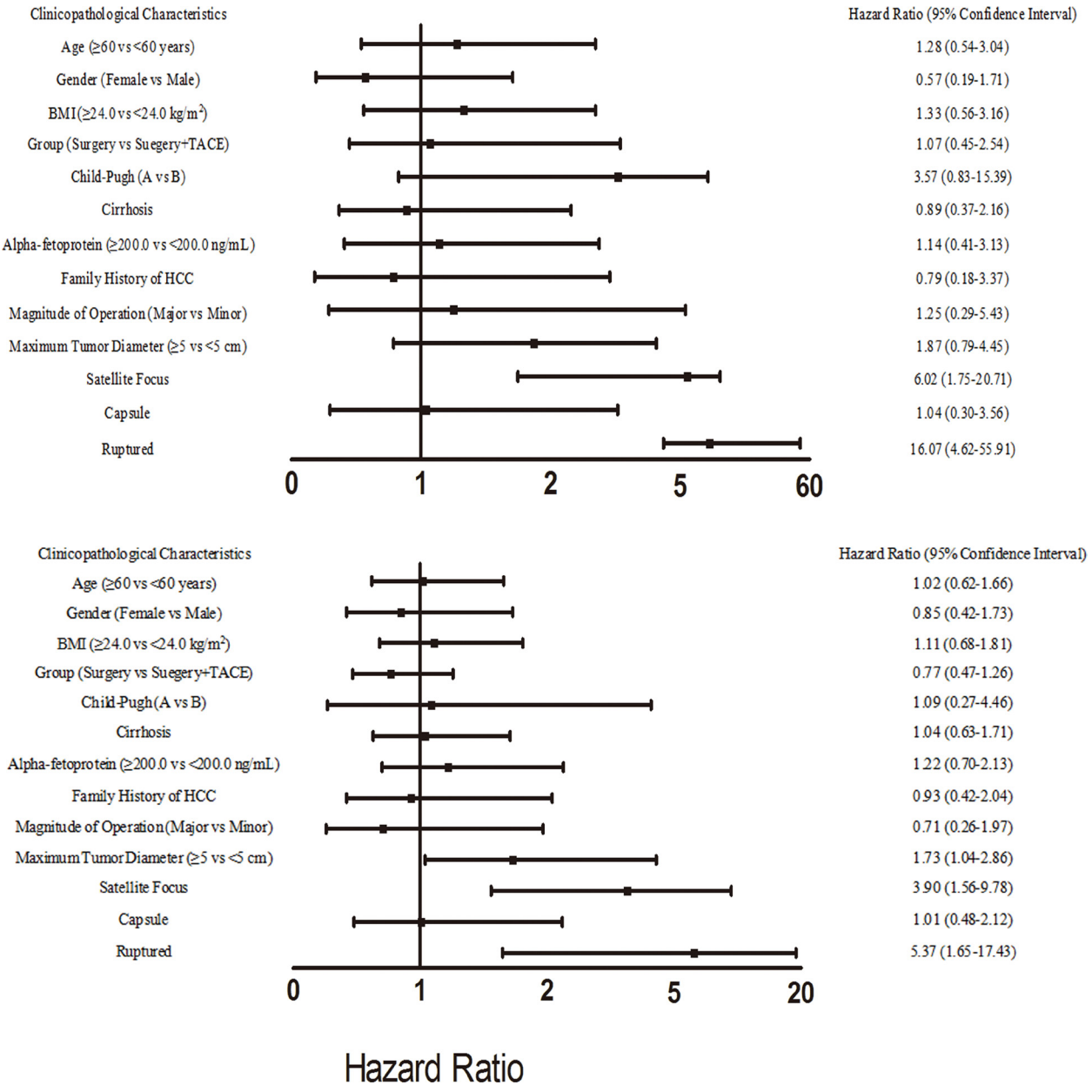
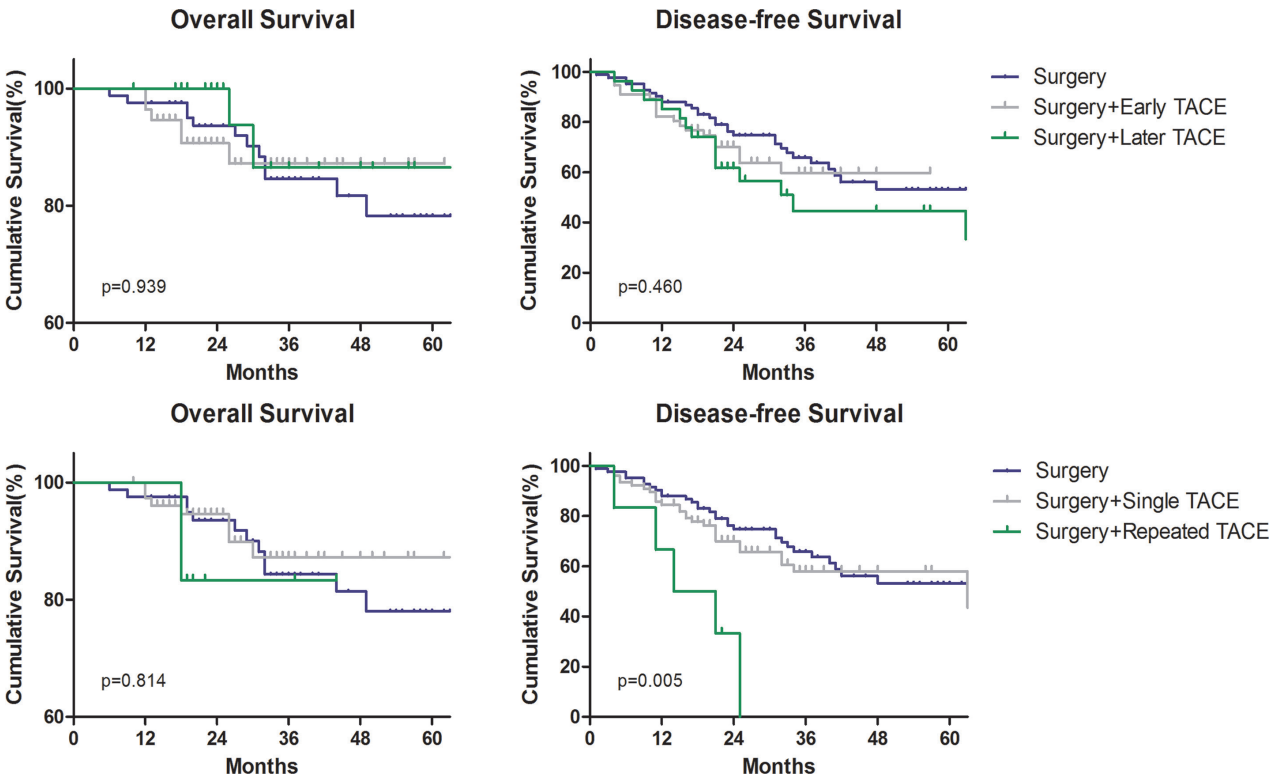
Postoperative adjuvant TACE for patients of hepatocellular carcinoma in AJCC stage I: friend or foe? a propensity score analysis

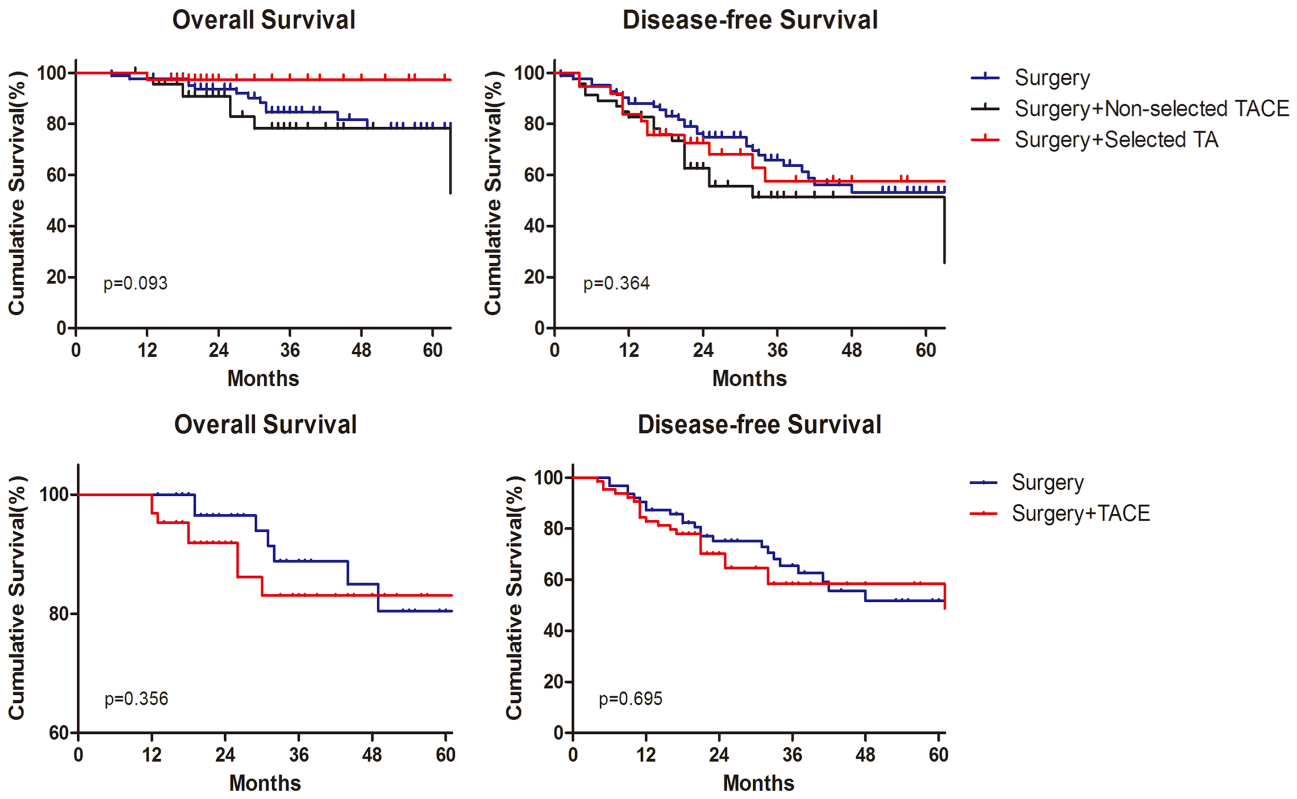
Supplementary Materials



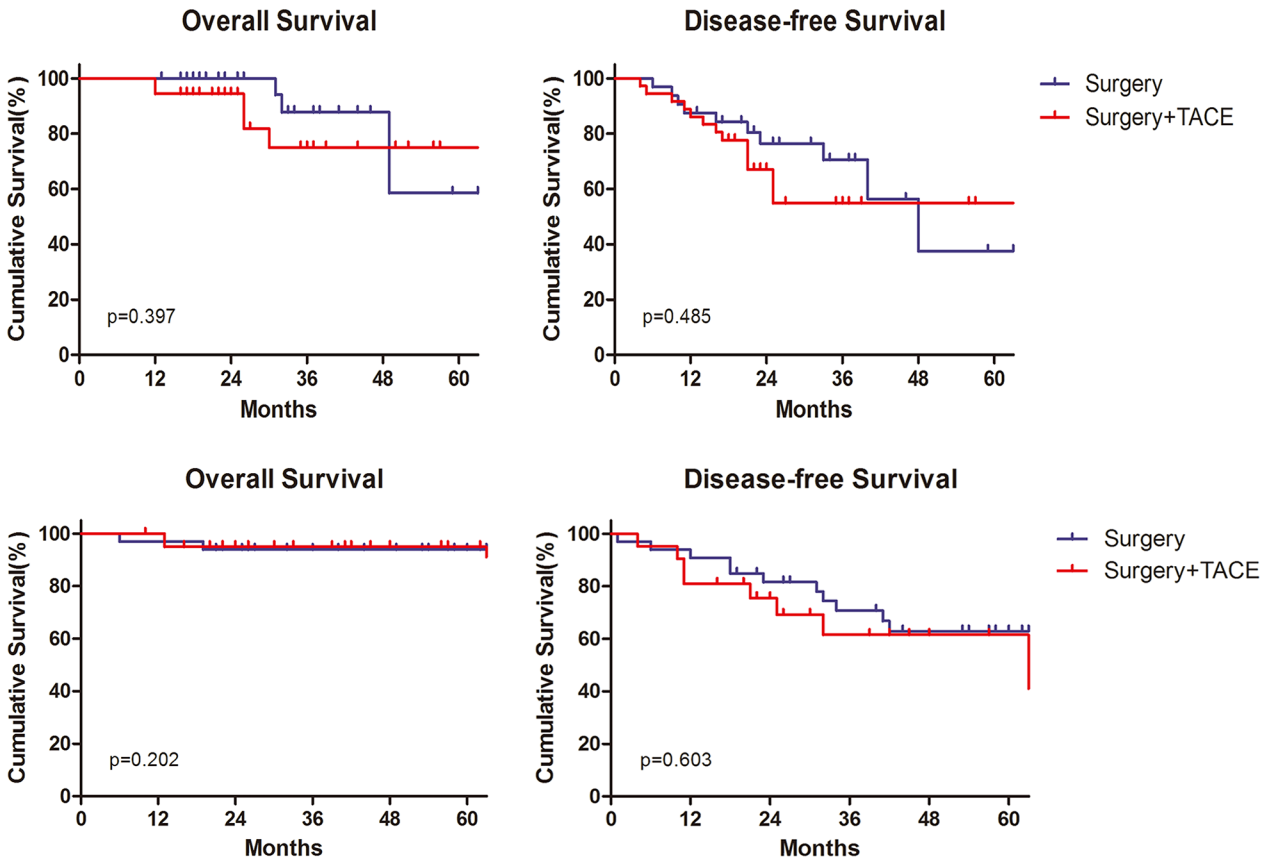
Supplementary Figure 1: Univariate analysis of survival with cox regression model. TACE: Transcatheter Arterial chemoembolization; BMI, Body Mass Index; HCC, Hepatocellular Carcinoma; Major resection is defined as equal or more than three segmentectomy; HR, Hazard Ratio.



Supplementary Figure 2: Subgroup analysis of survival with timing and times of TACE. Overall survival (Upper left) and Disease-free survival (Upper right) for Timing of TACE. Overall survival (Lower left) and Disease-free survival (Lower right) for Times of TACE. TACE, Transcatheter Arterial chemoembolization.



Supplementary Figure 3: Subgroup analysis for patients with selected or Non-selected TACE and preoperative alpha-fetoprotein < 200 ng/mL. Overall survival (Upper left) and Disease-free survival (Upper right) for patients with selected or non-selected TACE. Overall survival (Lower left) and Disease-free survival (Lower right) for patients with preoperative alpha-fetoprotein < 200 ng/mL. TACE, Transcatheter Arterial chemoembolization.



Supplementary Figure 4: Subgroup analysis for patients with alpha-fetoprotein negative or undetected immunohistochemically. Overall survival (Upper left) and Disease-free survival (Upper right) for patients with immunohistochemical alpha-fetoprotein negative. Overall survival (Lower left) and Disease-free survival (Lower right) for patients with immunohistochemical alpha-fetoprotein undetected. TACE, Transcatheter Arterial chemoembolization.

Supplementary Table 1: Clinicopathological characteristics before propensity score matching

	Surgical Group (n = 91)	Surgical+TACE Group (n = 115)	P–value
Age (years)	63.0 (36–84)	39.0 (29–83)	< 0.001
Gender (male)	78 (85.7%)	100 (87.0%)	0.796
BMI (kg/m^2)	24.2 (17.5–31.6)	23.2 (15.4–32.2)	0.330
Serum HBV	67 (73.6%)	101 (87.8%)	0.009
Serum HCV	1 (1.1%)	0 (0%)	0.442
Hemoglobin (g/L)	13.9 (8.0–17.1)	14.3 (8.9–17.1)	0.113
Prothrombin Time (s)	13.4 (11.3–17.5)	13.5 (11.7–23.0)	0.639
ALT (IU/L)	28.0 (7–128)	36.0 (5–211)	0.015
Albumin (g/L)	39.9 (28.2–51.0)	40.7 (23.4–50.6)	0.234
Total Bilirubin (μmol/L)	15.4 (3.2–50.7)	14.8 (3.4–47.9)	0.771
Alpha-fetoprotein (ng/mL)	14.7 (1.4–14104.8)	18.3 (1.5–50500.0)	0.563
Cirrhosis	40 (44.0%)	45 (39.1%)	0.185
HBV-related	35 (38.5%)	43 (37.4%)	0.875
HCV-related	1 (1.1%)	0 (0%)	0.442
Schistosome	4 (4.4%)	1 (0.8%)	0.172
Alcoholic	0 (0%)	1 (0.8%)	1.000
Child-Pugh Grade			0.702
A	87 (95.6%)	112 (97.4%)	
B	4 (4.4%)	3 (2.6%)	
Family History of HCC	8 (8.8%)	16 (13.9%)	0.255
Tumor Location			
I	3 (3.3%)	0 (0%)	0.257
II	13 (14.3%)	7 (6.1%)	0.084
III	7 (7.7%)	8 (7.0%)	0.840
IV	15 (16.5%)	13 (11.3%)	0.281
V	17 (18.7%)	23 (20.0%)	0.812
VI	26 (28.6%)	41 (35.7%)	0.281
VII	18 (19.8%)	30 (26.1%)	0.288
VIII	14 (15.4%)	30 (26.1%)	0.063
Maximum Tumor Diameter (cm)	3.0 (0.9–11.0)	2.0 (0.7–11.6)	0.180
Magnitude of Operation			0.311
Major	9 (9.9%)	7 (6.1%)	
Minor	82 (90.1%)	108 (93.9%)	

Values are presented as median (range) or number (percentage). TACE: Transcatheter Arterial Chemoembolization; BMI, Body Mass Index; ALT, Alanine Aminotransferase; HBV, Hepatitis B virus; HCV, Hepatitis C virus; HCC, Hepatocellular Carcinoma. Major resection is defined as equal or more than three segmentectomy.

Survival rate algorithm

Overall Survival Rate = (1- Mortality) × 100%
Mortality = Deaths/(No. at risk + No. of truncation/2) × 100%
Disease-free Survival Rate = (1- Recurrence Rate) × 100%
Recurrence Rate = No. of recurrence/(No. at risk + No. of truncation/2) × 100%