

Figure S1. Immunohistochemical staining of CD8⁺ T cells in patients with hepatocellular carcinoma. (A) Image of a high CD8⁺ T cell pattern. Magnification, x400. (B) Image of a low CD8⁺ T cell infiltration pattern. Magnification, x400.

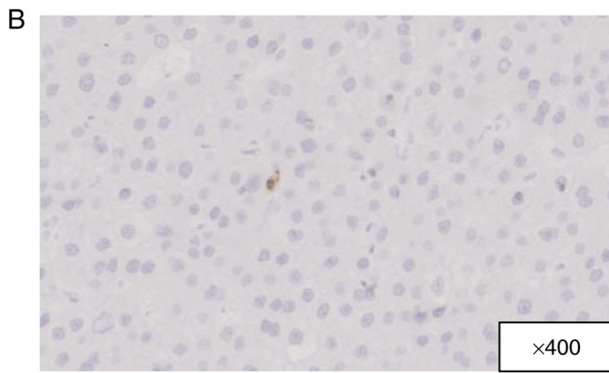
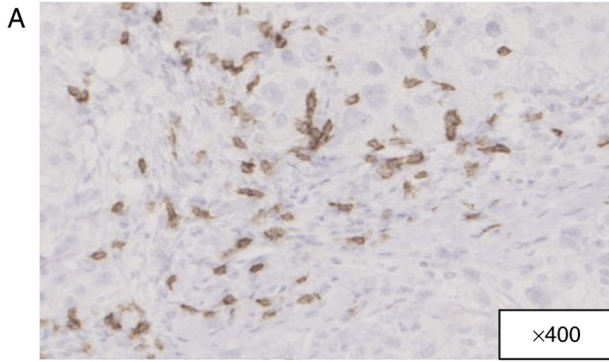


Figure S2. Kaplan-Meier curves showing the survival of patients with hepatocellular carcinoma according to the number of CD8⁺ T cells in tumors. (A) Recurrence-free survival and (B) overall survival in all patients according to high and low numbers of CD8⁺ T cells in tumors. CD8⁺Tc, CD8⁺ T-cell.

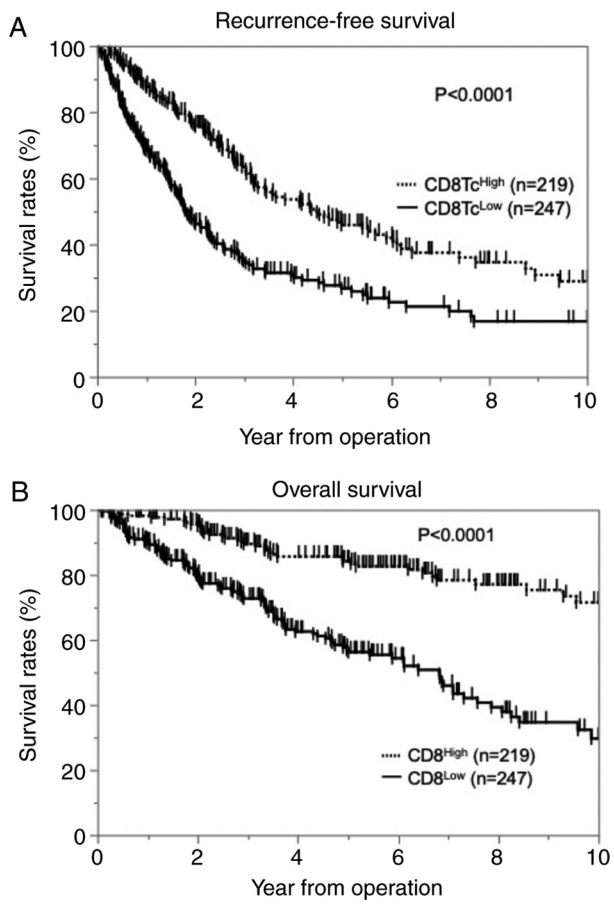


Table SI. Association of background characteristics of patients and intra-tumoral CD8 expression.

Variable	CD8 low (n=247)	CD8 high (n=219)	P-value
Age, years	69 (27-87)	69 (17-87)	0.5097
Sex (male), n (%)	193 (78.1)	151 (68.9)	0.0243
BMI, kg/m ²	23.0 (14.2-37.9)	23.0 (15.7-32.6)	0.2403
HBs-Ag positive, n (%)	41 (16.6)	32 (14.6)	0.5432
HCV-Ab positive, n (%)	119 (48.2)	120 (54.8)	0.1538
Child-Pugh classification, grade B, n (%)	11 (4.5)	5 (2.3)	0.1991
Albumin, g/dl	4.0 (1.8-5.1)	4.0 (2.1-4.8)	0.6124
DCP, mAU/ml	121 (2-250400)	52 (8-15430)	0.1665
AFP, ng/ml	8.7 (1-994600)	10.7 (1-165385)	0.0868
Performing preoperative TACE or TAE, n (%)	11 (4.5)	3 (1.4)	0.0516
Tumor size, cm	3.8 (1.0-20)	3.8 (0.9-30)	0.0045
Multiple tumors, n (%)	64 (25.9)	36 (16.4)	0.0129
BCLC staging, B or C, n (%)	55 (22.3)	32 (14.7)	0.0363
Gross classification, single nodular type, n (%)	148 (60.4)	140 (64.2)	0.3985
Poorly differentiation, n (%)	80 (32.4)	63 (28.9)	0.4158
Microscopic vascular invasion, n (%)	92 (37.3)	51 (23.3)	0.0011
Microscopic intrahepatic metastasis, n (%)	63 (25.6)	20 (9.1)	<0.0001
F3 or F4, n (%)	104 (42.1)	192 (42.2)	0.9832

Data are presented as n (%) or median (range). BMI, body mass index; HBs-Ag, hepatitis B surface antigen; HCV-Ab, hepatitis C virus antibody; DCP, des- γ -carboxy prothrombin; AFP, α -fetoprotein; TA(C)E, transcatheter arterial (chemo)embolization; BCLC, Barcelona Clinic Liver Cancer.

Table SII. Background characteristics of patients who underwent hepatic resection for hepatocellular carcinoma.

Variable	Others (n=398)	CD33 high/CD8 low (n=68)	P-value
Age, years	69 (17-87)	70 (36-86)	0.6032
Sex (male), n (%)	289 (72.6)	55 (80.9)	0.1517
BMI, kg/m ²	23.0 (15.7-37.9)	22.5 (14.2-32.6)	0.2700
HBs-Ag positive, n (%)	59 (14.9)	14 (20.6)	0.2304
HCV-Ab positive, n (%)	211 (53.0)	28 (41.2)	0.0770
Child-Pugh classification, grade B, n (%)	14 (3.5)	2 (2.9)	0.8094
Albumin, g/dl	4.0 (2.1-5.1)	3.9 (1.8-4.8)	0.0668
DCP, mAU/ml	73 (2-250400)	219 (9-75000)	0.4740
AFP, ng/ml	8.3 (1-693700)	28.1 (1-994600)	0.0007
Performing preoperative TACE or TAE, n (%)	10 (2.6)	4 (5.9)	0.1325
Tumor size, cm	3.2 (0.9-30)	4.5 (1-20)	0.0001
Multiple tumors, n (%)	80 (20.1)	20 (29.4)	0.0839
BCLC staging, B or C, n (%)	63 (15.9)	24 (35.3)	0.0004
Gross classification, single nodular type, n (%)	255 (64.4)	80 (49.3)	0.0181
Poorly differentiation, n (%)	108 (27.2)	35 (51.1)	<0.0001
Microscopic vascular invasion, n (%)	107 (26.9)	36 (52.9)	<0.0001
Microscopic intrahepatic metastasis, n (%)	58 (14.6)	25 (36.8)	<0.0001
F3 or F4, n (%)	171 (43.1)	25 (36.8)	0.3304

Data are presented as n (%) or median (range). BMI, body mass index; HBs-Ag, hepatitis B surface antigen; HCV-Ab, hepatitis C virus antibody; DCP, des- γ -carboxy prothrombin; AFP, α -fetoprotein; TA(C)E, transcatheter arterial (chemo)embolization; BCLC, Barcelona Clinic Liver Cancer.