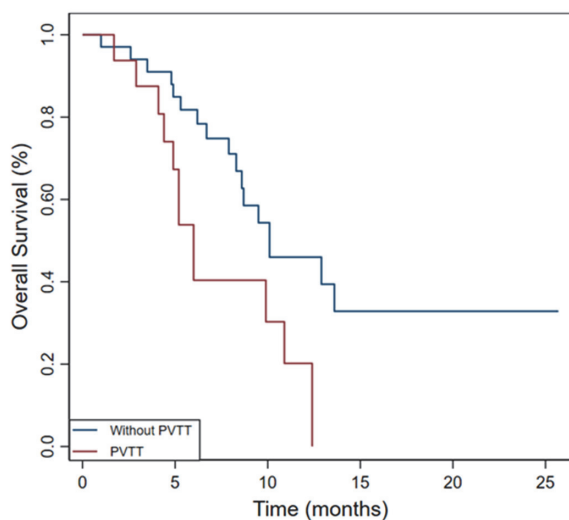


Abstract IDDF2020-ABS-0103 Table 1 Objective responses and disease control rates between two groups per the RECIST v1.1 and imRECIST.

	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

¹Weibin Lian*, ²Haiwei Li, ³Zhangran Chen, ³Yifan Lian. ¹Quanzhou First Hospital Affiliated to Fujian Medical University, China; ²Liaoning Cancer Hospital and Institute, China; ³School of Medicine, Xiamen University, China

10.1136/gutjnl-2020-IDDF.154

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

¹Junjie Huang*, ²Ping Chen, ³Shanjuan Wang, ⁴Lin Zhang, ⁵Jinju Yuan, ¹Xiang-Qian Lao, ¹Shelly LA Tse, ⁶Wanghong Xu, ⁷Zhi-Jie Zheng, ¹Martin Wong. ¹Jockey Club School of Public Health and Primary Care, Faculty of Medicine, Chinese University of Hong Kong, Hong Kong; ²Department of Gastroenterology, Ruijing Hospital North, School of Medicine, Shanghai Jiaotong University, China; ³Department of Gastroenterology, Jiading District Hospital, China; ⁴Melbourne School of Population and Global Health, The University of Melbourne, Australia; ⁵Clinical Research Centre; Scientific Research Centre, The Seventh Affiliated Hospital, Sun Yat-sen University, China; ⁶School of Public Health, Fudan University, China; ⁷Department of Global Health, School of Public Health, Peking University, China

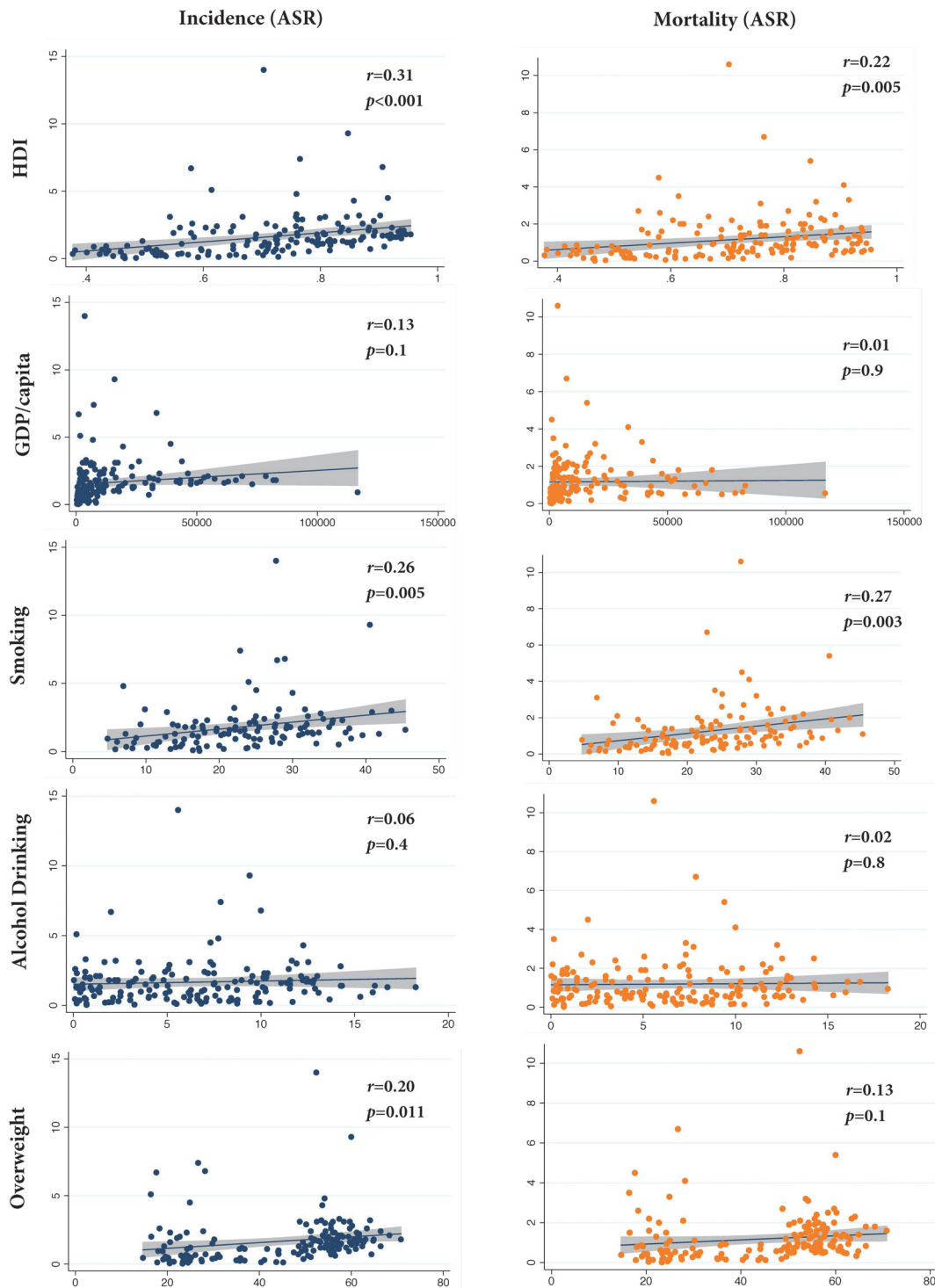
10.1136/gutjnl-2020-IDDF.155

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

and GDP per capita in 2018 for each country were collected from the *United Nation* and *World Bank*. Prevalence of smoking, alcohol drinking, and overweight in 2010 was retrieved from the *Global Health Observatory*. The association between the incidence/mortality and these factors was examined by Pearson's correlation coefficient (r).

Results The global ASR of the incidence of gallbladder cancer was 2.3 per 100,000 persons in 2018. The highest rates were reported in Eastern Asia (ASR=3.0), whilst the lowest rates were found in Middle Africa (0.35). The incidence was the highest in countries with very high HDI (2.5) as compared to those with high (2.4), medium (2.0), and low HDI (0.55).



HDI, human development index; GDP, gross domestic product; ASR, age-standardized rate; r , Pearson's correlation coefficient

Abstract IDDF2020-ABS-0139 Figure 1 The correlation between HDI, GDI, smoking, alcohol drinking, overweight, and gallbladder, cancer incidence and mortality

Countries with higher incidence were correlated with higher HDI ($r=0.31$, $p<0.001$) and a higher prevalence of smoking (0.26, 0.005) and overweight (0.20, 0.011, figure 1). The global ASR of mortality was 1.7. The highest rates were reported in Eastern Asia (ASR=2.4), whilst the lowest rates were found in Middle Africa (0.29). The mortality was the highest in countries with high HDI (1.9) as compared to those with very high (1.5), medium (1.5), and low HDI (0.45). Countries with higher mortality were correlated with higher HDI ($r=0.22$, $p=0.005$) and a higher prevalence of smoking (0.27, 0.003). No correlations with GDP or alcohol drinking were found ($p>0.05$).

Conclusions Higher incidence and mortality of gallbladder cancer were found in regions with higher HDI, higher prevalence of smoking and overweight. With population aging and growth, we might expect a further substantial increase in its disease burden, especially for countries with high socio-economic development. Preventive interventions on reducing the prevalence of risk factors for gallbladder cancer are warranted.

IDDF2020-ABS-0156

ASSOCIATION BETWEEN INCIDENCE AND RISK FACTORS OF LIVER CANCER: A GLOBAL COUNTRY-LEVEL ANALYSIS

¹Junjie Huang*, ²Harsh K Patel, ¹Veeleah Lok, ¹Chun Ho Ngai, ¹Cedric Chu, ³Ping Chen, ⁴Shanjuan Wang, ⁵Lin Zhang, ¹Xiang-Qian Lao, ¹Shelly LA Tse, ⁶Wanghong Xu, ⁷Zhi-Jie Zheng, ¹Martin Wong. ¹Jockey Club School of Public Health and Primary Care, Faculty of Medicine, Chinese University of Hong Kong, Hong Kong; ²Department of Internal Medicine, Ochsner Clinic Foundation, USA; ³Department of Gastroenterology, Ruijing Hospital North, School of Medicine, Shanghai Jiaotong University, China; ⁴Department of Gastroenterology, Jiading District Hospital, China; ⁵Melbourne School of Population and Global Health, The University of Melbourne, Australia; ⁶School of Public Health, Fudan University, China; ⁷Department of Global Health, School of Public Health, Peking University, China

10.1136/gutjnl-2020-IDDF.156

Background Liver cancer is the sixth most common cancer and the fourth leading cause of cancer mortality globally. The global ASR of incidence of liver cancer was 9.3 per 100,000 persons in 2018. There was an estimated total of 471,000 and 168,200 new cases of liver cancer attributable to HBV and HCV in 2018, respectively. This study aimed to evaluate the association between incidence of liver cancer and its risk factors among 185 countries.

Methods The Age-standardised rates (ASR) for incidence of liver cancer in 2018 were extracted from Global Cancer Observatory (GLOBOCAN). The prevalence of smoking,

alcohol consumption, obesity, and diabetes in 2010 for each country were retrieved from the Global Health Observatory (GHO). Primary Outcome: To determine the association between incidence (ASR) and prevalence of risk factors by using multivariable linear regression adjusting for human development index (HDI) and gross domestic product (GDP) per capita.

Results The country with higher incidence was associated with a higher prevalence of smoking (males: $\beta=0.25$, $p=0.028$) and alcohol consumption (females: $\beta=0.94$, $p=0.042$) (table 1: β , beta coefficient refers to how much does the incidence (ASR) change per unit increase in risk factor). No association between the incidence and body mass index (BMI) or diabetes were found in the current analysis ($p>0.05$).

Conclusions Smoking and alcohol consumption remain as important risk factors for liver cancer at a country level. Smoking was associated with an increased risk of Country-specific preventive strategies in the reduction of liver cancer burden includes promoting smoking cessation and alcohol control for high-risk populations.

IDDF2020-ABS-0161

MIXED TYPE I AND II GALLBLADDER PERFORATION IN AN ASYMPTOMATIC ELDERLY PATIENT

¹Nata Pratama Hardjo Lugito*, ¹Andree Kurniawan, ¹Ignatius Bima Prasetya, ¹Jeremia Immanuel Siregar, ²Dewi Purnamasari. ¹Department of Internal Medicine, Faculty of Medicine, Pelita Harapan University, Indonesia; ²Siloam Hospital Lippo Village, Indonesia

10.1136/gutjnl-2020-IDDF.157

Background Gallbladder perforation is a life-threatening event, a severe complication of acute cholecystitis. It is difficult to differentiate to uncomplicated acute cholecystitis. There are three types of gallbladder perforation; (I) acute free perforation into the peritoneal cavity; (II) subacute perforation with pericholecystic abscess; (III) chronic perforation with cholecystoenteric fistula. Type I and II mostly occurred in patients below 50-year-old, while type III in elderly patients with a long history of the biliary stone. We present a case of mixed type I and II gallbladder perforation in an asymptomatic patient.

Methods A 63-years old female with no medical comorbidity was admitted due to watery stool, without nausea, vomiting, abdominal pain or fever. She had a 10-year history of mild epigastric discomfort. She was normotensive, slightly tachycardia and tachypneu with no fever. There was a mass in the

Abstract IDDF2020-ABS-0156 Table 1 The associations between incidence of liver cancer and its risk factors

Outcome (GLOBOCAN)	Risk factor (GHO)	Male			Female				
		β	95% CI	p	β	95% CI	p		
Incidence (ASR)	Smoking	0.25	0.03	0.48	0.028	-0.13	-0.29	0.04	0.123
	Alcohol drinking	0.09	-0.40	0.58	0.712	0.94	0.03	1.85	0.042
	BMI	0.64	-0.49	1.77	0.265	-0.51	-1.58	0.55	0.342
	Diabetes	0.76	-0.54	2.05	0.249	0.54	-0.26	1.33	0.183
	HDI	-22.7	-51.5	6.07	0.121	-3.54	-19.2	12.2	0.656
	GDP	63.7	-121.3	248.8	0.496	-6.76	-101.9	88.4	0.888