Abstract OP06 Table 1 Gene expression analysis of hepatic injury and fibrogenic markers

	3 Months Postpartum			12 Months Postpartum		
Gene	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
IL-6	1.00±0.21	1.44±0.41	2.01±0.45	0.38±0.48	1.53±0.37	9.65±2.31
TNF-α	$1.00 \pm 0.30$	$1.32 \pm 0.79$	$2.13 \pm 0.33$	$1.14 \pm 0.36$	$4.59\!\pm\!0.98$	$8.65 \pm 1.12$
α-SMA	$1.00 \pm 0.24$	$3.06 \pm 0.98$	$2.86 \pm 0.28$	$0.87\!\pm\!0.22$	$1.96 \pm 0.87$	$23.86\!\pm\!8.5$
Collagen	$1.00 \pm 0.36$	$3.45\!\pm\!0.69$	$3.05\!\pm\!0.53$	$0.37\!\pm\!0.15$	$4.96\!\pm\!2.42$	$6.62\!\pm\!3.23$

**Conclusion** Maternal obesity programs development of offspring NAFLD with progression to fibrosis in the context of a post-weaning hyper-calorific diet. Innate immune dysfunction may be responsible for the observed programmed phenotype.

## BASL: Oral presentations Friday 9th September 2011 Clinical hepatology

OP07

PHENOTYPIC DESCRIPTION OF A LARGE COHORT OF PSC PATIENTS IN THE UK

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**Introduction** Primary Sclerosing cholangitis (PSC), a chronic cholestatic liver disease of unknown aetiology or pathogenesis, remains an area for active research.

**Aim** The demographic and phenotypic characteristics of a UK cohort of 1194 patients with PSC are described.

**Method** All patients were recruited as part of an ongoing national collaborative effort (PSC-UK) between October 2008 and May 2011. The diagnosis of PSC was confirmed on the basis of characteristic ERCP, MRCP or histology. Patients with small-duct PSC were also included. All patients completed a descriptive phenotypic questionnaire sent at recruitment. Demographic, phenotypic data and family history were extracted from the participant questionnaires. Results 1194 patients have returned completed questionnaires. Median age at recruitment was 59 years and 63% were male (male to female ratio =1.7:1). 64% of patients were lifelong non-smokers and only 4.3% were smoking at recruitment. 63.5% reported inflammatory bowel disease, split into 87% with Ulcerative colitis and 13% with Crohn's disease. 1.5% had a sibling with PSC and 14% had a sibling with inflammatory bowel disease. Further, 0.5% had one or more children with PSC and 4.6% had children with inflammatory bowel disease. 24% were asymptomatic, but over 50% reported itching and fatigue as the presenting symptom. Jaundice was present in 35%. The most common associated autoimmune disease was thyroid disease, present in 9% followed by Coeliac disease in 2.1% and type 1 diabetes mellitus in 1.8%. 16% of patients reported pan-procto or sub-total colectomy and 12.2% had undergone cholecystectomy. 2.7% of patients reported a history of colon cancer and 1.25% patients had a history of skin cancer.

**Conclusion** This is the largest reported demographic and phenotypic description of a single cohort of PSC patients. PSC is more common in young, non-smoking male patients. The frequency of associated inflammatory bowel disease is similar to that reported in other studies. It is plausible that siblings of patients with PSC have an increased risk of not only PSC but also inflammatory bowel disease. These data are consistent with increasing evidence pointing to a role of genetic factors in the pathogenesis of PSC.

OP08

## NAFLD RELATED HCC IS RISING DRAMATICALLY IN THE NORTH OF ENGLAND

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**Introduction** A reported increase in hepatocellular cancer (HCC) in western nations has been attributed to the rising prevalence of predisposing hepatitis C (HCV) related chronic liver disease. In parallel, however, the prevalence of the metabolic syndrome has risen markedly, and both a raised BMI and type 2 diabetes, characteristic features of the syndrome, are independently associated with an increased risk of HCC development.

 $\pmb{\mathsf{Aim}}$  We have assessed the prevalence of the metabolic syndrome in our patients with HCC.

**Method** 686 consecutive patients with HCC, diagnosed as per EASL guidelines, referred to our unit over a 10-year period (2000 and 2010), have been studied and demographic, laboratory, radiological variables, treatments and survival recorded.

**Results** The numbers of patients referred from our catchment population of 3.5 million has increased more than 10-fold in 10 years, reaching 133 in 2010. While numbers with underlying hepatitis B, haemochromatosis, autoimmune or cryptogenic cirrhosis have remained constant, those with underlying HCV or ALD have increased fivefold up to 10 and 35 per year respectively. The most dramatic increase, however, has been in those patients with NAFLD, increasing from 1 or 2 to over 30 per year in 2009 and 2010. There has also been an increase in HCC arising in individuals without chronic liver disease, 40 and 65% of which had diabetes and the metabolic syndrome respectively. Patients with NAFLD related HCC were significantly older (median age of 72 yrs vs 65 and 61 for ALD and HCV respectively. While NAFLD HCC cases were less likely to be detected by surveillance, they were more likely to be detected incidentally. Survival was determined by stage at presentation for all etiologies, and was not adversely affected by advanced age in the NAFLD population.

**Conclusion** NAFLD related HCC now equals that related to ALD in Northern England. The median age at presentation was higher for NAFLD HCC patients, but this did not adversely affect their survival. While relatively few NAFLD HCC cases were detected by surveillance, and the prognosis was particularly poor for those presenting with symptomatic disease (median 8.14 months), this was offset by an increase in incidental HCC detection, largely in diabetic follow-up clinics. The median survival of incidental patients (median 21.2 months) was similar to that of detected by surveillance (18.68 months). A raised awareness of the risk of HCC in older diabetic patients may reduce the numbers of those presenting with advanced symptomatic disease.

OP09

## TIPS OUTCOMES FOR REFRACTORY ASCITES: A SINGLE CENTRE EXPERIENCE

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**Introduction** Transjugular intrahepatic portosystemic shunt (TIPS) insertion is established as an important intervention in the