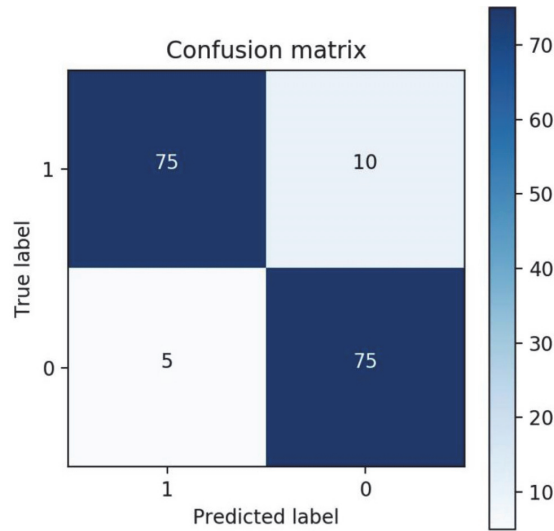


Abstract IDDF2020-ABS-0092 Figure 3 ROC curve of the clinical-radiomics model



Abstract IDDF2020-ABS-0092 Figure 4 Confusion matrix of the clinical-radiomics model

set and the testing set, respectively (Results are shown in figure 3 and figure 4). The model showed the maximum diameter of nodes, PLT, excision site, iMELD score and FF score were independent risk factors of PHLF in HCC patients (OR=1.258, 0.986, 4.670, 1.237, 320.382;  $P < 0.05$ , and feature coefficients shown as figure 2). Nomogram by Logistic Regression with predictors is shown in figure 5. Moreover, the AUC of LF scoring model was significantly higher than clinical-imaging model and single radiomics model. Meanwhile, the accuracy of the model in predicting overall survival and progression-free survival of HCC patients with PHLF were 0.771 and 0.762, respectively.

**Conclusions** The study indicates that LF scoring model has a good predictive value for the occurrence of PHLF in HCC patients and plays a vital role in predicting the clinical outcome of HCC patients who suffered PHLF.

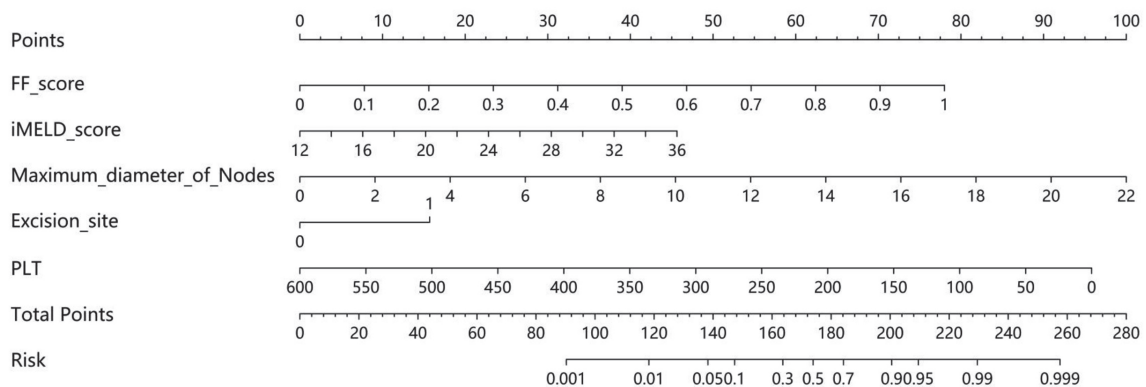
**IDDF2020-ABS-0103 EFFICACY AND SAFETY OF PROGRAMMED CELL DEATH PROTEIN 1 INHIBITOR AND THE ASSOCIATED PROGNOSTIC FACTORS IN PATIENTS WITH HEPATITIS B VIRUS-RELATED ADVANCED HEPATOCELLULAR CARCINOMA**

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**Background** Programmed cell death protein 1 (PD1) inhibitor is safe and effective for hepatocellular carcinoma (HCC) treatment; however, the correlation between previous hepatitis B virus (HBV) infection and the clinical outcomes of PD1 treatment remain unclear. This study evaluated the safety and efficacy of PD-1 inhibitor treatment for HBV-related advanced HCC and determined the associated prognostic factors.

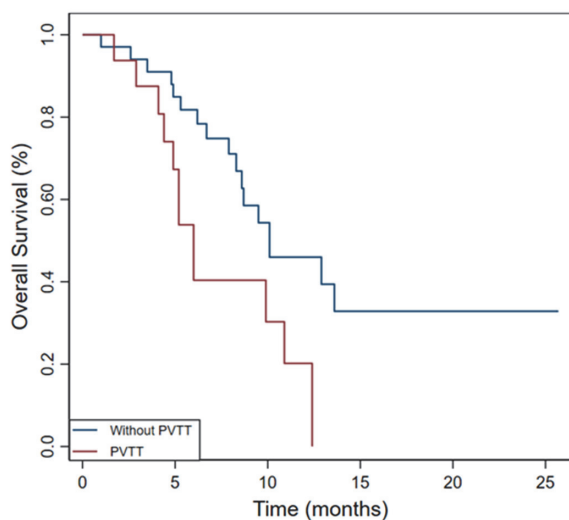
**Methods** Fifty HBV-infected HCC patients treated with PD-1 inhibitor in a clinical trial were retrospectively investigated. Treatment responses as per the response evaluation criteria in solid tumors 1.1 (RECIST 1.1) and immune-modified RECIST criteria (imRECIST). Overall survival (OS) and time to progression (TTP) were evaluated, and any adverse events (AEs) were recorded.



Abstract IDDF2020-ABS-0092 Figure 5 Nomogram by logistic regression with predictors

**Abstract IDDF2020-ABS-0103 Table 1** Objective responses and disease control rates between two groups per the RECIST v1.1 and imRECIST.

	RECIST v1.1				imRECIST			
	OR	NR	DC	PD	OR	NR	DC	PD
PVTT group (n=16)		16(100)	5(31.2)	11(68.8)		16(100)	7(43.8)	9(56.3)
Non-PVTT (n=34)	4(11.8)	30(88.2)	18(52.9)	15(44.1)	5(14.7)	29(85.3)	19(55.9)	14(41.2)
<i>p</i> value	<i>p</i> =0.383		<i>p</i> =0.125		<i>p</i> =0.266		<i>p</i> =0.546	

**Abstract IDDF2020-ABS-0103 Figure 1** Significantly better overall survival rates were observed in the patients without portal vein tumor thrombus (PVTT) ( $p = 0.018$ )

**Results** According to RECIST 1.1 criteria, no patient achieved a complete response (CR) while four (8%) achieved partial response (PR); thus, the objective response rate (ORR) was 8%. Nineteen (38%) and 26 (52%) patients exhibited stable disease (SD) and progressive disease (PD), respectively, at the first radiological assessment. The disease control rate (DCR) was 46% (table 1). The median OS was 9.5 months (95% confidence interval [CI], 7.6–11.3), while the median TTP was 2.77 months (95% CI, 2.1–3.5). In multivariate analysis, portal vein tumor thrombosis (PVTT) was an independent predictor of poor OS. Kaplan-Meier analysis revealed significantly shorter OS in the PVTT group than in the no PVTT group (median 6.0 vs. 10.1 months,  $p = 0.018$ , (figure 1). HBV reactivation occurred in six patients (12%), and the overall AEs rate was 92%.

**Conclusions** PD-1 inhibitor may be safe and effective for HBV-related advanced HCC, with PVTT being a predictor of a poor prognosis.

#### IDDF2020-ABS-0117 GUT MICROBIOTA ASSOCIATED WITH THE SENSITIVITY OF HEPATOCELLULAR CARCINOMA TO SORAFENIB

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**Background** Little is known about the relationship between alteration of gut microbiota and the sensitivity of hepatocellular carcinoma (HCC) to sorafenib. We performed a comparative study of gut microbiota composition between sorafenib-resistant HCC patients (R group, n=10) and sorafenib sensitive HCC patients (S group, n=10).

**Methods** Twenty patients were classified into two groups based on the sensitivity of hepatocellular carcinoma to sorafenib within 12 months of post-sorafenib treatment. Treatment response was assessed using modified response evaluation criteria in solid tumors (mRECIST) criteria. After sorafenib treatment, the fecal samples were analyzed using 16S rRNA gene sequencing and LC-MS-based metabolomics approach.

**Results** Compared with the R group, significant gut microbiota alterations were associated with the sensitivity of HCC to sorafenib. The results showed that the S group had higher Faecalibacterium, Enterococcus and Veillonella abundance while the R group had higher levels of Lactobacillus and Prevotellaceae. Additionally, the S group had a higher bacterial network complexity compared with the R group. Moreover, both Salbutamol and Glycopyramide correlated positively with Anaerostipes.

**Conclusions** These observations will lead to a better understanding of the relationship between alteration of gut microbiota and the sensitivity of HCC to sorafenib. Gut microbiota and microbe-associated metabolites can be used as diagnostic biomarkers in therapeutic explorations.

#### IDDF2020-ABS-0139 GLOBAL BURDEN OF GALLBLADDER CANCER AND ITS ASSOCIATIONS WITH HDI, GDP, SMOKING, ALCOHOL DRINKING, AND OVERWEIGHT

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**Background** This study aimed to evaluate the global incidence, mortality of gallbladder cancer, and their associations with human development index (HDI), gross domestic products (GDP), smoking, alcohol drinking, and overweight for 180 countries.

**Methods** The regional and national incidence and mortality figures for gallbladder cancer in 2018 were retrieved from the GLOBALCAN database. Age-standardized rates (ASRs) were evaluated by the *Segi-Doll* world standard population. HDI