

**Supplementary Table 1.** Characteristics and clinical features, FIB 4 index and PET metabolic characteristics of patients

Median (min-max)	Well-differ. HCC (n: 56 (51%))	Poor differ. HCC (n: 54 (49%))	P value
Gender			
Female	9 (53%)	8 (47%)	>0.05
Male	47 (51%)	46 (49%)	
Age (year) (Mean ± SD)	67.4 ± 11.4	66.3 ± 8.6	>0.05
Tm number, n			
Single lesion	24 (65%)	13 (35%)	0.04
Oligofocal	11 (58%)	8 (42%)	
Multifocal	21 (39%)	33 (61%)	
P. carcinomatosis			
Negative	41 (58%)	30 (42%)	0.05
Positive	15 (39%)	24 (61%)	
PET visual			
Negative	35 (100%)	0	<0.001
Positive	21 (28%)	54 (72%)	
FIB-4 Index	4.2 (0.6-25)	4.5 (0.9-38.5)	0.77
SUVmax	5.6 (2.9-12.7)	14.5 (7.5-46.7)	<0.001
SUVpeak	4.7 (2.4-11)	12 (1.2-39.4)	<0.001
SUVmean	3.1 (1.9-9.8)	8 (3.8-27.9)	<0.001
T/LmaxR	1.5 (1-3.5)	3.5 (1.7-15.1)	<0.001
T/LmeanR	2.1 (1.4-5.1)	5.4 (2.5-20.3)	<0.001
T/BmaxR	2 (1.2-6.3)	5.2 (2.6-21.2)	<0.001
T/BmeanR	3.1 (1.6-12.2)	7.6 (3.9-28.4)	<0.001

Abbreviations: PET = positron emission computed tomography; SUV max = the maximum standard uptake value; SUV peak = the peak standard uptake value; SUV mean = the mean standard uptake value; T/LmaxR = tumor-to-normal liver maximum standardized uptake value ratio; T/LmeanR = tumor-to-normal liver mean standardized uptake value ratio; T/BmaxR = tumor-to-mediastinum maximum standardized uptake value Ratio; T/BmeanR = tumor-to-mediastinum mean standardized uptake value Ratio.

**Supplementary Table 2.** ROC curve analysis of PET/CT parameters according to histological grading

PET/CT parameters	Cutoff value	AUC	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Accuracy (%)	P value
SUVmax	8.8	0.981	96.3	94.6	94.5	96.4	95.4	
SUVpeak	7.3	0.961	94	93	92.7	94.5	93.6	
SUVmean	4.5	0.974	98	91	91.4	98.1	94.5	
T/LmaxR	2.35	0.975	96	89	89.7	96.2	92.7	<0.001
T/LmeanR	3.16	0.970	98.1	83.9	85.5	97.9	90.9	
T/BmaxR	3.17	0.970	92.6	91.1	90.9	92.7	91.8	
T/BmeanR	5.3	0.963	85.2	96.4	95.8	87.1	90	

Abbreviations: AUC = area under the receiver operating characteristic curve; NPV = negative predictive value; PPV = positive predictive value; ROC = receiver operating characteristic; SUVmax = maximum standardized uptake value; SUVmean = mean standardized uptake value; SUVpeak = peak standardized uptake value; T/BmaxR = tumorSUVmax/blood SUVmax ratio; T/BmeanR = tumorSUVmax/blood SUVmean ratio; T/LmaxR = tumorSUVmax/liver SUVmax ratio; T/LmeanR = tumorSUVmax/liver SUVmean ratio.