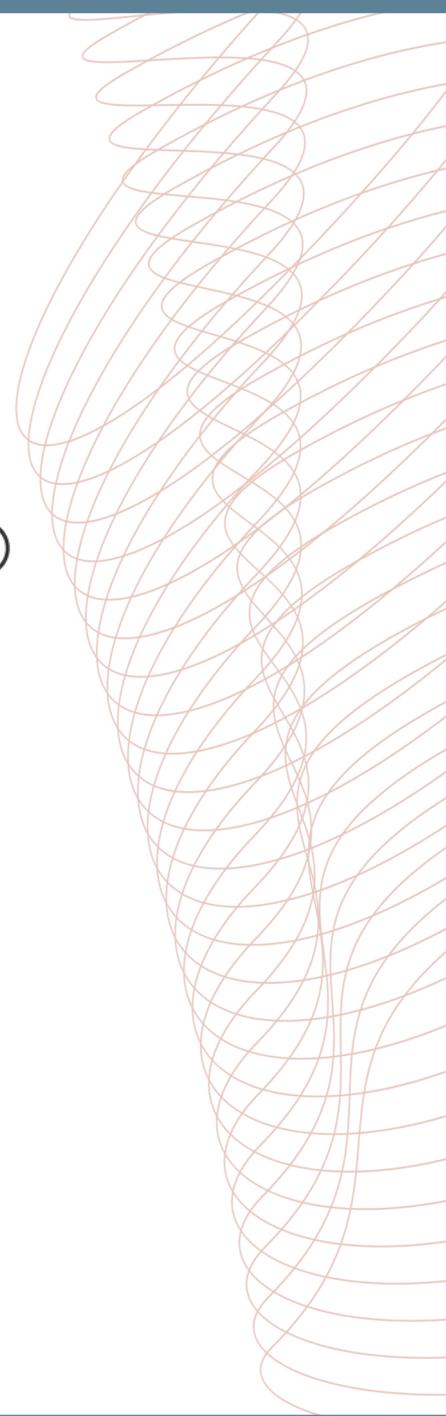


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# HCC EXPERTS ROUND TABLE (AMERICAS & EU)

## OVERVIEW OF KEY DATA

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# DISCLAIMER

## **Please note:**

Views expressed within this presentation are the personal opinions of the author. They do not necessarily represent the views of the author's academic institution, organisation, or other group or individual.

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## **Disclosures:**

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# EXECUTIVE SUMMARY

- The **HCC Experts Round Table** took place as a virtual meeting on **16 April 2020**
- With **7 Experts from the Americas and EU**:
  - 1x HCC patient advocate
  - 1x Payer/health economics expert
  - 5x Physicians (representing hepatology, oncology, and radiology)
- **21 questions** discussed:
  - 6 questions related to **standard of care in advanced 1L HCC** (sorafenib and lenvatinib)
  - 6 questions related to the **management of advanced HCC patients** (e.g. clinical setting, management tumour board)
  - 8 questions related to **IMbrave150 data** and potential impact in clinical practice
  - 1 question requesting **additional comments**
- **Next step:** Building a manuscript to reflect consensus outcomes

# **INTRODUCTION AND TREATMENT OVERVIEW OF ADVANCED HCC**

# HEPATOCELLULAR CARCINOMA (HCC): OVERVIEW

- The **fourth most common** cause of cancer-related death worldwide<sup>1</sup>
- HCC accounts for **>80% of primary liver cancers** worldwide<sup>1</sup>
- Chronic HBV and HCV infection are the most important causes of HCC and account for **80% of HCC cases globally**<sup>1</sup>
- Alcoholic cirrhosis is the **second most common risk factor** for HCC in the USA and Europe<sup>1</sup>
- **Staging of HCC** is important to determine outcome and planning of optimal therapy and **BCLC is the current accepted staging system** as follows:<sup>2</sup>

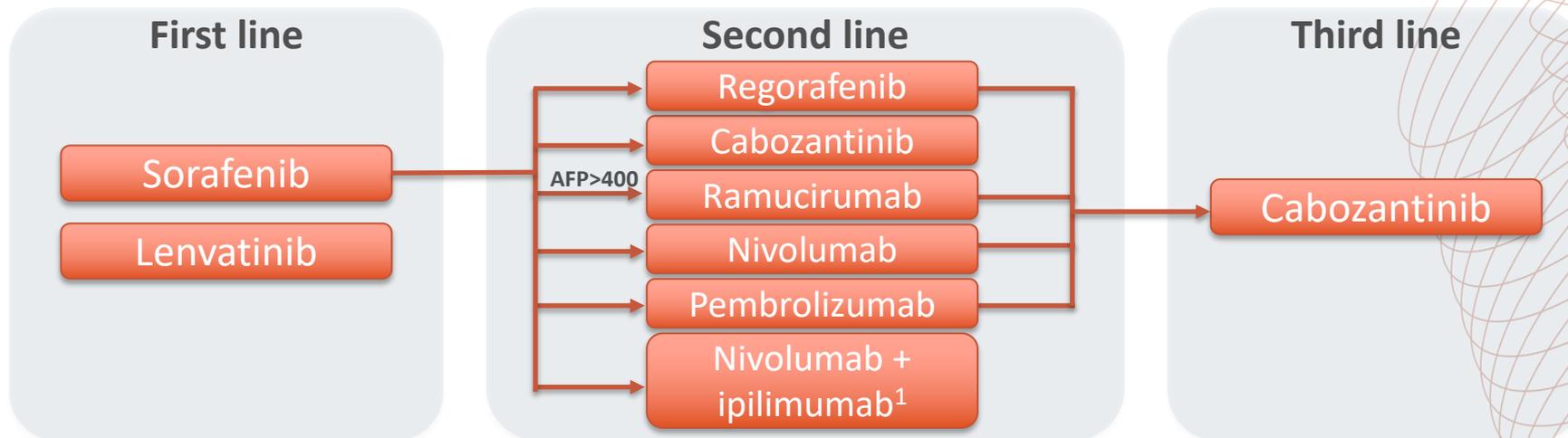
	BCLC staging	Survival rate without therapy	Standard of care treatment
Early and intermediate HCC	Stage 0-A	>5 years	Ablation, resection, transplantation
	Stage B	>2.5 years	Chemoembolisation (TACE)
Advanced HCC	Stage C	>1 year	Systemic therapy
	Stage D	3 months	Best supportive care

BCLC, Barcelona Clinic Liver Cancer; HBV, hepatitis B virus; HCV, hepatitis C virus; TACE, transarterial chemoembolisation

1. Yang JD, et al. Nat Rev Gastroenterol Hepatol 2019;16:589-604
2. Bruix J, et al. Nat Rev Gastroenterol Hepatol 2019;16:617-30

# SYSTEMIC TREATMENT SEQUENCING FOR BCLC STAGE C ADVANCED HCC

- **Targeted first-line therapies**
  - Oral multikinase inhibitors: **sorafenib** and **lenvatinib**
- **Targeted second-line therapies**
  - Multikinase inhibitor: **regorafenib** = standard of care
  - Multikinase inhibitor: **cabozantinib**
  - Human immunoglobulin G1 monoclonal antibody against VEGFR-2: **ramucirumab**
  - PD-1/PD-L1 inhibitors: **nivolumab**, **pembrolizumab**
  - Immune therapy combination: **nivolumab + ipilimumab**<sup>1</sup>



AFP, Alpha-Fetoprotein; BCLC, Barcelona Clinic Liver Cancer; HCC, hepatocellular carcinoma; PD-1/PD-L1, programmed cell death protein 1/programmed death-ligand 1; USPI, US prescribing information; VEGFR-2, vascular endothelial growth factor receptor 2  
Source: Bruix J, et al. Nat Rev Gastroenterol Hepatol 2019;16:617-30

<sup>1</sup>nivolumab + ipilimumab combination was approved by the US FDA in March 2020 (refer to the USPI of the respective drugs)

**SORAFENIB / LENVATINIB  
EFFICACY AND SAFETY DATA  
IN 1L FOR ADVANCED HCC PATIENTS**

# SORAFENIB EFFICACY DATA

**Based on results from:**

**SHARP** (NCT00105443): phase 3, international, multi-centre, randomised, double blind, placebo-controlled study in 602 patients with hepatocellular carcinoma

**Primary endpoint:** OS

**Secondary endpoint:** TTP

**Population enrolled:** BCLC stage (stage B: 18.1% vs. 16.8%; stage C: 81.6% vs. 83.2%; stage D: <1% vs. 0%) in sorafenib and placebo respectively

Efficacy parameter	Sorafenib (n=299)	Placebo (n=303)	P-value	HR (95% CI)
Median OS, months (95% CI)	10.7 (9.4, 13.3)	7.9 (6.8, 9.1)	0.00058	0.69 (0.55, 0.87)
Median TTP, months (95% CI)	5.5 (4.1, 6.9)	2.8 (2.7, 3.9)	0.000007	0.58 (0.45, 0.74)

**Formulation:** Film-coated tablets 200 mg

**Recommended daily dose:** 400 mg (2 x 200 mg tablets) twice daily

BCLC, Barcelona Clinic Liver Cancer; CI, confidence interval; HR, hazard ratio; OS, overall survival; SmPC, summary of product characteristics; TTP, time to progression; USPI, US prescribing information

Sources: Sorafenib SmPC November 2019, sorafenib USPI April 2020

# LENVATINIB EFFICACY DATA

**Based on results from:**

**REFLECT** (NCT01761266): phase 3, international, multi-centre, open-label, randomised study in 954 patients with hepatocellular carcinoma

→ Non inferiority assessment of lenvatinib vs. sorafenib for OS

**Primary endpoint:**

OS

**Secondary endpoints:**

PFS, ORR (mRECIST and RECIST v1.1)

**Population enrolled:**

BCLC stage B: 20%; stage C: 80%

**Formulation:**

Hard capsules 4 mg or 10 mg

**Recommended dose daily:**

12 mg (body weight ≥60 kg)

or 8 mg (<60 kg)

Efficacy parameters	lenvatinib	sorafenib
	N= 478	N=476
<b>Overall Survival</b>		
Number of deaths (%)	351 (73)	350 (74)
Median OS in months (95% CI)	13.6 (12.1, 14.9)	12.3 (10.4, 13.9)
Hazard Ratio (95% CI)	0.92 (0.79, 1.06)	
<b>Progression-Free Survival (mRECIST)</b>		
Number of Events (%)	311 (65)	323 (68)
Median PFS in months (95% CI)	7.3 (5.6, 7.5)	3.6 (3.6, 3.7)
Hazard Ratio (95% CI) and P-value	0.64 (0.55, 0.75) ; p<0.001	
<b>Objective Response Rate (mRECIST)</b>		
Objective response rate	41%	12%
Complete responses, n (%)	10 (2.1)	4 (0.8)
Partial responses, n (%)	184 (38.5)	55 (11.6)
95% CI	(36%, 45%)	(10%, 16%)
P-value	p<0.001	
<b>Progression-Free Survival (RECIST 1.1)</b>		
Number of Events (%)	307 (64)	320 (67)
Median PFS in months (95% CI)	7.3 (5.6, 7.5)	3.6 (3.6, 3.9)
Hazard Ratio (95% CI)	0.65 (0.56, 0.77)	
<b>Objective Response Rate (RECIST 1.1)</b>		
Objective response rate	19%	7%
Complete responses, n (%)	2 (0.4)	1 (0.2)
Partial responses, n (%)	88 (18.4)	30 (6.3)
95% CI	(15%, 22%)	(4%, 9%)

CI, confidence interval; BCLC, Barcelona Clinic Liver Cancer; HR, hazard ratio; mRECIST, modified Response evaluation criteria in solid tumours; N/A, not applicable; ORR, objective response rate; OS, overall survival; PFS, progression-free survival; RECIST, Response evaluation criteria in solid tumours

Sources: Lenvatinib SmPC November 2019, lenvatinib USPI February 2020

# SORAFENIB AND LENVATINIB SAFETY DATA IN HCC PATIENTS

## Most common adverse reactions (≥20%)

Sorafenib-treated patients in <b>SHARP</b> trial	diarrhoea – fatigue – hand-foot skin reaction – rash – weight loss – decreased appetite – nausea – abdominal pain
Lenvatinib-treated patients in <b>REFLECT</b> trial	hypertension – fatigue – diarrhoea – decreased appetite – arthralgia/myalgia – decreased weight - abdominal pain – palmar-plantar erythrodysesthesia syndrome – proteinuria – dysphonia – haemorrhagic events – hypothyroidism – nausea

**Further and more detailed information about the safety profile of both products and their management can be found in the European SmPC and USPI**

HCC, hepatocellular carcinoma; SmPC, summary of product characteristics; USPI, US prescribing information

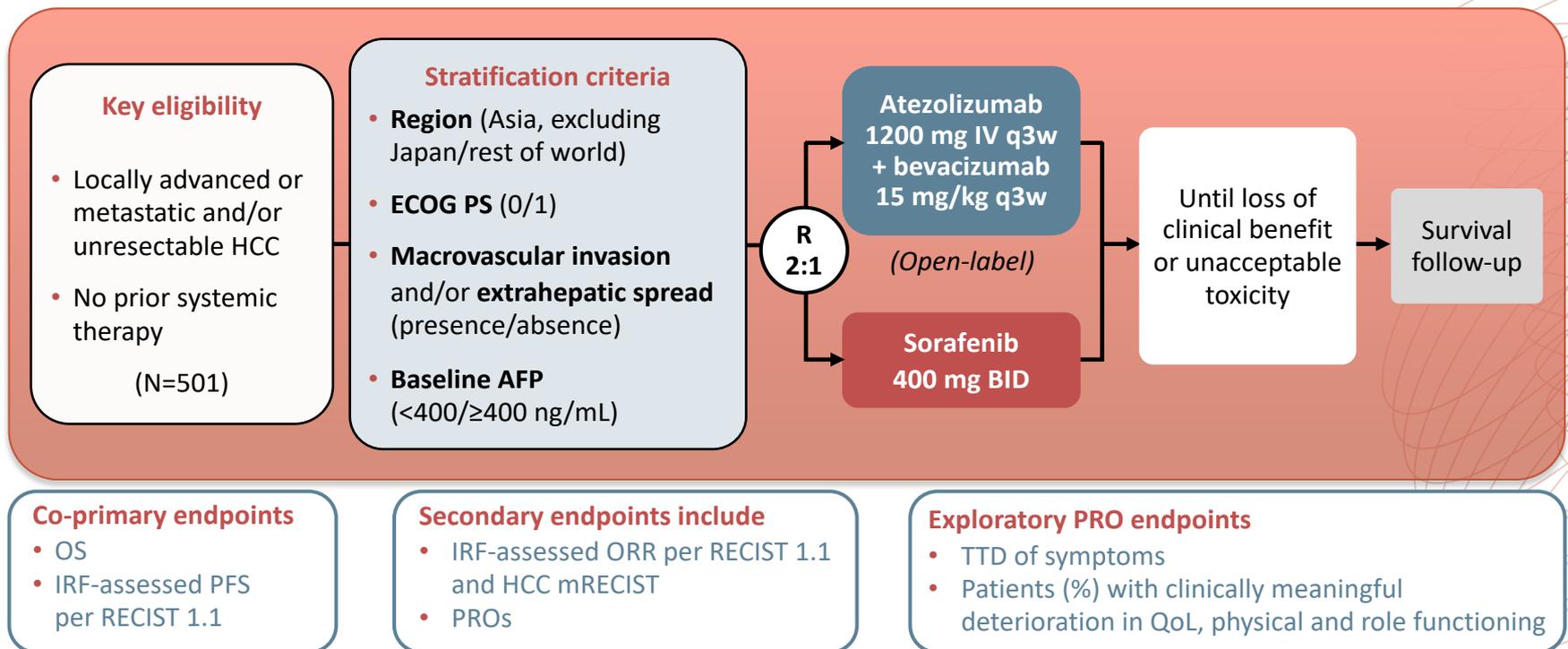
Sources: Sorafenib SmPC November 2019, sorafenib USPI April 2020, lenvatinib SmPC November 2019, lenvatinib USPI February 2020

**IMbrave150:  
A STUDY OF ATEZOLIZUMAB IN  
COMBINATION WITH BEVACIZUMAB  
COMPARED WITH SORAFENIB IN  
PATIENTS WITH UNTREATED LOCALLY  
ADVANCED OR METASTATIC  
HEPATOCELLULAR CARCINOMA**

**ClinicalTrials.gov Identifier: NCT03434379**

# IMbrave150 CLINICAL TRIAL DESIGN

- Phase 3 trial assessing combination therapy with the PD-L1 inhibitor atezolizumab and the VEGF inhibitor bevacizumab vs. standard of care sorafenib in 1L advanced HCC



1L, first line; AFP, alpha-fetoprotein; BID, twice a day; ECOG PS; Eastern Cooperative Oncology Group performance status; HCC; hepatocellular carcinoma; IFR; independent review facility; IV, intravenous; mRECIST, modified RECIST; ORR, overall response rate; OS, overall survival; PD-L1, programmed death-ligand 1; PFS, progression free survival; PRO: patients-reported outcome; q3w, every 3 weeks; QoL, quality of life; RECIST, response evaluation criteria in solid tumours; TTD, time to treatment discontinuation; VEGF, vascular endothelial growth factor

# IMbrave150 CLINICAL TRIAL

## EFFICACY RESULTS

- Data cut-off date: 29 August 2019; median survival follow-up: 8.6 months

	Atezolizumab + bevacizumab	Sorafenib
Median OS, months (95% CI)	NE	13.2 (10.4-NE)
OS, HR (95% CI)	0.58 (0.42, 0.79)	
P-value	0.0006	
Median PFS, months (95% CI) IRF RECIST v1.1	6.8 (5.7, 8.3)	4.3 (4.0, 5.6)
PFS, HR (95% CI)	0.59 (0.47, 0.76)	
P-value	<0.0001	
ORR, IRF RECIST v1.1	27%	12%
P-value	<0.0001	

CI, confidence interval; HR, hazard ratio; IRF, independent review facility; NE, not estimable; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; RECIST, response evaluation criteria in solid tumours

Cheng A-L, et al. Ann Oncol 2019;30(suppl 9;abstract LBA3); Galle PR, et al. J Clin Oncol 2020;38(suppl 4:abstract 476)

# IMbrave150 CLINICAL TRIAL SAFETY AND QOL RESULTS

- Safety Data presented by Cheng et al. at ESMO Asia in 2019

	Atezolizumab + bevacizumab	Sorafenib
Grade 3-4 AEs	57%	55%
Grade 5 AEs	5%	6%

- PRO endpoints data presented by Galle et al. at ASCO GI in 2020:
  - Three QoL instruments were used EORTC QLQ-C30, EORTC QLQ-HCC18 and EQ-5D-5L:
    - QoL
    - Functioning: physical, role
    - Symptoms: fatigue, pain, appetite loss, diarrhoea, jaundice
  - Conclusion: Clinically meaningful benefits in key aspects of the patient experience (QoL, functioning, key symptoms) with atezolizumab + bevacizumab vs. sorafenib

AE, adverse event; ASCO GI, Gastrointestinal Cancers Symposium of the American Society of Clinical Oncology; EORTC, European Organisation for Research and Treatment of Cancer; ESMO, European Society for Medical Oncology; PRO, patient-reported outcome; QLC-C30, cancer-specific quality of life questionnaire; QLQ-HCC18, hepatocellular-carcinoma-specific quality of life questionnaire; QoL, quality of life

Cheng A-L, et al. Ann Oncol 2019;30(suppl 9;abstract LBA3); Galle PR, et al. J Clin Oncol 2020;38(suppl 4:abstract 476)

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