**S1 Table.** Evaluable patients' characteristics

Characteristic	No. of patients (%)
Age, median (range, yr)	59 (39-84)
Sex	
Male	112 (84.8)
Female	20 (15.2)
ECOG score	
0	38 (28.8)
1	59 (44.7)
2	35 (26.5)
Hepatitis	
No	9 (6.8)
HBV	99 (75.0)
HCV	16 (12.1)
Alcoholic	8 (6.1)
Initial CP score	
7	81 (61.4)
8	45 (34.1)
9	6 (4.5)
Tumor size, median (range, cm)	5.3 (1-21)
No. of tumors	
1	65 (49.2)
2	26 (19.7)
3	15 (11.4)
4	4 (3.0)
5	3 (2.3)
6	4 (3.0)
7	0 (0.0)
8	2 (1.5)
9	1 (0.8)
≥ 10	12 (9.1)
Tumor location	
Rt lobe	82 (62.1)
Lt lobe	15 (11.4)
Both lobes	35 (26.5)
Bile duct invasion	
No	104 (78.8)
Yes	28 (21.2)
PVTT	,
No	51 (38.6)
Yes	81 (61.4)
Main PVTT	, ,

No	96 (72.7)
Yes	36 (27.3)
mUICC_T	
1	10 (7.6)
2	19 (14.4)
3	46 (34.8)
4	57 (43.2)
mUICC_N	
0	115 (87.1)
1	17 (12.9)
Previous treatment	
No	56 (42.4)
Yes	76 (57.6)
Combined treatment	
No	50 (37.9)
Yes	82 (62.1)
AFP, median (range, IU/mL)	74.4 (2.2-973140.0)
RT technique	
3DCRT	114 (86.4)
IMRT	18 (13.6)
RT aim <sup>a)</sup>	
Curative	78 (59.1)
Palliative	54 (40.9)
Fx size, median (range, Gy)	2.5 (1.5-5.0)
Total dose, median (range, Gy)	45.0 (33.0-64.0)
BED, median (range, Gy <sub>10</sub> )	56.0 (40.4-89.6)
Classic RILD	
No	116 (87.9)
Yes	16 (12.1)
Non-classic RILD	, ,
No	106 (80.3)
Yes	26 (19.7)
Additional Treatment	, ,
No	58 (43.9)
Yes	74 (56.1)
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ECOG, Eastern Cooperative Oncology Group; HBV, hepatitis B virus; HCV, hepatitis C virus; CP, Child-Pugh; PVTT, portal vein tumor thrombosis; mUICC, the modified International Union Against Cancer stage; T, tumor; N, lymph nodes; AFP,  $\alpha$ -fetoprotein; RT, radiotherapy; 3DCRT, 3-dimensional conformal radiotherapy; IMRT, intensity-modulated radiotherapy; Fx, fraction; BED, biologically effective dose when the  $\alpha/\beta$  ratio was assumed to be 10 Gy; RILD, radiation- induced liver disease. <sup>a)</sup>Curative intent means that RT field cover all viable tumors; palliative intent means that RT field cover a part of viable tumors.