Conclusion Pts experience significant sleep problems as measured by JSEQ; magnitude of impairment correlates with disease activity. Both anchor- &distribution-based methods derive similar thresholds representative of clinically meaningful improvements in JSEQ. UST induction resulted in a greater proportion of pts achieving clinically meaningful improvements in sleep impairments.

Disclosure of Interest C. Gasink Employee of: Janssen R&D, LLC, D. Chan Employee of: Janssen R&D, LLC, L.-L. Gao Employee of: Janssen R&D, LLC, B. Schenkel Employee of: Janssen Scientific Affairs, LLC, C. Han Employee of: 3. Janssen Pharmaceutical Services

PTU-064 IDENTIFICATION OF SYNE1 AND FOXE1 HYPERMETHYLATION TO IMPROVE DIAGNOSIS AND MANAGEMENT OF COLERECTAL NEOPLASIA IN **INFLAMMATORY BOWEL DISEASE**

doi:10.1136/gutjnl-2013-304907.156

1,2,*C Papadia, 3J Louwagie, 4P Del Rio, 5M Novelli, 2G de'Angelis, 6W Atkin, 7C Bordi, 8P Bassett, ¹A Forbes. ¹Gastroenterology & Nuitrition, University College London, London, UK; 2Gastroenterology, Parma University Hospital, Parma, Italy; 3Molecular Diagnostics,, Novartis, Basel, Switzerland; 4Surgery, Parma University Hospital, Parma, Italy; 5Pathology, University College London; Cancer Prevention Unit, Imperial College London, London, UK; ⁷Pathology, Parma University Hospital, Parma, Italy; ⁸Statsconsultancy, University College London, London, UK

Introduction Colitis-associated colorectal cancer (CAC) affects individuals with inflammatory bowel disease (IBD) more often and younger than cancer in the general population. Colonoscopy provides the surveillance gold standard. Changes to surveillance intervals have been made given data demonstrating that endoscopic appearance is an important predictor of future dysplasia or cancer, but adjuvant, non-invasive clinical tools are still warranted to improve surveillance outcomes and to assist in management and interpretation of dysplasia. Methylation markers may be able to do this. Material and methods

Methods using reexpression profiles of colon cancer cell lines, candidate genes were identified; promising markers were tested on tissue using the Base5 methylation-profiling platform. Promoter sequences were linked with gene expression to identify epigenetically silenced genes. Marker candidates were screened using methylation specific PCR assays to assess the methylation status of 2 gene promoters (FOXE1, SYNE1) in biopsies from 93 longstanding IBD patients and 30 healthy controls. Samples included colitis-associated colorectal adenocarcinomas (n = 25); IBD-associated dysplastic lesions (n = 29); adenomas arising on a background of UC (n = 8); samples from IBD patients with no neoplasia (n = 31) and healthy controls (n = 30).

Results The presence of the 2 genes significantly varied between the groups. Both were increasing likely with increased disease severity. Neither occurred in controls, whilst 60% of CAC patients had FOXE1, and 80% of CAC patients had SYNE1.

Conclusion FOXE1- SYNE1 methylation markers panel demonstrated significantly increased expression in neoplastic tissue. Syne1 was highly represented in CAC. Methylation of these promoter genes might be considered a potentially useful pathology marker of neoplasia in longstanding inflammatory bowel disease.

Disclosure of Interest None Declared

PTU-065 INFLUENZA VACCINATION UPTAKE IN INFLAMMATORY **BOWEL DISEASE- IS THERE ROOM TO IMPROVE?**

doi:10.1136/gutjnl-2013-304907.157

^{1,*}D Cheema, ¹R Muhammed. ¹Department of Paediatric Gastroenterology, Birmingham Children's Hospital, Birmingham, UK

Introduction The aim of our study is to assess the seasonal influenza vaccination uptake in patients with inflammatory bowel disease (IBD)

Methods We have conducted a telephonic survey of our IBD patients in February 2012 to assess the influenza vaccination uptake for winter 2011–2012.

Results 140 children had responded to this survey (61.6% of our IBD patients). 84 children had Crohn's disease, 35 had Ulcerative colitis and 21 had IBD unclassified. Majority of these children (90/140) were on immunosuppressive treatments. 61 children (44%) had received seasonal influenza vaccination in that winter. 21 of them received in October, 20 in November, 13 in December and 3 in January. Out of the 79 children who have not received the influenza vaccine, 42 were not aware of the need for vaccination and did not have the influenza vaccine in the previous winters as well. 10 children were aware of the need for the influenza vaccine; however they opted not to receive the vaccine. 14 children intended to receive the vaccine, however this was deferred due to various reasons like intercurrent illness, family bereavement and difficulties experienced the General Practice surgery. Only one IBD patient needed hospitalisation in 2011 and 2012 with Influenza infection, however this was in July before the vaccination had started.

Conclusion Department of Health advises influenza vaccination for immunosuppressed individuals and also for children with medical conditions, who may need treatment with steroids for more than a month. European Crohn's and Colitis Organisation (ECCO) recommend influenza vaccination for IBD patients on immunomodulators. Experience from Philadelphia, Boston and Poland show that good, but variable, antibody response occurs after influenza vaccination in children and better protection occurs against type A strains. Side effects, both local and systemic, are generally mild. Experience from Australia and Germany show that the seasonal flu vaccination uptake in IBD patients are generally low, 10% and 16% respectively. We would like to hear from other centres about their experience of influenza vaccination uptake in IBD patients. Further efforts need to be done to increase the awareness of influenza vaccination in patients with IBD

Influenza vaccination uptake in our IBD patients are better than reported from other centres, however further work needs to be done both locally and nationally to improve the influenza vaccination

Disclosure of Interest None Declared

PTU-066 NEW INSIGHT INTO THE MUCOSAL PROFILE OF **EICOSANOID MEDIATORS IN ULCERATIVE COLITIS**

doi:10.1136/gutjnl-2013-304907.158

^{1,*}D S Pearl, ^{2,3}M Masoodi, ³M Eiden, ⁴J K Shute, ⁵P C Calder, ¹T M Trebble. ¹Department of Gastroenterology, Portsmouth Hospitals NHS Trust, Portsmouth, UK; 2Nestle Institute of Health Sciences, Lausanne, Switzerland; 3Elsie Widdowson Laboratory, Medical Research Council, Cambridge; 4Institute of Biomedicine and Biomolecular Sciences, University of Portsmouth, Portsmouth; 5Human Development and Health Academic Unit, Faculty of Medicine, University of Southampton, Southampton, UK

Introduction Ulcerative colitis (UC) is a relapsing remitting disorder of the colon with a recognised role for certain eicosanoid mediators derived from polyunsaturated lipid substrates. However, a detailed characterisation of the eicosanoids involved in UC is currently lacking. Using a comprehensive lipidomics approach, we profiled eicosanoids that could exhibit both pro- and anti-inflammatory function in inflamed and non-inflamed colonic mucosal biopsies from UC patients.

Methods Biopsies were taken from inflamed and nearby noninflamed colonic mucosa (69 patients, 54 with paired inflamed and non-inflamed mucosa) from patients with symptomatic relapses. Inflammation was scored endoscopically and histologically. Mucosal lipid mediators were determined by LC-MS/MS lipidomics analysis. Univariate and multivariate statistical analyses were used to investigate the association of lipid mediators with the disease state