40 mg twice daily, bismuth tripotassium dicitrate 300 mg four times a day, tetracycline 500 mg four times a day, and metronidazole 500 mg three times a day, for 10 days. The primary end point was the eradication rate in the second-line treatment according to intention to treat (ITT) analysis. The minimum inhibitory concentrations were determined by agar dilution test.

**Results** The results were available for analysis in 398 patients up to Dec, 2017. The preliminary eradication rate in the EAML and BQ groups were 88.9% (169/190) and 91% (172/189), respectively (p=0.505) in the ITT analysis, and were 89.9% (169/188) and 96.1% (172/179) in the PP analyses, respectively (p=0.021) in the second line treatment. The efficacy of levofloxacin sequential therapy, but not bismuth quadruple therapy, appeared to be affected by levofloxacin resistance. In the third-line therapy, the eradication rate of EAML was 60% (3/5) for patients who failed after bismuth quadruple therapy. The eradication rate of BQ was 80% (12/15) for patients who failed after levofloxacin sequential therapy. The cumulative eradication rates were 95.3% (181/190) and 92.6% (175/189) in the EAML (2nd-BQ(3rd) and the BQ(2nd)-EAML (3rd) groups (p=0.276). The frequencies of adverse effects were 42.8% (62/145) and 81.9% (118/144) in patients treated with EAML and BQ, respectively (p<0.001).

**Conclusions** Levofloxacin sequential therapy and bismuth quadruple therapy are similarly effective in the second-line treatment for *H. pylori* infection. (Trial registration number: NCT NCT03148366).

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**Clinical Hepatology**

**IDDF2018-ABS-0058 EARLY NORMALISATION OF ALANINE AMINOTRANSFERASE (ALT) AFTER NUCLEOS(T)IDE ANALOGUE TREATMENT REDUCES THE RISK OF HEPATOCELLULAR CARCINOMA (HCC) IN PATIENTS WITH CHRONIC HEPATITIS B – A TERRITORY-WIDE STUDY OF 21,182 SUBJECTS**

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**Background** We aimed to evaluate the impact of alanine aminotransferase (ALT) normalisation (ALTN) achieved at different time after the start of antiviral treatment on the risk of hepatocellular carcinoma (HCC) in patients with chronic hepatitis B (CHB).

**Methods** We identified a territory-wide cohort of CHB patients who received entecavir and/or tenofovir disoproxil fumarate (TDF) for ≥1 year between 2005 and 2016 in Hong Kong. Serial on-treatment ALT levels were analysed. ALTN referred to ALT level lower than the upper limit of normal (ULN) (30 U/L in males and 19 U/L in females). Early ALTN was defined as ALTN within 12 months. The primary outcome was HCC based on ICD-9-CM diagnosis codes. Patients with cancers previously or during the first year of treatment were excluded.

**Results** 21,182 CHB patients (10 437 with and 10 745 without ALTN at 12 months after antiviral treatment) were identified and followed for a median (interquartile range) of 4.1 (2.4–6.0) years. Patients with or without ALTN at 12 months differed in gender distribution (76.9% vs. 58.4% male), baseline ALT (58 vs. 61 U/L), baseline serum HBV DNA (4.9 vs. 5.1 log_{10} IU/mL), proportion of positive hepatitis Be antigen (31.5% vs. 37.1%), and presence of cirrhosis (8.8% vs. 10.5%) and diabetes mellitus (8.1% vs. 9.1%); 509 (2.4%) patients developed HCC. ALTN at 3, 6, 9 and 12 months
were associated with a reduced risk of HCC (Figure 1), with adjusted hazard ratios (aHR) (95% confidence interval [CI]) of 0.55 (0.42,0.71), 0.52 (0.41,0.64), 0.47 (0.38,0.58) and 0.46 (0.37,0.56), respectively (all p<0.001). In contrast, ALT 1 to 2 times the ULN and ALT greater than 2 times the ULN at 12 months were associated with a higher risk of HCC as compared to ALTN at 12 months, with aHR (95% CI) of 2.07 (1.67,2.56) and 3.21 (2.32,4.44), respectively, after adjustment for baseline ALT and important covariates.

Conclusions Early on-treatment ALTN reduces the risk of HCC in CHB patients having entecavir/TDF treatment. On-treatment ALT above 1 and 2 times the ULN at 12 months were associated with higher risk of HCC.

### IDDF2018-ABS-0067

**Efficacy and Safety of Glecaprevir/Pibrentasvir in Patients with HCV Genotype 5 or 6 Infection: The ENDURANCE-5, 6 Study**

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Background The pangenotypic direct-acting antivirals (DAAs) glecaprevir (developed by AbbVie and Enanta)/pibrentasvir (G/P) are approved to treat chronic HCV genotype (GT)1–6 infection. In Phase 2 and 3 studies, G/P achieved high SVR12 rates with no virologic failures in 80 patients with GT5 or 6 infection. To increase the body of data for these genotypes, ENDURANCE-5, 6 evaluates patients from countries where GT5 and GT6 are endemic, such as South Africa (GT5), Myanmar and Vietnam (GT6). This study evaluates the efficacy and safety of G/P in patients with chronic HCV GT5 or GT6 infection.

Methods ENDURANCE-5, 6 is an ongoing phase 3b, non-randomised, open-label, multicenter study conducted in adults with chronic HCV GT 5 or 6 infections with or without compensated cirrhosis who are HCV treatment-naive or experienced with interferon (IFN) or pegIFN with or without ribavirin (RBV) or sofosbuvir and RBV with or without pegIFN. G/P (300 mg/120 mg) was orally dosed once-daily for 8 or 12 weeks in patients with or without compensated cirrhosis, respectively. The primary efficacy endpoint was SVR12. Secondary endpoints were on-treatment virologic failure or relapse. Adverse events and clinical laboratory abnormalities were monitored in all patients.

Results Seventy patients have enrolled to date, 61 and 9 in the 8- and 12 week treatment arms, respectively; 66 have completed treatment. Baseline demographics are shown in table 1. The SVR4 among patients with available data is 61/62 (98%). One HCV GT6c-l-infected patient with compensated cirrhosis experienced virologic breakthrough at treatment week 12, and one HCV GT5a-infected patient without compensated cirrhosis who achieved SVR4 relapsed at post-treatment week 12. To date, three patients (4%) have experienced treatment-emergent serious adverse events, none of which were related to G/P or led to discontinuation; no Grade 3 alanine aminotransferase elevations have occurred.

### IDDF2018-ABS-0082

**Quantification of Circulating miR-125B-5P Predicts Survival in Chronic Hepatitis B Patients with Acute-On-Chronic Liver Failure**

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Background This study aimed to analyse serum levels of miR-125B-5P in CHB patients with varying degrees of liver damage and evaluate its value in predicting the short-term outcome of acute-on-chronic liver failure (ACLF).

Methods CHB patients with normal hepatic function(n=100), moderate-to-severe liver damage(n=90) and ACLF(n=86) were included. Serum levels of miR-125B-5P and miR-122 were measured by quantitative real-time PCR.

Results Serum miR-125B-5P levels were increased along with disease progression, and lower in survival than in death among HBV-ACLF patients. Among HBV-ACLF patients, serum miR125B-5P were positively correlated with total bilirubin(TBil) (r=0.214, p<0.05) and MELD score(r=0.382, p<0.01), and negatively correlated with prothrombin activity(PTA)(r=−0.215, p<0.05). Interestingly, serum miR-122 showed a completely opposite performance as compared to that of serum miR-125B-5P. Cox Regression Analysis showed that serum miR-125B-5P, miR122 and PTA were all independent survival predictors of HBV-ACLF; and low miR-125B-5P and high miR122 may predict

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**Abstracts**

**IDDF2018-ABS-0067**

**Table 1** Baseline Demographics and Disease Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>8 week G/P No Cirrhosis</th>
<th>12 week G/P Cirrhosis</th>
</tr>
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<tbody>
<tr>
<td>n=61</td>
<td>48 (44)</td>
<td>n=9</td>
</tr>
<tr>
<td>Female, n (%)</td>
<td>36 (59)</td>
<td>4 (44)</td>
</tr>
<tr>
<td>Asian, n (%)</td>
<td>38 (82)</td>
<td>5 (66)</td>
</tr>
<tr>
<td>Age, median years (range)</td>
<td>57 (24–79)</td>
<td>65 (22–75)</td>
</tr>
<tr>
<td>Genotype 5, n (%)</td>
<td>20 (33)</td>
<td>3 (33)</td>
</tr>
<tr>
<td>Genotype 6, n (%)</td>
<td>41 (67)</td>
<td>6 (67)</td>
</tr>
<tr>
<td>GT6a/6b</td>
<td>19 (31)</td>
<td>1 (11)</td>
</tr>
<tr>
<td>GT6c-l</td>
<td>22 (36)</td>
<td>5 (56)</td>
</tr>
<tr>
<td>HCV treatment-naive, n (%)</td>
<td>55 (89)</td>
<td>8 (89)</td>
</tr>
<tr>
<td>Baseline HCV RNA, median log10 IU/L</td>
<td>6.85 (4.6–7.5)</td>
<td>6.29 (4.9–7.2)</td>
</tr>
<tr>
<td>ML (range)</td>
<td></td>
<td></td>
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</tbody>
</table>

**Conclusions** In this ongoing dedicated study, HCV genotype 5- and 6-infected patients without and with compensated cirrhosis treated with G/P for 8 and 12 weeks, respectively, achieved high rates of SVR4. Complete SVR4 and available SVR12 data will be presented.

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**IDDF2018-ABS-0082**

**Table 1** Baseline Demographics and Disease Characteristics

**Conclusions**