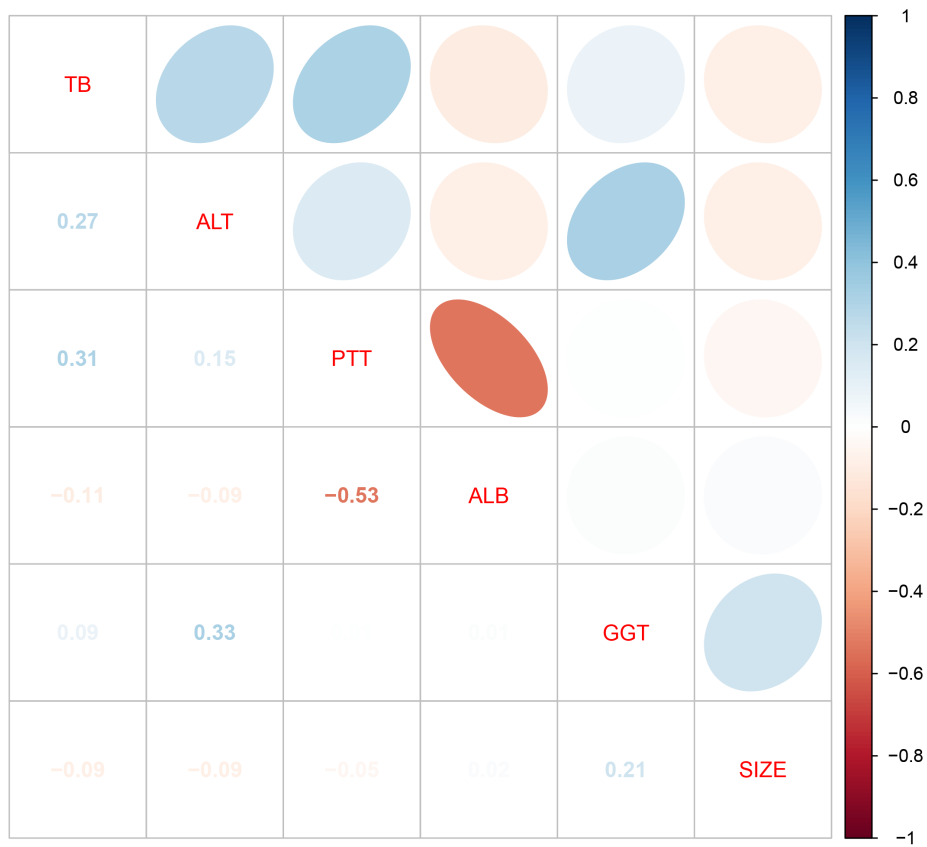


**Table S1** Univariate Cox regression analyses of risk factors related to OS and TTR in 107 patients

Variables	OS		TTR	
	Odds ratio (95% CI)	P value	Odds ratio (95% CI)	P value
Age, years, ≤50 vs. >50	0.72 (0.46, 1.12)	0.146	0.69 (0.45, 1.07)	0.098
TB, per SD	0.98 (0.79, 1.21)	0.846	1.01 (0.83, 1.23)	0.916
Prothrombin time (s)	1.16 (0.95, 1.43)	0.155	1.18 (0.97, 1.44)	0.093
Serum albumin, per SD	0.78 (0.62, 0.99)	0.039*	0.72 (0.58, 0.91)	0.006*
Glutamic pyruvic transaminase, per SD	0.98 (0.80, 1.20)	0.830	1.00 (0.82, 1.21)	0.988
GGT, per SD	1.54 (1.27, 1.87)	<0.001*	1.53 (1.26, 1.86)	<0.001*
Tumor size (cm)	1.05 (0.97, 1.13)	0.210	1.07 (0.99, 1.15)	0.082
Sex (male vs. female)	1.45 (0.89, 2.35)	0.132	1.68 (1.04, 2.71)	0.035*
Cirrhosis (positive vs. negative)	1.35 (0.73, 2.51)	0.335	1.31 (0.71, 2.42)	0.386
HBV DNA, copies/mL (>10 <sup>3</sup> vs. ≤10 <sup>3</sup> )	1.07 (0.61, 1.87)	0.824	1.11 (0.64, 1.92)	0.708
CA19-9, u/mL (≤37 vs. >37)	1.02 (0.65, 1.59)	0.945	1.44 (0.92, 2.24)	0.108
AFP, ng/ml (≤20 vs. >20)	1.30 (0.77, 2.18)	0.328	1.34 (0.80, 2.26)	0.262
Tumor number (multiple vs. solitary)	1.39 (0.60, 3.20)	0.438	1.15 (0.50, 2.65)	0.738
Tumor location (single lobe vs. multiple lobes)	2.41 (1.38, 4.20)	0.002*	2.11 (1.21, 3.68)	0.008*
Liver resection (anatomical vs. local)	0.74 (0.46, 1.17)	0.196	0.76 (0.48, 1.19)	0.225
Tumor capsule (positive vs. negative)	0.74 (0.38, 1.43)	0.366	0.70 (0.36, 1.36)	0.296
Micro thrombus invasion (yes vs. no)	1.46 (0.86, 2.48)	0.157	2.02 (1.22, 3.36)	0.006*
Hilar lymph nodes (negative vs. positive)	1.13 (0.54, 2.35)	0.743	1.21 (0.58, 2.52)	0.607
Histologic differentiation (well vs. poor)	1.71 (1.08, 2.70)	0.022*	1.71 (1.09, 2.68)	0.019*
Adjuvant chemotherapy (yes vs. no)	0.86 (0.54, 1.36)	0.510	1.04 (0.66, 1.63)	0.876

\*, Significant difference. OS, overall survival; TTR, time to recurrence; CI, confidence interval; TB, total bilirubin; SD, standard deviation; GGT, gamma-glutamyl transpeptidase; HBV, hepatitis B virus; CA19-9, carbohydrate antigen 19-9; AFP, alpha-fetoprotein.



**Figure S1** Factors potentially correlated with serum GGT concentration. Correlation test showed that all of the P value of correlation for each pair are  $>0.05$ . Even ALT which is the most relevant factor of GGT, has a correlation coefficient of only 0.33. GGT, gamma-glutamyl transpeptidase; ALT, alanine aminotransferase; TB, total bilirubin.