Abstract P23 Table 1 Predicted risk of ESLD in patients with PBC before and after OCA treatment

<table>
<thead>
<tr>
<th>Median (IQR)</th>
<th>Baseline (n=73)</th>
<th>DB Month 12 (n=68)</th>
<th>OLE Month 12 (n=58)</th>
<th>OLE Month 36 (n=48)</th>
<th>OLE Month 60 (n=24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Year Risk (%)</td>
<td>1.9 (1.1, 3.5)</td>
<td>2.3 (1.1, 4.4)</td>
<td>1.4 (0.8, 3.3)*</td>
<td>1.3 (0.7, 2.1)*</td>
<td>1.6 (1.0, 2.7)*</td>
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<tr>
<td>10-Year Risk (%)</td>
<td>6.4 (3.8, 11.3)</td>
<td>7.5 (3.6, 14.0)</td>
<td>4.7 (2.7, 10.6)*</td>
<td>4.4 (2.5, 6.9)*</td>
<td>5.2 (3.3, 8.7)*</td>
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<tr>
<td>15-Year Risk (%)</td>
<td>11.5 (6.9, 19.9)</td>
<td>13.5 (6.6, 24.4)</td>
<td>8.5 (5.0, 18.8)*</td>
<td>8.0 (4.5, 12.5)*</td>
<td>9.4 (6.0, 15.7)*</td>
</tr>
</tbody>
</table>

1 Patients received Placebo ± UDCA for 12 months during the double-blind phase, then OCA ± UDCA throughout the OLE. *p<0.05. P-value for within group comparison using Wilcoxon Signed Rank Test comparing Month 12 DB and Month 12, 36, or 60 OLE.

The global pooled prevalence of NAFLD is 25% (Youssoufi 2016). Genetic factors have been shown to play a significant role in determining the risk for the development and progression of NAFLD in Caucasian/East Asian populations where robustly replicated associations have been found, many at genome-wide significance, with variants in PNPLA3, TM6SF2, GCKR, and HSD17B13 - (Trépo 2020). South Asians have a lower risk for NAFLD compared with European/East Asian populations. This is concordant with the observed divergence in NAFLD phenotype, but needs to be validated in further, larger cohorts.

No associations were identified with NAFLD at genome-wide significance (p < 5 × 10⁻⁸). However, a number of genetic variants implicated in liver-related and metabolic pathology showed suggestive evidence of association (p value range 1.93 × 10⁻⁶ to 5.83 × 10⁻⁶) including SNPs in chromosome 20 open reading frame 78 (C20orf78), Transmembrane Protein 63C (TMEM63C), Bromodomain Adjacent To Zinc Finger Domain 1A (BAZ1A), Fibroblast Growth Factor 21 (FGF21), and Insulin Receptor Substrate 1 (IRS1).

These findings suggest that there may be divergence in the genetic risk profile for developing NAFLD in the South Asian population compared with European/East Asian populations. Nevertheless, there has been no systematic attempt to undertake a genome wide association study (GWAS) of NAFLD in the South Asian community. This study aimed to redress the balance.

The Trivandrum population-based NAFLD cohort comprises of 2222 individuals from Kerala, South India. Genomic DNA was available for 908 participants. Cases were defined as participants who, based on ultrasound scanning, had evidence of fatty infiltration of the liver (n = 454). Controls were defined as participants with no evidence of fatty infiltration (n = 454). Samples were genotyped using the Global Screening Array-24 v3.0 BeadChip (Illumina, Inc), and were imputed against the Haploype Reference Consortium panel and the population-specific GenomeAsia pilot panel. The analysis was conducted in GMMAT to control for a degree of cryptic relatedness, with the model adjusted for age, sex, and BMI as fixed effects and family structure as a random effect by a relationship matrix calculated in LDAK.

The median age at baseline in the placebo group was 55 years; 93% were female, and 93% received daily UDCA (median dose, 15 mg/kg). After 1 year of standard-of-care (SOC), placebo patients demonstrated a slight increase in predicted risk of ESLD (table 1). After 1 year of OCA, predicted risk of ESLD at 5, 10, and 15 years was reduced to below baseline levels; these were sustained through the 60-month OLE.

In POISE, the UK-PBC risk score predicted an increased risk of ESLD in PBC patients treated with SOC and placebo for 12 months. OCA treatment led to sustained reductions in predicted risk of ESLD through 60 months.

Abstract P25

LONG TERM ABDOMINAL DRAIN FOR REFRACTORY ASCITES: ROYAL DERBY HOSPITAL EXPERIENCE

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Introduction In those patients who are not a candidate for liver transplantation or TIPSS, managing refractory ascites is challenging. Repeated large volume paracentesis (LVP) is effective but requires hospitalization. Long term abdominal drains (LTAD) have been considered as an alternative to minimize the need for admission and improve quality of life.

Methods A retrospective review of all patients treated with LTAD (Rocket ®) between 2009 and 2019 in Royal Derby Hospital was undertaken and included the indication, frequency of hospital admission for LVP prior to and after LTAD insertion, MELD score, SBP prior to insertion, complications encountered following insertion, the need for re-insertion and duration of the drain.

Results 24(7 female) patients had LTAD inserted under ultrasound guidance by experienced interventional radiologists. Ascites was secondary to liver cirrhosis in 22 patients (NASH 10; ALD 7; HCV 3; HFE 1; PBC 1) and heart failure/cardiac cirrhosis in 2 patients. The median MELD score was 14(6–32). Median number of LVP in 6 months prior to LTAD insertion was 5 (0–15), with median interval of 2 weeks. Following LTAD insertion, median LVP in 6 months fell to 0(0–5). SBP was diagnosed and treated in 7 patients before LTAD, 6 of whom remained on prophylaxis. No immediate
complications were reported. Following LTAD, 15 patients (5/15 had pre-LTAD diagnosis) developed SBP at median 60(20–42) days. Post-LTAD SBP was treated with antibiotics but 5 died. In 10 patients LTAD was removed after median 10 days of antibiotics and only 4 were replaced. For those who had replacement, 2 of 3 patients given prophylaxis suffered recurrent SBP. Other indications for removal were (leak 2; blockage 2). Patients needed hospitalization for median 19 (2–40) days in the 6 months prior to LTAD, and 12(0–34) days in the following 6 months. In 11 of 20 patients with MELD score less than 21 (figure 1), the drain remained for 90 or more days while the median lifespan of LTAD in the whole cohort was 67(6–463).

Conclusions In some patients, LTAD achieved long term palliation without hospital admission but many developed SBP post-insertion. Nevertheless, there was still a reduction in hospital stay. It was not possible to identify factors which might predict a successful outcome from this small cohort. Further research should focus on the impact of LTAD on quality of life measures, the role of antibiotic prophylaxis and better defining when LTAD is best employed in the natural history of patient’s with ascites.

At our DGH multiple audits have identified that there is poor compliance to an existing evidence based care bundle for patients with decompensated liver cirrhosis despite previous attempts to improve consistent use. Varying applicability of the bundle causes variation in the quality of care patients receive.

Presence of the existing bundle in the format of a sticker within the patient’s medical notes was audited along with application of the 6 main cirrhosis care bundle domains. Data was collected prior to and following intervention. A questionnaire was sent to junior medical staff to ascertain knowledge of the bundle and competency of performing paracentesis. Length of stay and 28 day mortality were used as patient outcome measures.

It was shown that adherence to the cirrhosis care bundle was poor. No patients had all of the recommended investigations carried out and none of the patients with ascites had an attempt to perform a diagnostic paracentesis. When asked 74% of junior doctors reported not feeling confident to perform paracentesis unsupervised. 45% of junior doctors were unaware of the existence of the cirrhosis care bundle. 48% of survey responders were foundation doctors.

The cirrhosis care bundle was redesigned into a printable format that can be accessed via the trust intranet because of concerns that the sticker might not always be available in clinical areas. The layout of the bundle was altered to improve usability and tick boxes were added to encourage the user to consider and complete each step in the bundle.

Doctors rotating between specialties and between trusts was also highlighted as an explanation of the high rates of