role than previously thought. We have now investigated whether IKKα represents a potential therapeutic target for IBD using murine epithelial intestinal organoids.

Methods Intestinal crypts were harvested from C57BL/6J mice (n=3) and cultured into enteroids in 3D using a Matrigel matrix. Enteroids were either untreated or administered 0.6 μM of IKKα inhibitor SU1433 on day 3 after passage and stimulated with 30 ng/ml TNF on day 4. Enteroid morphological changes were assessed daily using the Enteroid Circularity Score. Immunohistochemistry for active caspase-3 and Ki-67 was performed to assess apoptosis and cell proliferation. Enteroids were harvested at 3, 6, 24, and 48 hours after stimulation and RT-qPCR was performed to determine the expression profiles of selected inflammation-related and non-canonical NF-κB related target genes.

Results Enteroids pre-treated with SU1433 and then stimulated with TNF were protected against enteroid rounding compared to TNF treatment alone. There was also a marked decrease in active caspase-3 positive apoptotic cells 48 hours following TNF in the SU1433 pre-treated group compared to the TNF only group. At the 3, 6, 24 and 48 hour time points NF-κB2, TNF, CXCL9 and ICAM-1 expressions were significantly increased compared to TNF-naïve groups, however there was no significant difference between the SU1433+TNF and TNF only treatment groups.

Conclusions TNF induced enteroid rounding and promoted the expressions of several inflammation related genes in the NF-κB signalling pathways. Pharmacological inhibition of IKKα prevented TNF-induced enteroid rounding. This was associated with a significant decrease in apoptosis on histology. Together, our findings suggest that IKKα may be a potential therapeutic target for the prevention of IBD relapse.

P162 COMPARATIVE EFFECTIVENESS OF VEDOLIZUMAB AND USTEKINUMAB IN ANTI-TNF REFRACTORY CROHN'S DISEASE: MULTI-CENTRE RETROSPECTIVE COHORT STUDY

[1]Tristan Townsend*, [2]Violeta Razanskaite, [1]Stephanie Michail, [1]James Morgan, [1]Michael Davies, [1]Daniel Storey, [3]Christopher Watters, [3]Douglas Penman, [4]Mira Swaminathan, [4]Ian Reilly, [3]Paul Flanagan, [1]Sreedhar Subramanian. *[1]Royal Liverpool University Hospital, Liverpool, UK; [2]Aintree University Hospital, Liverpool, UK; [3]Arrowe Park Hospital, Upton, UK; [4]Countess of Chester Hospital, Chester, UK*

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Introduction Anti-tumour necrosis factor (TNF) agents are effective in Crohn's disease (CD), but up to 30% of patients fail to respond or develop intolerance and require alternative biological therapy. Both vedolizumab and ustekinumab are licensed to treat anti-TNF refractory CD patients. Clinical trials of vedolizumab and ustekinumab in anti-TNF refractory patients seem to suggest comparable efficacy, but no real-life data exist to facilitate decision-making. We conducted a multicentre retrospective cohort study to assess the comparative effectiveness of vedolizumab and ustekinumab in treating anti-TNF refractory CD.

Methods Anti-TNF exposed CD patients then treated with vedolizumab or ustekinumab were included. Disease activity was monitored serially by calculation of Harvey-Bradshaw index (HBI) for up to 12 months. Faecal calprotectin (FC) at baseline and subsequent visits were recorded if available. Clinical response was defined as decrease in HBI ≥3 and remission by HBI <5. We compared the effectiveness of ustekinumab and vedolizumab on an intention to treat basis.

Abstract P162 Table 1

		Vedolizumab n = 85	Ustekinumab n = 45	Fisher's Exact Test (P value)
Response	2 months	35%	49%	0.138
	4 months	39%	56%	0.095
	6 months	39%	49%	0.351
	12 months	44%	53%	0.356
Remission	2 months	16%	36%	**0.017***
	4 months	21%	40%	**0.038***
	6 months	39%	49%	0.351
	12 months	44%	53%	0.356
Steroid-Free Remission	2 months	12%	29%	**0.028***
	4 months	20%	38%	**0.036***
	6 months	15%	38%	**0.008***
	12 months	25%	42%	**0.047***

Results After exclusion of patients without evaluable data, 85 patients commencing vedolizumab and 45 commencing ustekinumab therapy were included. Baseline characteristics (age, disease location, behaviour, smoking status and baseline FC) were comparable in both cohorts. 29 (34%) of patients receiving vedolizumab and 6 (13%) receiving ustekinumab stopped treatment within 12 months due to adverse events or lack of response. Clinical response rates were similar between treatments. Clinical remission rates, however, were greater at 2 and 4 months in patients treated with ustekinumab. Steroid-free remission rates were greater in patients treated with ustekinumab at all time points (see table 1 - Response and remission rates for vedolizumab and ustekinumab).

Significance set at p = 0.05. *indicates statistical significance reached

Conclusions Vedolizumab and ustekinumab effectiveness was broadly comparable to that seen in their landmark clinical trials. A higher proportion of patients receiving vedolizumab needed to change treatment within 12 months. Higher rates of steroid-free remission were seen in patients treated with ustekinumab at all time points.

P163 EMERGENCE/EXACERBATION OF INFLAMMATORY BOWEL DISEASE IN PATIENTS RECEIVING SECUKINUMAB FOR ANKYLOSING SPONDYLITIS -CASE SERIES

Qamar Tufail, Shivanee Nakum*, Sudarshan Kadri, Patricia Hooper, Veena Patel, Rebecca Harrison. *Leicester Royal Infrimary, Leicester, UK*

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Secukinumab is an IgG monoclonal antibody against interleukin-17A and is licenced for the treatment of ankylosing spondylitis (AS), psoriatic arthritis and plaque psoriasis. IL-17 is one of the pro-inflammatory cytokines involved in the pathogenesis of above inflammatory conditions and blocking it has proved beneficial in their management.

National guidance advises for Secukinumab to be used with caution due to a risk of exacerbation or development of new onset IBD. However, safety results of

clinical trials carried out for dermatological and rheumatic diseases describe exacerbations or new cases of inflammatory bowel disease (IBD), with a low incidence of 0.7 per 100 patient-years in patients with AS. We present a case series of patients who developed new onset severe colitis after the commencement of Secukinumab for the treatment of AS.

Presentation and Diagnosis Clinical and electronic case notes for 3 patients, who developed colitis after loading dose of Secukinumab were reviewed. Histology of endoscopic biopsies was also reviewed specifically for infective and inflammatory colitis. 2 of 3 patients presented with diarrhoea and abdominal pain after loading dose of Secukinumab and one presented with bloody diarrhoea. All three cases were investigated for infective causes with Stool culture, Entamoeba screen and CMV screen.

Results All 3 patients were male and presented from July 2018 to July 2019.The mean age was 57.33 years. One case had a subtotal colectomy for Ulcerative Colitis 10 years ago with pouch formation. 2 patients had received Adalimumab for AS in the past and one was treated with infliximab. No case had evidence of infection. Endoscopic examination for the 2 patients showed severe colitis. The patient with pouch did not have an endoscopy. Histology for the 2 cases confirmed severe active colitis of idiopathic nature. All three cases received steroids and Secukinumab was stopped. The patient with pouchitis responded to oral steroids alone. One of the patients was started on Adalimumab whilst the other received IV steroids and ciclosporin as the initial response to steroids was poor.

Discussion These cases present the association between the initiation of Secukinumab therapy and the development of severe colitis. Though there are no formal guidelines on the management of such cases, our patients responded to other biological and non-biological agents with rapid resolution. Clinicians should be aware of the association between this IL-17 antagonist and the development of severe colitis and prescribers should evaluate individual risk factors prior to its commencement with close monitoring. The pathogenesis behind this is not fully understood and requires further research.

P164 CORRELATION BETWEEN PHYSICIAN AND PATIENT DISEASE ASSESSMENTS IN ULCERATIVE COLITIS: 2-YEAR UK DATA FROM ICONIC

[1]Neeraj Bhala*, [2]Ailsa Hart, [3]David Watts, [4]Stephen Lewis, [5,6]Subrata Ghosh, [7]Stijn van Haaren, [7]Chris Hansell, [8]Tariq Ahmad. *[1]Queen Elizabeth Hospital Birmingham, Birmingham, UK; [2]IBD Unit, St Mark's Hospital, Harrow, UK; [3]NHS Forth Valley, Stirling, UK; [4]Plymouth Hospitals NHS Trust, Plymouth, UK; [5]NIHR Biomedical Research Centre, University of Birmingham, Birmingham, UK; [6]University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK; [7]AbbVie Limited, Maidenhead, UK; [8]Royal Devon and Exeter Hospital, Exeter, UK*

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Introduction ICONIC is the largest prospective multi-country observational study assessing burden in adult ulcerative colitis (UC) patients under routine care. This local subanalysis evaluated the level of agreement between UK patients and physicians for measures of disease activity over 2 years.

Methods Adults with early UC (diagnosed ≤36 months) were included regardless of disease severity/treatment. Patient self-assessments of disease activity/impact included: disease severity, Pictorial Representation of Illness and Self-Measure (PRISM, a measure of perceived disease impact; lower scores=greater burden); Patient Health Questionnaire-9 (PHQ-9); Short Inflammatory Bowel Disease Questionnaire (SIBDQ); patient-modified Simple Clinical Colitis Activity Index (P-SCCAI). Physician assessments included: clinical parameters; PRISM; SCCAI. Correlations between measures were assessed using Spearman's correlations.

Abstract P164 Table 1 Spearman correlation coefficients between instruments

Variables, r (p-value)	BL	2-Years
SCCAI (physician) vs. P-SCCAI	0.86 (<0.0001) n=62	0.72 (<0.0001) n=34
SCCAI (physician) vs. PRISM(physician)	-0.64 (<0.0001) n=63	-0.64 (<0.0001) n=34
PRISM (patient) vs. PRISM (physician)	0.67 (<0.0001) n=63	0.60 (0.0004) n=31
PRISM (patient) vs. SIBDQ	0.71 (<0.0001) n=63	0.74 (<0.0001) n=33
PRISM (patient) vs. PHQ-9	-0.56 (<0.0001) n=63	-0.48 (0.0044) n=33
PRISM (patient) vs. P-SCCAI	-0.58 (<0.0001) n=62	-0.67 (<0.0001) n=33

Results 63 patients were included (59% female; mean age 43 years; median time since diagnosis 126 days); 98% patients received treatment post-diagnosis. Physician-assessed baseline (BL) severity was: in remission 16 (25%), mild 18 (29%), moderate 18 (29%), severe 11 (17%). Overall, 48% patients agreed with physician-assessed severity (remission 50%, mild 68%, moderate 28%, severe 46%). Table 1 shows correlation coefficients between measures at BL and 2-years. At 2-years, mean±SD P-SCCAI/physician SCCAI scores were 2.6±2.6 and 1.5±1.5; patient and physician PRISM scores were 5.2±2.6 and 5.2±2.1.

Conclusion Persistently high UC burden was observed over 2 years, despite treatment. PRISM, used for the first time in UC, was moderately correlated with disease-specific (SIBDQ/SCCAI) and general depression (PHQ-9) measures. Alignment between patients and physicians on disease activity/severity varied but was greatest for SCCAI.

P165 DISEASE-RELATED WORRIES AND CONCERNS IN UK PATIENTS WITH ULCERATIVE COLITIS: 2-YEAR DATA FROM ICONIC

[1]Neeraj Bhala*, [2]Ailsa Hart, [3]David Watts, [4]Stephen Lewis, [5,6]Subrata Ghosh, [7]Stijn van Haaren, [7]Chris Hansell, [8]Tariq Ahmad. *[1]Queen Elizabeth Hospital Birmingham, Birmingham, UK; [2]IBD Unit, St Mark's Hospital, Harrow, UK; [3]NHS Forth Valley, Stirling, UK; [4]Plymouth Hospitals NHS Trust, Plymouth, UK; [5]NIHR Biomedical Research Centre, University of Birmingham, Birmingham, UK; [6]University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK; [7]AbbVie Limited, Maidenhead, UK; [8]Royal Devon and Exeter Hospital, Exeter, UK*

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Introduction ICONIC is the largest prospective, multi-country observational study assessing cumulative disease-associated burden in adults with ulcerative colitis (UC) under routine care. This local subanalysis evaluated patient worries and concerns over 2 years in UK patients using the Rating Form of Inflammatory Bowel Disease (IBD) Patient Concerns (RFIPC) questionnaire.

Methods Adults with early UC (diagnosed ≤36 months) were included irrespective of treatment regimen/disease