanced neoplasia (HGD or cancer) was identified.

4 patients continued surveillance with a median follow-up of 6.5 years (range 5–9) and a median number of colonoscopies of 5 (range 3–7). LGD was identified on further colonoscopy in 1 patient. This patient then opted for colectomy, but no LGD was identified in the resected specimen. 3 patients had further LGD identified during surveillance endoscopy. The remaining patients had LGD identified at colonoscopies performed outside their scheduled surveillance interval. To date those undergoing surveillance have had no subsequent LGD, HGD or carcinoma.

Conclusion The finding of LGD in patients with ulcerative colitis is associated with a low risk of synchronous or subsequent advanced neoplasia. Continued surveillance may be a reasonable option in this group of patients.

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Disclosure of Interest None Declared.

PTU-068 EFFICACY AND SAFETY OF GRANULOCYTE, MONOCYTE/MACROPHAGE ADSORPTIVE APHERESIS IN STEROID-DEPENDENT ACTIVE UC WITH INSUFFICIENT RESPONSE OR INTOLERANCE TO IMMUNOSUPPRESSANTS AND/OR BIOLOGICAL THERAPIES (THE ART TRIAL): WEEK 12 RESULTS

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Introduction Current medical options for patients with refractory steroid-dependent, chronic-active ulcerative colitis (UC) are limited. Immunosuppressants (IS) and biologics carry risks of severe side effects and patients may not respond. The efficacy of

of Granulocyte, Monocyte/Macrophage adsorptive (GMA) apheresis with Adacolumn® is supported by an increasing number of randomised controlled trials. The present study intended to generate further data to document efficacy and identify subpopulations of refractory UC that may benefit from GMA apheresis.

Methods This was an uncontrolled, open-label, multicenter trial conducted in the UK, France and Germany. Consecutive eligible patients (age >18 <75 years) with steroid-dependent active UC, a Rachmilewitz (CAI) index ≥6, an Endoscopic Activity Index (EAI) ≥4, and insufficient response or intolerance to IS and/or biologicals were included. Patients received at least 5 weekly GMA aphereses. Evaluation visits were planned at Week 12, 24 and 48. The primary endpoint was the remission rate (CAI ≤4) at Week 12 in the Intention-to-treat (ITT) population.

Results We report interim results from the 12 Week visit. The ITT population comprised 84 enrolled and treated patients at cutoff date. At Week 12, 33 (39.3%) subjects had achieved remission. For 30 patients with prior failure of IS and/or biologicals, the remission rate was 30%. Secondary efficacy parameters were clinical response with reduction in CAI of ≥3 (47 or 55.9%), steroid-free remission (23%) and steroid-free response (36%). In remitters, EAI dropped from 8.2 to 4.4; in responders from 8.6 to 5.3. Quality of Life improved in parallel. Most subjects had Adverse Events (AEs) of mild or moderate intensity. Six (7.1%) of 85 subjects in the Safety Population experienced serious (SAEs), all in the treatment-emergent period; however none was considered related to study treatment. No new safety signals were seen.

Conclusion This study describes a larger cohort of steroid-dependent moderate-severe active UC patients intolerant or refractory to IS and/or biologicals treated with GMA apheresis. Apheresis was safe and showed benefit in over half of these patients and remission in 39.3% at week 12. Leukocyte aphaeresis (Adacolumn) for IBD has been reviewed by NICE as suitable for carefully selected patients with IBD, and these results help define this sub-group. Further controlled studies are needed.

Disclosure of Interest None Declared.

PTU-069 740 PATIENT YEARS OF ANTI-TNF SAFETY DATA IN CROHN'S DISEASE PATIENTS

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Introduction Anti-Tumour Necrosis Factor alpha antibodies (anti-TNFs) are widely used for the treatment of severe and fistulising Crohn's Disease (CD). They are, however, associated with a number of adverse events (AEs) including infections, neutropenia, malignancy, demyelinating disease and infusion reactions. We aimed to evaluate the safety profiles Adalimumab (AI) and Infliximab (Ifx) amongst patients with CD at Central Manchester University Hospitals.

Methods 217 CD pts were identified retrospectively from our anti-TNF database; data was retrieved from clinic letters. A probit regression was used to correlate AEs and pt characteristics.

Abstract PTU-069 Table 1

	Mild	Moderate	Severe
Ifx	30 (22.6%)	23 (17.3%)	7 (5.2%)
AI	40 (28.3%)	18 (12.8%)	2 (1.4%)