Results In total, 527 patients were enrolled on the registry; of whom, 54 were excluded due to incomplete information. Out of 473 patients [Collagenous colitis 328(69%), Lymphocytic colitis 127(27%), 18 unspecified (4%)] included in the analysis, 358(76%) were female, aged 20–96 (median 67) years. Watery diarrhoea (463, 98%) and abdominal pain (111, 23%) were predominant symptoms. Weight loss was noted in 115 (24%).

Eight (2%) patients developed complications; 2 adverse drug reactions, 1 colorectal malignancy and 3 required surgical intervention for intractable symptoms related to MC.

Variations were noted in the following areas:

- 1. Patient journey:** Whilst 230(49%) were referred directly to Gastroenterology, 109(23%) were referred initially to Surgery– with subsequent referral to Gastroenterology following colonoscopy. This led to delay in therapy initiation in a proportion of patients. In one unit, average length of symptoms at diagnosis was 5.7 months, with an average length of 9.1 months to see Gastroenterology.
- 2. Medications:** There was no evidence of medication review in 121(26%) patients. Reducing-dose Budesonide was the first line treatment in 205(43%). Though 174(37%) did not require initial medical therapy; of these 18(10%) required subsequent treatment with Budesonide. There are 4(1%) patients on biologics and 4(1%) patients on immunomodulators specifically for MC– all of which were treated with budesonide first line.
- 3. Follow-up:** A majority, 337(71%) were followed-up in clinic, with 260(77%) later discharged. Relapse was noted in 118 (25%) patients.

Conclusions Initial findings from the first MC Registry in the UK demonstrate variability in referral pathway, patient journey and management. Data suggests association with alarm features and significant complications.

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VEDOLIZUMAB IS AN EFFECTIVE TREATMENT FOR ANTIBIOTIC REFRACTORY CHRONIC POUCHITIS

¹Sam Harrison*, ²Sara Cesano, ²Gareth-Rhys Jones, ²Philip Jenkinson, ²Alan Shand, ²Charlie Lees, ²Ian Amott. ¹University Of Edinburgh, Edinburgh, UK; ²Edinburgh IBD Unit – Western General Hospital, Edinburgh, UK

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Introduction Vedolizumab is a gut selective monoclonal antibody to $\alpha 4\beta 7$ integrin that can successfully treat IBD, currently licenced for the treatment of Ulcerative colitis and Crohn's disease. Chronic pouchitis is the most common complication arising following proctocolectomy, affecting 15–50% of patients after ileo-anal pouch formation. To date there is little data regarding the use of vedolizumab in pouchitis. We aim to evaluate the efficacy and safety of vedolizumab in the treatment of chronic antibiotic refractory pouchitis.

Methods This was a retrospective study that took place in the Edinburgh IBD unit between July 2015 and September 2019. Patients were included in the study who had confirmed chronic pouchitis and had failed to respond to antibiotic therapy with at least 6 months of follow up. We assessed clinical disease activity by completing the Pouchitis Activity Score

Abstract P109 Figure 1

clinical sub-score. We also assessed blood tests including CRP, faecal calprotectin and inflammatory activity on pouch biopsy. In our statistical analysis continuous variables were assessed with paired samples t tests, whilst changes in frequencies were assessed with chi-squared tests. Adverse events were recorded quantitatively.

Results A total of 13 patients were included in the study. 6 females, median age 50 years (IQR 44.5–62). All patients underwent colectomy for failure of medical therapy. Following vedolizumab treatment, 92% of patients experienced a reduction in Pouchitis Activity Score clinical sub-score, with median score falling from 10 at baseline to 2.5 at follow up ($p < 0.0001$, IQR= 8–12 at baseline, 0–5 at follow up). Median faecal calprotectin fell from 390 $\mu\text{g/g}$ to 197 $\mu\text{g/g}$ at 1 year ($p = 0.02$, IQR= 340–644 at baseline, 60–283 at follow up). Active inflammation levels on pouch biopsy decreased in 71% of participants (Baseline– 4 mild, 1 moderate, 2 severe. Follow up– 3 mild, 4 none. Chi $p = 0.0008$. No serious adverse events were reported and only 15% of patients reported mild adverse events (1 arthropathy, 1 rhinitis).

Conclusions In our cohort, vedolizumab is an effective and safe treatment for chronic antibiotic refractory pouchitis and produces improvements in symptoms, biochemical tests and histological inflammation. Whilst larger studies are needed, this is a treatment option for those who have failed conventional medical therapy.

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COST-EFFECTIVENESS OF A 17-GENE CLASSIFIER TO GUIDE TREATMENT CHOICE IN CROHN'S DISEASE IN THE UK

¹Susan Griffin, ¹Vanessa Buchanan, ²James C Lee, ²Eoin F McKinney, ³Paul Kinnon, ³Karen Hills. ¹Predictimmune, Cambridge, UK; ²Department of Medicine, University of Cambridge, Cambridge, UK; ³Cogentia Healthcare Consulting, Cambridge, UK

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Introduction This study examines the cost-effectiveness of PredictSURE in guiding the early use of biologic therapy in newly diagnosed CD patients, at high-risk of requiring early and frequent treatment escalations in the UK. PredictSURE IBD™ is a 17-gene, whole blood-based qPCR-based classifier that predicts long-term outcome in IBD, enabling early personalised treatment strategies through the early use of biologics in high-risk patients.

Methods A decision tree leading into a Markov state-transition model was constructed in MS Excel to compare two treatment approaches: 1) standard of care therapy following established

Abstract P110 Figure 1 Model schematic
CDAI, Crohn's disease activity index

UK clinical guidelines, consisting of sequences of immunomodulator followed by biologic upon relapse ('step-up' treatment), 2) targeted therapy guided by PredictSURE, whereby patients identified as high-risk receive sequences of anti-TNF biologic treatment followed by other biologic classes upon relapse ('top-down' treatment), figure 1. Parameters were informed by patient data from PredictSURE clinical studies and the literature.

Results Top-down treatment guided by PredictSURE resulted in an incremental cost-effectiveness ratio (ICER) of £7,179 per quality-adjusted life year (QALY), with £1,852 incremental costs and 0.258 incremental QALYs vs. standard of care generated over a 15-year time horizon. Additional costs relating to earlier biologic use were offset by reductions in the costs of flares, hospitalisations and surgery. Incremental QALYs were driven by increased time spent in remission and improved quality of life from reduced flares and surgery. The model was most sensitive to the time horizon, rates of mucosal healing on top-down vs. step-up therapy, the costs of hospitalisation and the costs and quality of life in the severe disease health state.

Conclusion Modelling shows that upfront use of biologic guided by PredictSURE could substantially improve clinical outcomes for high-risk patients by increasing remission rates and reducing flares, surgery and treatment escalations. The ICER for PredictSURE was well below the £20-£30 k/QALY threshold used by the UK National Institute for Health and Care Excellence (NICE). Top-down treatment guided by PredictSURE would not only represent a treatment paradigm shift for CD patients but would also be a highly cost-effective use of resources in the UK National Health Service.

Introduction This study evaluated corticosteroid and antibiotic prescribing during the first 12 months of first-line biologic therapy in patients with ulcerative colitis (UC) initiated on vedolizumab (VDZ) compared with patients initiated on anti-tumour necrosis factor- α (anti-TNF) agents.

Methods A multicentre, retrospective observational study was conducted in six United Kingdom secondary care centres. Eligible consenting patients were aged ≥ 18 years at initiation, without primary fistulising disease or acute severe disease. Patients were matched for age, gender, Montreal classification of disease extent and steroid use at initiation.

Results The study included 56 patients initiated on VDZ and 56 patients initiated on anti-TNF (table 1). During the overall 12 month post-initiation observation period, patients initiated on VDZ and anti-TNF were prescribed a median of 1.0 (inter-quartile range [IQR] 0.0–4.8) and 2.0 (IQR 0.0–7.8; Mann-Whitney U test $P=0.16$) courses of corticosteroids, respectively. During the post-initiation maintenance period (week 14 to month 12), 37% (95% confidence interval [CI] 24%–49%; $n=52$) of patients initiated on VDZ and 57% (95%CI 44%–70%; $n=53$; $\chi^2 P=0.039$) of patients initiated on anti-TNF received at least one course of corticosteroids. During the overall 12 month post-initiation observation period, patients initiated on VDZ and anti-TNF were prescribed a median of 0 (range 0–4) and 0 (range 0–2; Mann-Whitney U test $P=0.42$) courses of antibiotics, respectively. During the post-initiation maintenance period, 11% (95%CI 3%–19%; $n=56$) of patients initiated on VDZ and 16% (95%CI 6%–26%;

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STERIOD AND ANTIBIOTIC PRESCRIBING RATES IN UK PATIENTS WITH ULCERATIVE COLITIS ON VEDOLIZUMAB VS ANTI-TNF

¹Gareth Parkes*, ²Ayesha Akbar, ³Ian Beales, ⁴Martin Buckley, ⁵Said Din, ⁶Tom Creed, ⁷Nikolas Plevris, ⁸Niamh Hogan, ⁹Nicola Heggs, ¹⁰Simon Meadowcroft, ¹¹Mike Wallington, ¹²Aileen Fraser. ¹The Royal London Hospital, London, UK; ²St. Mark's Hospital, London, UK; ³Norfolk and Norwich University Hospital, Norwich, UK; ⁴Mercy Hospital, Cork, Ireland; ⁵Bristol Royal Infirmary, Bristol, UK; ⁶Royal Derby Hospital, Derby, UK; ⁷Western General Hospital, Edinburgh, UK; ⁸Takeda UK, London, UK; ⁹OPEN VIE, Marlow, UK

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Abstract P111 Table 1 Characteristics at initiation of first-line biologic

Characteristics at initiation	VDZ (n=56)	Anti-TNF (n=56)
Age (years), mean (standard deviation)	46.8 (16.9)	45.7 (17.5)
Female, n (%)	25 (45%)	25 (45%)
Disease duration (years), median (IQR)	6.9 (3.1–13.6)	4.7 (1.8–14.9)*
Montreal classification, n (%)	5 (9%)	5 (9%)
E1	29 (52%)	29 (52%)
E2	22 (39%)	22 (39%)
E3		
On corticosteroids	31 (55%)	31 (55%)

*Mann-Whitney U-test $P=0.27$