



Figure S1 Survival analysis. Kaplan-Meier curves stratified by baseline ECOG score of <2 or ≥2 for progression-free survival (A). Kaplan-Meier curves stratified by baseline ECOG score of <2 or ≥2 for overall survival (B). PFS, progression-free survival; ECOG, Eastern Co-operative Group; OS, overall survival.

Table S1 Univariate and multivariate analysis of in-field progression-free survival

Variables [†]	Univariate		Multivariate	
	HR (95% CI)	P value	HR (95% CI)	P value
Age (<50 vs. ≥50 years)	1.55 (0.34-7.04)	0.572		
Sex (male/female)	0.78 (0.10-6.11)	0.814		
Virus infection (negative vs. positive)	NE			
ECOG (<2 vs. ≥2)	1.67 (0.55-5.08)	0.367		
AFP (<400 vs. ≥400 ng/mL)	2.12 (0.70-6.42)	0.182		
Child-Pugh class (A vs. B)	4.35 (0.78-24.37)	0.095	1.99 (0.34-11.71)	0.445
ALBI score (1 vs. 2)	0.84 (0.27-2.65)	0.765		
Portal invasion (absent vs. present)	3.19 (0.98-10.40)	0.054	0.75 (0.09-6.02)	0.783
Extrahepatic spread (absent vs. present)	0.51 (0.18-1.50)	0.223		
Prior hepatectomy (absent vs. present)	0.24 (0.07-0.88)	0.032	0.20 (0.02-1.88)	0.159
Prior hepatic local treatment (absent vs. present)	0.93 (0.20-4.19)	0.920		
Maximal tumor diameter (<10 vs. ≥10 cm)	1.88 (0.58-6.13)	0.295		
Tumor number (<3 vs. ≥3)	1.09 (0.30-4.00)	0.893		
Disease control [‡] (no vs. yes)	0.93 (0.26-3.36)	0.917		
PFS1, months (<4.1 vs. ≥4.1)	0.97 (0.32-2.92)	0.958		
Interval between ICIs and RT (<5.0 vs. ≥5.0 months)	1.13 (0.38-3.41)	0.827		
PEL (no vs. yes)	1.65 (0.57-4.79)	0.355		
First-line of ICIs (no vs. yes)	2.93 (0.90-9.52)	0.074	2.93 (0.74-11.51)	0.124
BED ₁₀ , Gray (<60 vs. ≥60)	1.19 (0.41-3.52)	0.747		

Factors (P<0.15) in the univariate analysis were candidates for entry into a multivariable Cox analysis. [†], analysis for the 32 patients with complete radiotherapy data; [‡], best objective response during immunotherapy before radiotherapy. ECOG, Eastern Co-operative Oncology Group; AFP, α -fetoprotein; ALBI, albumin-bilirubin; PFS, progression-free survival; ICIs, immune checkpoint inhibitors; RT, radiotherapy; PEL, progression of existing lesion; BED10, biologically effective dose at an alpha/beta ratio of 10; HR, hazard ratio; CI, confidence interval; NE, not estimable.