

Supplementary table 1. Clinical characteristics of HCC patients (N = 1950)

	HBV (n = 1367)	HCV (n = 254)	Alcohol (n = 172)	Non-viral and non-alcoholic (n = 157)	Non-viral and non-alcoholic vs.			Value s are expre ssed as mean s ± stand ard devia tion or numb er (%)
					HBV <i>P</i> value	HCV <i>P</i> value	alcohol <i>P</i> value	
Age	55 ± 10	69 ± 10	63 ± 10	68 ± 12	< 0.001	0.671	< 0.001	
Sex (male)	1083 (79.2)	164 (64.6)	167 (97.1)	106 (67.5)	0.001	0.593	< 0.001	
Diabetes	257 (18.8)	83 (32.7)	62 (36.0)	62 (39.4)	< 0.001	0.169	0.569	
Hypertension	350 (25.6)	120 (47.2)	62 (36.0)	72 (45.9)	< 0.001	0.839	0.074	
Total cholesterol > 200 mg/dL [†]	149 (10.9)	13 (5.1)	15 (8.7)	19 (12.1)	0.686	0.013	0.366	
Triglyceride > 150 mg/dL [†]	75 (5.5)	25 (9.8)	22 (12.8)	17 (10.8)	0.012	0.741	0.612	
BMI ≥ 25 [†]	410 (30.0)	79 (31.1)	56 (32.6)	48 (30.6)	0.927	1.000	0.723	
BMI ≥ 30 [†]	47 (3.5)	8 (3.2)	6 (3.6)	9 (6.1)	0.113	0.203	0.304	
AFP, median (Q1–Q3), ng/mL	76 (10–9.1 × 10 ²)	37 (9–2.7 × 10 ²)	9 (4–61)	13 (4–1.1 × 10 ³)	0.801	0.196	0.128	
APRI ≥ 1.5	496 (36.3)	116 (45.7)	53 (30.8)	28 (17.8)	< 0.001	< 0.001	0.007	
FIB-4 ≥ 3.25	735 (53.8)	195 (76.8)	105 (61.0)	75 (47.8)	0.177	< 0.001	0.020	
Prothrombin time (INR)	1.2 ± 0.2	1.2 ± 0.2	1.2 ± 0.2	1.1 ± 0.2	< 0.001	0.001	< 0.001	
CTP score	6 ± 1	6 ± 1	6 ± 2	6 ± 1	0.170	< 0.001	0.003	
CTP class A	1088 (79.6)	194 (76.4)	121 (70.3)	134 (85.4)	0.091	0.031	0.001	
Liver cirrhosis	1099 (80.4)	214 (84.3)	126 (73.3)	67 (42.7)	< 0.001	< 0.001	< 0.001	
Positive for anti-HBc [†]	-	153 (81.4)	118 (79.7)	116 (82.9)	-	0.773	0.547	

†Some patients lacked clinical information at the time of HCC diagnosis

Abbreviations: anti-HBc, anti-hepatitis B core antibody; APRI, aspartate aminotransferase to platelet ratio index; FIB-4, fibrosis-4; HBV, hepatitis B virus; HCV, hepatitis C virus; BMI, body mass index; AFP, alpha-fetoprotein; AST, aspartate aminotransferase; ALT, alanine aminotransferase ; APRI, aspartate aminotransferase to platelet ratio index; FIB-4, fibrosis-4 ; CTP, Child-Turcotte-Pugh

Supplementary table 2. Tumor characteristics of HCC patients (N = 1950)

	HBV (n = 1367)	HCV (n = 254)	Alcohol (n = 172)	Non-viral and non-alcoholic (n = 157)	Non-viral and non-alcoholic vs.			Value s are expre ssed as numb er (%) Tum or chara cteris tics were evalu ated as a result of MRI or CT
					HBV <i>P</i> value	HCV <i>P</i> value	alcohol <i>P</i> value	
Uni-nodular tumor	729 (53.3)	140 (55.1)	110 (64.0)	98 (62.4)	0.034	0.151	0.819	
Largest tumor size, ≤ 5cm	775 (56.7)	187 (73.6)	108 (62.8)	69 (43.9)	0.003	< 0.001	< 0.001	
Portal vein thrombosis	440 (32.2)	49 (19.3)	41 (23.8)	49 (31.2)	0.857	0.009	0.140	
Extrahepatic metastasis [†]	219 (16.1)	25 (9.9)	19 (11.2)	31 (19.9)	0.255	0.007	0.032	
mUICC staging, n (%) [†]					0.532	0.029	0.010	
I	217 (16.0)	46 (18.2)	42 (24.7)	19 (12.2)				
II	489 (36.0)	111 (43.9)	67 (39.4)	58 (37.2)				
III	259 (19.1)	53 (20.9)	30 (17.6)	35 (22.4)				
IV/V	394 (29.0)	43 (17.0)	31 (18.2)	44 (28.2)				
BCLC staging, n (%)					0.011	< 0.001	0.044	
0/A	599 (43.8)	135 (53.1)	80 (46.5)	52 (33.1)				
B	253 (18.5)	64 (25.2)	39 (22.7)	42 (26.8)				
C/D	515 (37.7)	55 (21.7)	53 (30.8)	63 (40.1)				
1 st treatment, n (%)								
Curative therapy [†]	202 (14.8)	59 (23.2)	33 (19.2)	21 (13.4)	0.810	0.020	0.182	
Surgical resection	50 (3.7)	5 (2.0)	5 (2.9)	6 (3.8)				
Liver transplantation	16 (1.2)	3 (1.2)	2 (1.2)	0 (0.0)				
RFA/PEI	136 (10.0)	51 (20.1)	26 (15.1)	15 (9.6)				

scans used at the time of HCC diagnosis.

[†]Some patients lacked clinical information at the time of HCC diagnosis.

‡Patients not indicated for curative therapies were applied to palliative therapies including transarterial chemoembolization, transarterial radioembolization, radiotherapy, systemic treatments, or conservative treatment.

Abbreviations: BCLC, Barcelona Clinic Liver Cancer; HBV, hepatitis B virus; HCV, hepatitis C virus; mUICC, modified Union for International Cancer Control