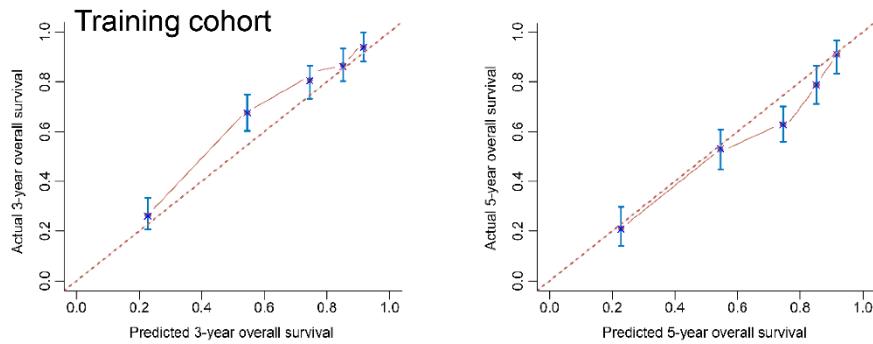


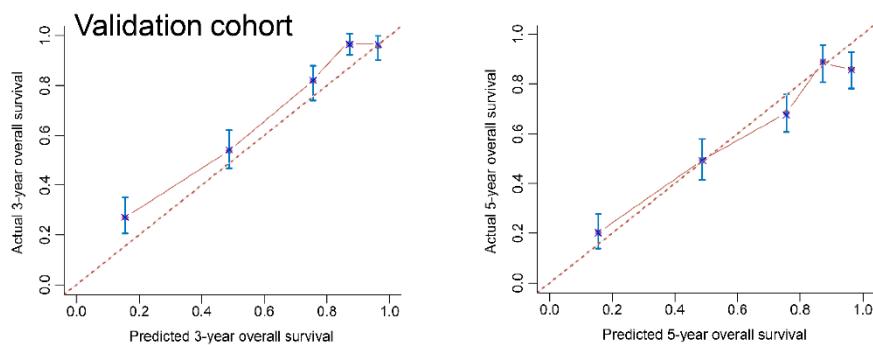
## Supplementary Figures

### Supplementary Figure 1

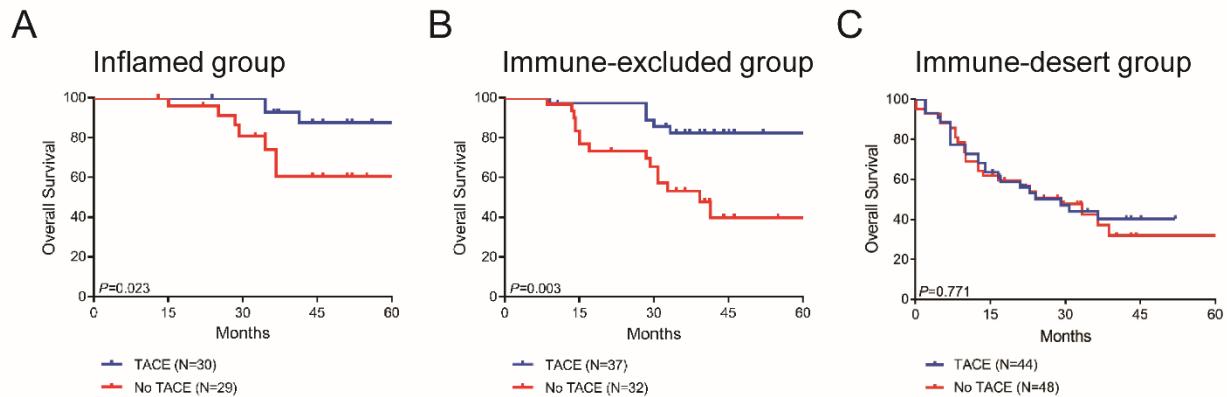
A



B



**Supplementary Figure 1.** Calibration curves for predicting 3- and 5-year overall survival in the training cohort (A), and 3- and 5-year (D) overall survival in the validation cohort (B).

**Supplementary Figure 2**

**Supplementary Figure 2.** Survival benefit of postoperative TACE in the inflamed (A), immune-excluded (B) and immune-desert (C) groups.

**Supplementary Table 1.** Univariate and multivariate analyses for recurrence-free survival in the training cohort.

Variables	Univariable analysis <i>P</i>	Multivariable analysis	
		Hazard ratio (95% CI)	<i>P</i>
Immunotype	0.038		0.015
Inflamed		Reference	
Immune-excluded		3.313 (1.133-11.757)	0.044
Immune-desert		4.330 (1.324-14.159)	0.017
Sex	0.682		
Male			
Female			
Age	0.458		
<50			
≥50			
HBV infection	0.107		
Yes			
No			
Cirrhosis	0.474		
Yes			
No			
ALT (U/L)	0.288		
<40			
≥40			
AFP (μg/L)	0.580		
<20			
≥20			
Grade	<0.001		0.001
G 1-2		Reference	
G 3-4		4.566 (1.832-11.364)	
BCLC stage	0.001		<0.001
0-A		Reference	
B		5.051 (1.621-15.625)	0.005
C		7.692 (1.761-33.333)	0.007
PD-L1 expression	<0.001		<0.001
Low		Reference	
High		6.667 (2.660-16.667)	

HBV, hepatitis B virus; ALT, alanine aminotransferase; AFP, alpha fetoprotein.