

Table S1 Baseline characteristics of all patients in GGT-high and GGT-low groups

Characteristics	GGT-high Group, n=603 (%)	GGT-low Group, n=631 (%)	P value
Age, >50 years	323 (53.6)	339 (53.7)	<0.001
Gender, male	532 (88.2)	487 (77.2)	0.955
HBV-DNA, >2,000 IU/mL	368 (61.0)	59 (9.4)	<0.001
TBil, >17.1 µmol/L	104 (17.2)	77 (12.2)	0.012
Albumin, <3.5 g/dL	215 (35.7)	148 (23.5)	<0.001
ALT, >44 U/L	254 (42.1)	95 (15.1)	<0.001
AST, >40 U/L	332 (55.1)	119 (18.9)	<0.001
GGT, > 60 U/L	603 (100.0)	0 (0)	<0.001
Child-Pugh, B	588 (97.5)	452 (71.6)	0.113
AFP, >400 ng/mL	394 (65.3)	631 (100)	<0.001
Nonanatomical hepatectomy	245 (40.6)	263 (41.2)	<0.001
Surgical margin, <1 cm	201 (33.3)	231 (36.6)	<0.001
Tumor number, >1 [^]	76 (12.6)	54 (8.6)	0.003
Tumor diameter, >5 cm [^]	317 (52.6)	47 (7.4)	<0.001
Bilateral tumor distribution [^]	129 (21.4)	140 (22.2)	0.001
Satellite nodules [^]	190 (31.6)	104 (16.5)	0.004
Microvascular invasion [^]	169 (28.0)	153 (24.2)	0.008
Edmondson-Steiner grade, III-IV [^]	492 (81.6)	136 (21.6)	<0.001
Cirrhosis [^]	452 (75.0)	445 (70.5)	0.080
TNM stage: I-II, IIIA-IIIB	111 (18.4), 492 (81.6)	352 (55.8), 279 (44.2)	<0.001
BCLC stage: 0, A-B	26 (4.3), 577 (95.7)	449 (71.2), 182 (28.8)	<0.001
CLIP score: 0-1, 2-3	454 (75.3), 149 (24.7)	495 (78.4), 136 (21.6)	<0.001

[^], Post-operative parameter. TBil, total bilirubin; ALT, alanine aminotransferase; AST, aspartate aminotransferase; GGT, γ -glutamyl transpeptidase; AFP, α -fetoprotein.

Table S2 Independent prognostic factors predicting RFS in HCC patients positive for HBsAg

Characteristics	Univariate			Multivariate analysis		
	HR	95%CI	P value	HR	95%CI	P value
Age, >50 vs. ≤50 years	1.130	0.967-1.319	0.123	NA	NA	NA
Gender, male vs. female	1.485	1.181-1.868	0.001	1.458	1.153-1.845	0.002
HBV-DNA, >2000 vs. ≤2000 IU/mL	1.380	1.179-1.615	<0.001	1.025	0.850-1.237	0.793
TBil, >17.1 vs. ≤17.1 μmol/L	1.084	0.875-1.342	1.084	NA	NA	NA
Albumin, <3.5 vs. ≥3.5g/dL	1.358	1.155-1.597	<0.001	1.231	1.043-1.453	0.014
ALT, >44 vs. ≤44 U/L	1.270	1.076-1.498	0.005	0.993	0.807-1.223	0.951
AST, >40 vs. ≤40 U/L	1.504	1.286-1.758	<0.001	1.159	0.945-1.423	0.157
GGT, > 90 vs. ≤90 U/L	1.634	1.399-1.908	<0.001	1.235	1.123-1.445	0.021
Child-Pugh, B vs. A	1.341	0.774-2.323	0.295	NA	NA	NA
AFP, >400 vs. ≤400 ng/mL	1.651	1.408-1.936	<0.001	1.132	0.903-1.419	0.281
Hepatectomy, nonanatomical vs. anatomical	1.103	0.942-1.231	0.321	NA	NA	NA
Surgical margin, <1 vs. ≥1 cm [^]	1.123	0.974-1.294	0.140	NA	NA	NA
Tumor number, >1 vs. 1 [^]	2.232	1.781-2.799	<0.001	1.931	1.530-2.439	<0.001
Tumor diameter, >5 vs. ≤5 cm [^]	1.897	1.622-2.219	<0.001	1.582	1.335-1.875	<0.001
Tumor distribution, ipsilateral vs. bilateral [^]	1.004	0.912-1.123	0.178	NA	NA	NA
Satellite nodules, presence vs. absence [^]	1.857	1.579-2.184	<0.001	1.434	1.206-1.707	1.434
Microvascular invasion, presence vs. absence [^]	1.804	1.523-2.135	<0.001	1.447	1.210-1.732	<0.001
Edmondson-Steiner grade, III-IV vs. I-II [^]	1.486	1.228-1.798	<0.001	1.194	0.980-1.454	0.079
Cirrhosis, yes vs. no [^]	1.088	0.913-1.298	0.346	NA	NA	NA

[^], Post-operative parameter. TBil, total bilirubin; ALT, alanine aminotransferase; AST, aspartate aminotransferase; AFP, α-fetoprotein.