

Abstract PTU-097 Table 1 Average annual, UC-related and all-cause per patient Cost (£), by relapse status

	0 relapses (n = 70)	1 relapse (n = 77)	2 relapses (n = 34)	>2 relapses (n = 20)	All (N = 201)	p Value
UC-related medical costs	269.5	1174.8	1768.6	5034.7	1344.1	<0.0001
Diagnostic tests	16.5	88.4	120.1	187.7	78.6	<0.001
GP visits	101.8	258.9	260.1	409.2	219.3	<0.001
Gastroenterologist visits	107	264.7	330.4	473.2	241.6	<0.001
Nurse visits	8.9	23.3	37.9	35.1	21.9	0.0132
ER visits	21	133.2	65.4	1303.1	199	0.0039
Outpatient procedures	0	6.6	22.6	70.4	13.4	<0.001
Hospitalisations	14.3	399.8	932.2	2556	570.1	0.0006
Total all-cause cost	1208.5	1842.6	2672.1	6075.2	2183.2	<0.001

Conclusion Patients with mild-to-moderate UC have considerable care costs which increase significantly with the number of relapses. These findings support the importance of maintenance therapies in UC that aim to reduce relapse. Quantifying the relationship between relapse rate and costs will inform future health economic studies.

Competing interests K Bodger: Consultant for: Dr Bodger received funding from Covance Market Access Services, L Yen: Shareholder with: MsYen is a Shire Development LLC, shareholder, Employee of: MsYen is a Shire Development LLC, employee, A Szende: Grant/Research Support from: Dr Szende is a Covance Market Access Services (CMA) employee CMA received funding from Shire, G Sharma: Grant/Research Support from: Dr Sharma is a Covance Market Access Services (CMA) employee CMA received funding from Shire, J McDermott Grant/Research Support from: Mr McDermott is a Covance Market Access Services (CMA) employee CMA received funding from Shire, J Chen: Grant/Research Support from: MsChen is a Covance Market Access Services (CMA) employee CMA received funding from Shire, P Hodgkins Shareholder with: Dr Hodgkins is a Shire Development LLC, shareholder, Employee of: Dr Hodgkins is a Shire Development LLC, employee.

PTU-098 THE UK INFLAMMATORY BOWEL DISEASE AUDIT: KEY FINDINGS FROM THE INPATIENT EXPERIENCE QUESTIONNAIRE

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Introduction The UK IBD Audit seeks to improve the quality and safety of care for IBD patients throughout the UK by auditing individual patient care and provision and organisation of IBD service resources. The inclusion of an inpatient experience questionnaire in the 3rd round of the audit provided the opportunity to obtain direct patient feedback regarding hospital care.

Methods Teams at participating sites were required to audit a consecutive sample of inpatients with UC and CD. Completion of local clinical data entry for each case triggered the generation of a patient survey comprising a self-completed questionnaire containing items taken from the National Inpatient Survey questionnaire (Picker Institute) with supplementary questions specific to IBD. Aggregated results are presented for all respondents.

Results Response rate: 33% (data for 2028 adults and 166 children). Results presented as adults [children] where appropriate. **Overall care** rated as only fair by 7% [6.7% children] and poor by 2.9% [0%]. Overall satisfaction correlated most strongly with rating of how well doctors and nurses worked together. **Composite scores** across six domains of acute adult care were comparable across all countries (no national differences). Scores for CD were

lower than UC in several domains. Scores for **consistency and coordination of care** and **nursing** were relatively low compared to general adult inpatients (National Inpatient Survey, 2009). Only 60% of adults [76% children] reported a visit from a specialist nurse. **Hospital food:** Rated as poor by 20% [11%]; "Too little" food provided was reported by 15% [16%]; "Never" suited to dietary needs by 15% [8%]. No dietician visit in 59% [26%]. **Pain management:** "Ever in pain?" 85% [83%]; pain "usually severe" 52% [52%]; analgesic medication "not enough" 16% [12%]. At least 1 in 10 reported sub-optimal aspects of **discharge information** such as lack of information about drug side effects, the danger signs to watch for or how to manage their condition after going home.

Conclusion There are many positive findings from the UK IBD inpatient survey—over $\frac{3}{4}$ of adults and children rated care as "very good" or "excellent". There are areas for potential improvement. Patients place a strong value on co-ordinated care from experienced staff. Greater provision and involvement of IBD nurses at ward level could play a key role in promoting excellent inpatient care. All admitted IBD patients should receive input from specialist multi-disciplinary teams experienced in managing these complex disorders.

Competing interests None declared.

PTU-099 HEALTH-RELATED QUALITY OF LIFE IN GREEK PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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Introduction Over the last 20 years, health related quality of life (HRQoL) has developed into a scientific index of subjective health status in the management of ulcerative colitis (UC) and Crohn's disease (CD), with the majority of the available data to come from Northern Europe. But limited data are available from Southern Europe. Aim of our study was to characterise the HRQoL in patients with IBD from Central Greece and the investigation of socio-demographic factors and disease characteristics that affect their HRQoL in order to create a bank of data for future comparative studies.

Methods The population of the study consisted of 69 IBD patients who were recruited from the IBD referral centre for Central Greece. Data collection included the usage of the Greek version of IBDQ and a card with the sociodemographic and clinical characteristics of the population. Disease activity was assessed by Harvey-Bradshaw activity index for CD and by Simple Colitis Activity Index for UC. The impact of each characteristic in HRQoL was studied with one and two way ANOVA.

Results 43% of the patients were suffering from UC and 57% from CD. The majority were male (50.7%) but a prevalence of women was noticed in the CD group. 80% of patients were <60 yrs. 60% of

the patients with UC and 22.8% with CD were in remission. No significant HRQoL differences were found between UC and CD patients. But, there was a tendency of the CD patients to have higher IBDQ scores and better emotional functioning. ANOVA analysis identified disease activity and symptom's to explain variations in HRQoL. No significant impact found for sex, educational level, employment and marital status. In contrast, young age (20–40 years) in the CD group had negative impact on their social functioning.

Conclusion HRQoL did not differ significantly between patients with CD and UC. But, there was a tendency of the CD patients to score higher in the IBDQ compared to the UC group which can be justified by the beneficial effect of biologic agents in the management of CD. Young age in CD patients had negative impact on their social functioning which indicates the need for developing supportive networks similar to those of Northern Europe in the South. Finally, disease activity and symptom's severity were the only factors that affect HRQoL in our population.

Competing interests None declared.

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PTU-100 DEVELOPING SWANSEA INFLAMMATORY BOWEL DISEASE CLINICAL SEVERITY INDEX (SICSI)

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Introduction To assess IBD activity, many severity scales have been developed. Yet, most of them were not properly validated and did not go through robust methodology. Using different scoring systems makes it difficult to compare different trials especially when the end points are different. Because new therapies for IBD are rapidly emerging, there is a need to optimise and standardise methodology for assessing of disease activity in clinical trials. With the nationwide initiative to establish an IBD registry, a valid and easy to use activity measurement tool is needed. We believe that having a single disease activity index that is suitable for all types and presentations of IBD will make it very useful to monitor patients and assess their response to treatment.

Methods Literature search was conducted using MEDLINE and Google scholar database from January 1947 to 2011 to identify the clinical severity indices commonly used in clinical trials. Seventeen indices were identified for both Ulcerative colitis and Crohn's disease. We followed a clinico-metric approach to develop the simple IBD clinical severity index. Common items between Ulcerative colitis and Crohn's disease were chosen. Few items were added to cover disease specific domains. The new index was examined by gastroenterologists and methodologists in Swansea University to ensure good face and content validity. The index was tested on 50 patients with different presentations of inflammatory bowel disease. Harvey Bradshaw index and Simple clinical colitis index were used for construct validity. Responsiveness was checked by repeating the test within 2-week period.

Results The new index, simple IBD clinical severity index, showed good face and content validity. It covers all presentations of IBD including Crohn's disease, ulcerative colitis and perianal disease. It has good reliability and construct validity. It is easy to use in daily practice.

Conclusion Simple IBD clinical severity index is a new tool to assess the clinical activity of IBD. It is valid, reliable, user friendly and

non-invasive index. Further studies are required to check how it performs on a wider range of patients.

Competing interests None declared.

PTU-101 DRUGS USED IN THE TREATMENT OF FISTULAE IN CROHN'S DISEASE PRESERVE MESENCHYMAL STEM CELL SURVIVAL

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Introduction Mesenchymal stem cells (MSCs) may enhance tissue healing in fistulae of Crohn's disease, owing to their multilineage differentiation and immunosuppressive capacity. They are currently under investigation in clinical trials in patients with fistulae, whether cryptoglandular in origin or associated with Crohn's disease. Little is known about the interaction of MSCs with drugs used in the treatment of fistulae in Crohn's disease. We demonstrate here that on daily exposure to antibiotics commonly used in the management of fistulae (ciprofloxacin and metronidazole), as well as anti-TNF α (infliximab), mesenchymal stem cells retain their proliferation and differentiation capacity.

Methods Cultured human bone marrow derived MSCs were plated at a density of 5×10^4 cells per square centimeter in 24 well plates and allowed to adhere overnight. Cells were exposed to a range of daily doses of ciprofloxacin, metronidazole (0.1 μ g/ml–30 μ g/ml) and infliximab (1 μ g/ml–500 μ g/ml) for a 6-week period. MSC morphology was assessed daily and differentiation capacity into adipocyte, osteocyte and chondrocyte lineages was studied after exposure to the drugs. MSC survival was assessed at 6 weeks using Annexin-V Apoptect assay followed by FACS analysis. Cell survival was expressed as percentages of cells that were negative for Annexin-V and propidium iodide staining. Analyses were performed using the SPSS statistical package (V. 19.0).

Results MSCs exposed to a range of concentrations of ciprofloxacin, metronidazole and infliximab daily, consistently displayed a normal morphology as assessed by light microscopy. Following exposure of these drugs, differentiation into adipocyte, osteocyte and chondrocyte lineages was conserved. In the absence of drugs, mean survival (\pm SD) of MSCs was $81.8 \pm 8.6\%$. In the presence of ciprofloxacin, mean survival of MSCs was generally increased compared to control cells, significantly so at the highest concentration of 30 μ g/ml: 90.1% ($p < 0.05$). By contrast, with metronidazole and infliximab there was no suggestion of a change in survival level, when compared to control cells at any of the concentrations used.

Conclusion This study demonstrates that, in vitro, morphological characteristics as well as the proliferation and differentiation capacity of MSCs is preserved in the presence of ciprofloxacin, metronidazole and infliximab. These findings are important in the consideration of the combination of MSCs with antibiotics and anti-TNF α therapy and will inform subsequent studies to optimise drug and cell delivery.

Competing interests None declared.

PTU-102 RE-TREATMENT WITH INFlixIMAB AFTER A PROLONGED DRUG HOLIDAY IN PATIENTS WITH CROHN'S DISEASE

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Introduction Infliximab (IFX) is a chimeric monoclonal antibody effective for inducing and maintaining remission in Crohn's disease.