

N, nodal metastasis; M, extrahepatic metastasis.

## Supplementary Figure 1 Hepatocellular carcinoma treatment algorithm.



Supplementary Figure 2 Development of first-line treatment for hepatocellular carcinoma.

Criteria	RECIST 1.0	RECIST 1.1	Comm	ent			
Minimum target lesion	≥ 20 mm	≥ 10 mm	Entry		was		
diameter by CT or MRI at			restrict	ed to the	hose		
baseline			with	measur	able		
			disease	9			
Measurable lesions	Up to five per organ and	Up to two per organ and					
	ten lesions in total, maximum of five lesions in						
	representative of all	total, representative of all					
	involved organs	involved organs					
Prior treatment	Tumor lesions that are Tumor lesions situated in a						
	situated in a previously previously irradiated area,						
	irradiated area not	or in an area subjected to					
	considered measurable	other local-regional therapy,					
		are usually not considered					
		measurable unless there has					
		been demonstrated					
		progression in the lesion					
Non- target lesions	All other lesions (or sites Multiple non-target lesions						
	of disease) were	involving the same organ					
	identified as non-target were assessed as a single						
	lesions and recorded at	item on the case record form					
	baseline	(e.g., "multiple enlarged					
		pelvic lymph nodes" or					
		"multiple liver metastasis)					
Criteria for response			Confir	mation	of		
(according to sum of target			CR or	PR afte	er at		
lesions diameters)			least 2	8 d requ	ired		
			for F	RECIST	1.0		
			only	and	for		

# Supplementary Table 1 Response evaluation criteria in solid tumors criteria

1.1

if

RECIST

			primary endpoint
CR	Disappearance of lesions	Disappearance of lesions	Primary endpoint
PR	≥ 30% decrease	≥30% decrease	Both target and
			non-target lesions
			in the liver were
			assessed at follow-
			up
SD	< 30% decrease or < 20%	< 30% decrease or < 20%	Note: Appearance
	increase	increase	of new lesion as
			indicator of
			progression is only
			relevant for overall
			response
			evaluation
PD	Any increase	$\geq 20\%$ or $\geq 5$ mm increase	
PET	No specific	FDG-PET may be	e Results from PET
	recommendations	considered to complement	t were not
		CT scanning in assessment	considered in this
		of progression and the	e study
		confirmation of CR	
	1 1.1		1

RECIST: Response evaluation criteria in solid tumors; FDG-PET: Fluorodeoxyglucosepositron emission tomography; MRI: Magnetic resonance imaging.

	Points			
	1	2	3	
Encephalopathy	None	Grade 1-2 (or precipitant induced)	Grade 3-4 (or chronic)	
Ascites	None	Mild to moderate (diuretic responsive)	Severe (diuretic refractory)	
Bilirubin (mg/dL)	< 2	2 to 3	> 3	
Albumin (g/dL)	> 3.5	2.8 to 3.5	< 2.8	
International normalized ratio	< 1.7	1.7 to 2.3	> 2.3	

# Supplementary Table 2 Child-Turcotte-Pugh scoring tool

# Child-Turcotte-Pugh classifications

Class A			Class B			Class C		
Mild, leas	t severe	liver	Moderately	severe	liver disease.	Most seve	ere liver	disease.
disease. We	ll-preserved	liver	Moderate	liver	dysfunction.	Decomper	nsated fun	ction
function			Significant		functional			
			compromise	5				
< 6 points			7 to 9 points	5		10 to 15 pc	oints	

Variables		Tumor Status			
Stage PST		Tumor stage Okuda stage		Liver functional status	
Stage A: Early HCC					
A1	0	Single	Ι	No portal hypertension and normal bilirubin	
A2	0	Single	Ι	Portal hypertension and normal bilirubin	
A3	0	Single	Ι	Portal hypertension and abnormal bilirubin	
A4	0	3 tumors < 3 cm	I-II	Child Pugh A-B	
Stage B: Intermediate HCC	0	Large multinodular	I-II	Child Pugh A-B	
Stage C: Advanced HCC	1-2	Vascular invasion or extrahepatic spread	I-II	Child Pugh A-B	
Stage D: End-stage HCC	3-4	Any	III	Child Pugh C	

# Supplementary Table 3 Barcelona clinic liver cancer staging classification

Stage A and B: All criteria should be fulfilled; Stage C: At least one criteria; PST 1-2 or vascular invasion/extrahepatic spread; Stage D: At least one criteria; PST 3-4 or Okuda stage III/Child-Pugh C. Modified from Lovett *et al*, (1999). HCC: Hepatocellular carcinoma.