

led to a significant increase of NF- $\kappa$ B luciferase activity in WT and all NOD2 variant constructs, except SNP13 and SNP5+13 ( $p < 0.0001$ ). Haplotype analysis of 11 NOD2 SNPs, identified through direct sequencing in 24 children with CD, showed that LD between SNP5 and the other CD-associated variants is low ( $r^2 < 0.1$ ), in spite of close physical proximity ( $D' \approx 1.0$ ).

**Conclusion** Our combined genetic and functional analyses demonstrate that the association of SNP5 with Crohn's disease is unlikely due to LD with other SNPs. At low levels of NOD2 expression, NOD2 variant constructs differ from WT in their auto-signalling and MDP-stimulated activation of NF- $\kappa$ B.

**Competing interests** None declared.

### PTU-093 INAPPROPRIATE INFLAMMATORY RESPONSES IN THE ILEUM OF ULCERATIVE COLITIS PATIENTS

doi:10.1136/gutjnl-2012-302514c.93

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**Introduction** Inflammation in ulcerative colitis (UC) is restricted to the colon. However, up to 50% of UC patients develop inflammation of the small bowel following restorative proctocolectomy (RPC). We hypothesised that in UC patients, ileal lamina propria dendritic cells would have a more "stimulatory" phenotype than in normal controls predisposing UC patients to pouch inflammation following RPC.

**Methods** Mucosal biopsy samples were taken from the ileum of UC patients undergoing RPC and from healthy controls undergoing colonoscopy. Lamina propria dendritic cells were isolated from biopsy tissue by collagenase digestion. DCs were identified as an HLA DR+, lineage- (CD3-, CD14-, CD16-, CD19-, CD34-, CD56-) population and expression of Toll-like receptors (TLRs), homing markers and co-stimulatory markers were measured by multicolour flow cytometry. T-tests were performed for statistical analysis.

**Results** There were no differences between the percentage of dendritic cells expressing TLR 2 ( $30.5 \pm 11.5\%$  vs  $32.5 \pm 8.8\%$ ) or TLR 4 ( $38.6 \pm 5.8\%$  vs  $38.8 \pm 7.2\%$ ) in the UC and healthy control ileum. A significantly greater percentage of lamina propria dendritic cells expressed the gut homing marker  $\beta 7$  in the normal ileum ( $33.8 \pm 9.6\%$ ) compared with the UC ileum ( $6.4 \pm 3.2\%$ ,  $p = 0.007$ ) as well as the co-stimulatory marker CD40 ( $80 \pm 2.9\%$  vs  $48.6 \pm 5.7\%$ ,  $p = 0.001$ ).

**Conclusion** Contrary to our expectations, lamina propria dendritic cells in the ileum of UC patients appear to have a less "stimulatory" phenotype than in normal controls. There may therefore be an absence of appropriate effector responses and reduced regulation by T-cells in the UC ileum. Further work is necessary to assess the T-cell responses to dendritic cell stimulation in the ileum of UC and in healthy controls.

**Competing interests** None declared.

### PTU-094 IMMUNISATION OF IBD PATIENTS ON BIOLOGIC THERAPY: AN ENGLISH DISTRICT HOSPITAL EXPERIENCE

doi:10.1136/gutjnl-2012-302514c.94

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**Introduction** Patients with IBD remain at risk of preventable infections due to immunomodulatory drugs. The European Crohns and

Colitis Organisation (ECCO) Consensus document<sup>1</sup> recommends immunising all such patients to Human Papilloma Virus (HPV-in females under 18 years), Influenza, Pneumococcus and Hepatitis B (in seronegative patients). We investigated our practice over the last 5 years.

**Methods** All 29 patients contactable on our Biologics' Register agreed to take part. Twenty-six remained on maintenance biologics. All had received at least one immunomodulatory drug prior to their commencement. Patients were asked if they had been immunised or offered it prior to or during their biologic therapy.

**Results** Responses in Abstract PTU-094 table 1. While 83% were offered influenza immunisation—28% declined all invitations and a similar number declined yearly offers of the immunisation. This was despite a number of pandemic flu scares. All patients reported that influenza and pneumococcal vaccination occurred at the instigation of Primary Carers. All those who received Hepatitis B immunisation did so as a result of Occupational or Travel requirement and those who were offered HPV did so as part of other national recommendations.

#### Abstract PTU-094 Table 1

Vaccination	Potential recipients	Immunised (%)	Immunisation declined (%)	Not offered immunisation
HPV	2	1 (50)	1 (50)	0
Influenza	29	16 (55)	8 (28)	5 (17)
Pneumococcus	29	4 (14)	0	25 (86)
Hepatitis B	29	6 (21)	0	23 (79)

**Conclusion** A recent survey of Australian Gastroenterologists found 30%–55% had never recommended such immunisations.<sup>2</sup> Others have found that most Gastroenterologists feel that Primary carers are responsible.<sup>3</sup> Primary carers however use National guidelines<sup>4</sup> that have no specific recommendations for Hepatitis B and HPV in patients on immunosuppressants. Gastroenterologists therefore need to promote awareness of ECCO guidelines to ensure best coverage for patients as well as advocating standardisation in National and Professional guidelines.

**Competing interests** None declared.

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### PTU-095 A QUALITATIVE EXPLORATION OF INFLAMMATORY BOWEL DISEASE PATIENT PERCEPTIONS OF PRIMARY CARE IN THE UK

doi:10.1136/gutjnl-2012-302514c.95

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**Introduction** Many patients with IBD in the UK are managed primarily in secondary care with minimal General Practitioner (GP) involvement or within a restricted shared care protocol. As UK NHS hospitals face mounting financial and workforce pressures,