**PP-087** Investigation of HBV infection rate and virus genotypes of Yao population in Guangdong Ruyuan
C.-S. Lin1*, D.-C. Li1, C. Ma2. 1The Third Affiliated Hospital of Sun Yat-sen University, 2The Second People’s Hospital of Yue-Bei, China

**Objective:** To explore the infection rate of HBV of Yao population in Ruyuan and the correction between Hepatitis B virus genotypes and clinical disease spectra.

**Methods:** ELISA was used to detect hepatitis B virus markers of 665 Yao population and 589 Han population. And microboard nucleate molecular hybridization ELISA was used to detect the genotype of 97 cases of different clinical types of HBV infections.

**Results:** HBsAg positive rate of Yao population (20.3%) was higher than Han population (13.4%), and significance difference was found in males (25.81% vs 13.22%, P < 0.05). Among the 97 HBV patients of Yao population, genotype B took up the largest proportion (52.58%, 51/97), followed by genotype C (36.08%, 35/97), and then 7 cases of mixed genotype (4 cases of B/C, 3 cases of C/D). No genotype E or F was detected. Genotype B was higher than genotype C (52.94% vs 23.71%, P < 0.05) in asymptomatic carriers, while genotype C was higher than genotype B (62.85% vs 27.45%, P < 0.05) in mild or moderate chronic hepatitis B.

**Conclusion:** HBsAg positive rate of males in Ruyuan of Yao population was higher than that of Han population. Genotype B was the main type in this area, followed by genotype C.

**PP-088** Incidence of genotypic resistance to lamivudine long-term therapy in chronic hepatitis B genotype D

W. Osman1, N. Allami1, M. Hassouna1, A. Abdelmoneim1, A. Roshy1, I. Waked1. 1National Liver Institute, Egypt

**Background:** Lamivudine improves patients’ outcome but is reported to be associated with increasing rates of viral resistance. The long-term benefit of lamivudine therapy and resistance rate in HBeAg negative genotype D patients is not fully known. The aim of the present study was to assess the incidence of genotypic resistance to lamivudine therapy in patients with chronic hepatitis B due to genotype D.

**Methods:** This study included 85 patients with chronic hepatitis B due to genotype D, who received lamivudine 100 mg daily for at least 12 months (10 females, age 32±8 years). 73 (85%) % were HBeAg negative. Mean follow up period was 25±10 months (33 patients for 12-24m, 27 for 24-36m, 20 for 36-48 and 5 for 48-60m).

**Results:** HBV-DNA decreased to <2000 IU/ml in 25 patients (21%), and HBV-DNA became undetectable in 42 (35.7%) during the first year of treatment. The rate of relapse with either HBV-DNA reverting to positive or increasing to >2000 IU/ml after initial response was 16% during the first year, 19% during the second year, 3.5% during the third, 1% during the fourth year of follow up. Breakthrough was observed in 66% of the HBeAg positive group and only 35% of the HBeAg negative group. INNO-LIPA was performed for 20 patients. Wild type was found in 14 patients; mixed type in 4 and mutant in two patients. Hence mutations were detected in 30% of the tested lamivudine-treated cases. YMDD was detected in 15%. Mean viral load was 283746 IU/ml compared to 5,673000 IU/ml in the patients with the mutants.

**Conclusion:** Longterm lamivudine therapy is associated with a high response rate with a rather low relapse rate in HBeAg negative patients with genotype D. The incidence of YMDD mutation is low.

**PP-089** Improving blood safety by setting the ambiguous region of screening HBsAg ELISA in Chinese blood donations
Y.Y. Lin1*, X.J. Ling1. 1Nanjing Red Cross Blood Center, China

**Objective:** To evaluate to set ambiguous region of screening HBsAg ELISA results whether improving blood safety by HBsAg confirmatory assay and super-sensitivity screening kits.

**Method:** The samples, which HBsAg screening results were in ambiguous region, were retested by HBsAg confirmatory assay using hepatitis B immunoglobulin and super-sensitivity screening kits.

**Results:** The 21 samples were positive tested by HBsAg super-sensitivity screening kits, in which 15 samples were positive confirmed by HBsAg confirmatory assay and other 6 samples were false positive. The average S/CO value of negative samples, which retested by HBsAg super-sensitivity screening kits, was not significance rise compared with other two routine HBsAg screening kits in our laboratory.

**Conclusions:** Setting ambiguous region of screening HBsAg ELISA in Chinese blood donations improved blood safety and prevented HBsAg screening failure.

**PP-090** Hepatitis B, C and D viruses in Tajikistan
D. Abdusamad1*. 1The Institute of Gastroenterology of the Ministry of Health of the Republic of Tajikistan, Tajikistan

**Aim:** To study to investigate the genotypic prevalence and clinical significance of HCV, HBV, and/or HDV among chronic hepatitis patients with and without liver cirrhosis and/or HCC in Tajikistan.

**Methods:** Sera were obtained from 124 consecutive cases of chronic liver diseases. Patients in this study were classified into two clinical groups: (i) chronic hepatitis and (ii) liver cirrhosis.

**Results:** Genotypes of HBV, HCV, and HDV were determined by genetic sequencing. The overall prevalence of anti-HCV, HCV core antigen (HCVcAg) and HBsAg was 46% (57/124) and 41.1% (51/124), respectively. Co-infection of HCV/HDV, HBV/HDV, and HCV/HBV/HDV was found in 4.8% (6/124), 11.2% (12/112), and 0.8% (1/124) of cases, respectively. HDV genotype 1 was found in 19.6% (10/51) of HBsAg-positive patients. The HBV/HDV co-infection was relatively high in group 2 compared with group 1 (15% vs. 7.1%). HCV/1b was detected in 84.6% (44/52) of HCV RNA-positive patients, followed by 3a (7.6%), 2a (5.7%), and 2c (1.9%). HBV/D was detected in 94.1% (48/51) of HBsAg-positive patients, followed by HBV/A (5.8% (3/51)). T1762/A1764 double mutation was associated with liver cirrhosis in HBV-infected patients (P = 0.0004).

**Conclusion:** Among HBV-infected patients, the T1762/A1764 mutation was associated with liver cirrhosis.

**PP-091** Protective effect of caffeic acid phenethyl ester on liver injury model in rats
S.S. Ding1*, S. Zhai1, X.F. Wang1, Y.P. Li1, W.J. Wang1, X. Zhang1, Y. Wang1. 1Department of Infectious Diseases, the Second Affiliated Hospital of Medical College, Xi’an Jiaotong University, Xi’an 710004, China

**Objectives:** This study aims to evaluate the antioxidative effects of caffeic acid phenethyl ester (CAPE) with various doses, which was given by intraperitoneal injection or oral route, in rats with chronic liver injury induced by carbon tetrachloride (CCl4), alcohol and high-lipid forage.

**Methods:** Ninety-five Sprague-Dawley rats were divided randomly into nine groups as follows: blank control, solvent