



5TH WORKSHOP ON HCV THERAPY ADVANCES NEW ANTIVIRALS IN CLINICAL PRACTICE

Amsterdam, 4 December 2015

Liver Cancer

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Financial Disclosures

Grant and research support:

BMS, Gilead Science

Advisory committees:

Merck, Roche, Novartis, Bayer, BMS, Gilead Science,
Tibotec, Vertex, Janssen Cilag, Achillion, Lundbeck,
GSK, GenSpera

Speaking and teaching:

Tibotec, Roche, Novartis, Bayer, BMS, Gilead
Science, Vertex, Merck, Janssen

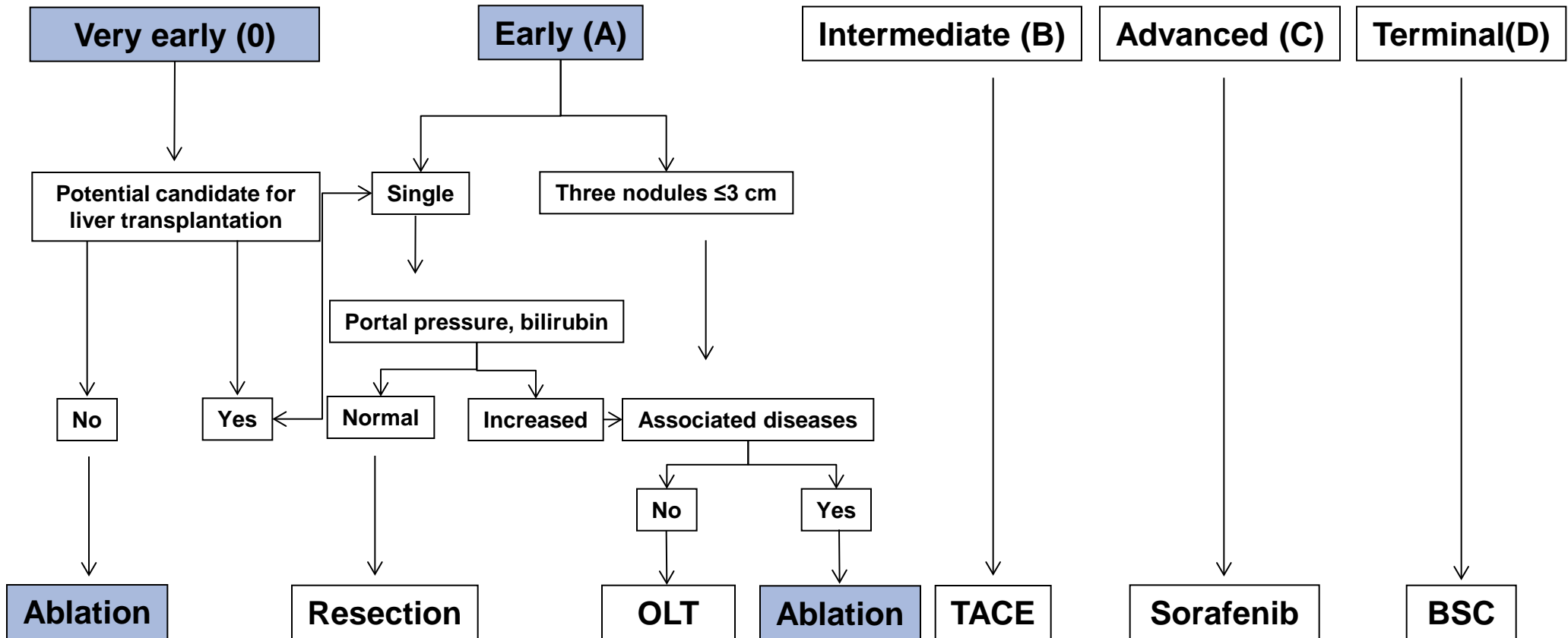
Geographic Distribution of HCC Risk Factors

The Bridge Cohort Study

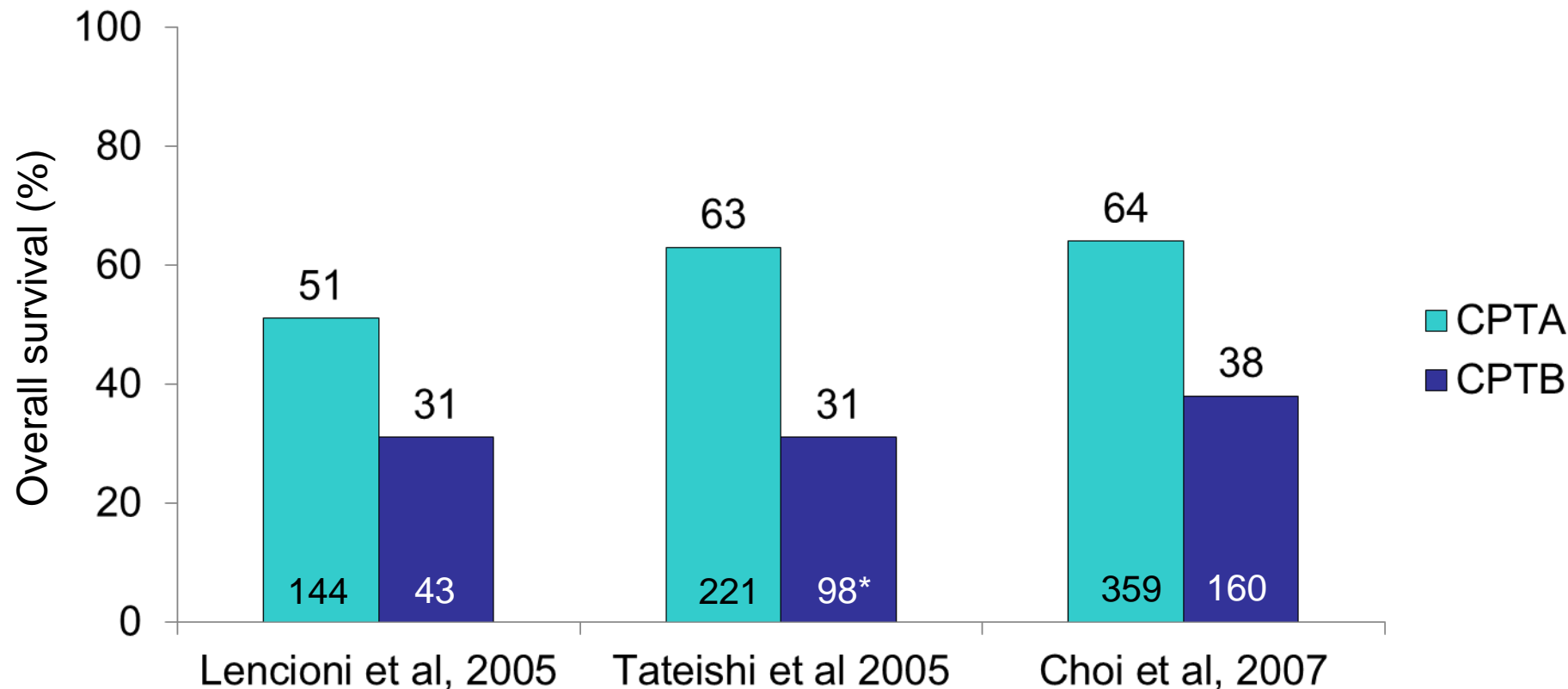
Risk factors	N. America	Europe	China	Taiwan	S. Korea	Japan
n (%)	n = 2,243	n = 3,466	n = 8,538	n = 1,580	n = 1,172	n = 446
HBV	522 (23)	362 (10)	6,575 (77)	987 (63)	884 (75)	64 (14)
HCV	876 (39)	1,590 (46)	255 (3)	489 (31)	112 (10)	284 (64)
ALD	471 (21)	1,290 (37)	416 (5)	66 (4)	110 (9)	59 (13)
NASH	275 (12)	334 (10)	53 (1)	84 (5)	68 (6)	9 (2)

**Does Treatment of Viral Hepatitis Improve the
Outcome of Tumor Ablation?**

The Founders of BCLC: Staging and Treatment Strategy



RFA for the Treatment of Early-Stage HCC (Milan in) Five-year Survival Outcomes



* 4 of 98 patients had Child Pugh C cirrhosis

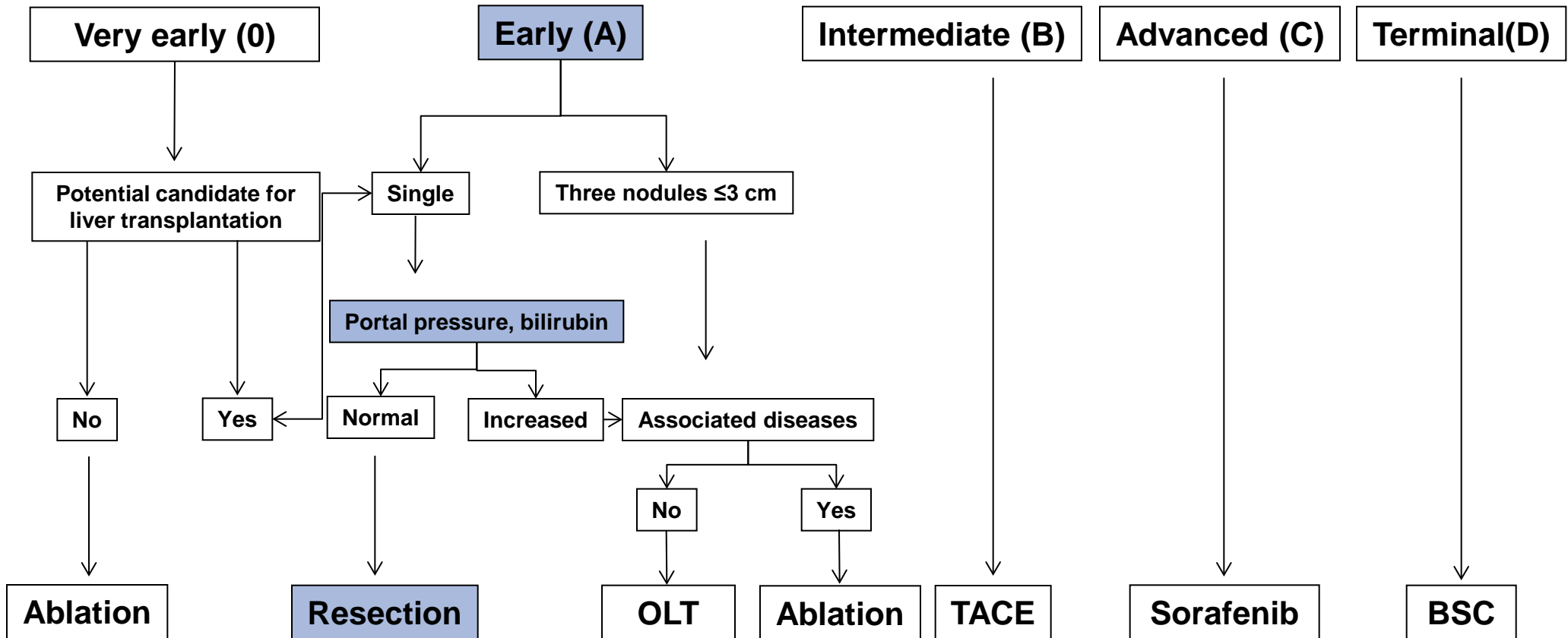
SOLAR-2: LDV/SOF + RBV in Decompensated and Post-Liver Transplant Patients

Child Pugh (CPT) Change from Baseline to Follow-Up Wk 4 Following SVR12

		Baseline CPT		
		A (5–6) n=73	B (7–9) n=100	C (10–12) n=54
Follow-up Week 4 CPT	A (5–6)	67 (96%)	31 (35%)	2 (5%)
	B (7–9)	3 (4%)	57 (65%)	20 (48%)
	C (10–12)	0	0	20 (48%)

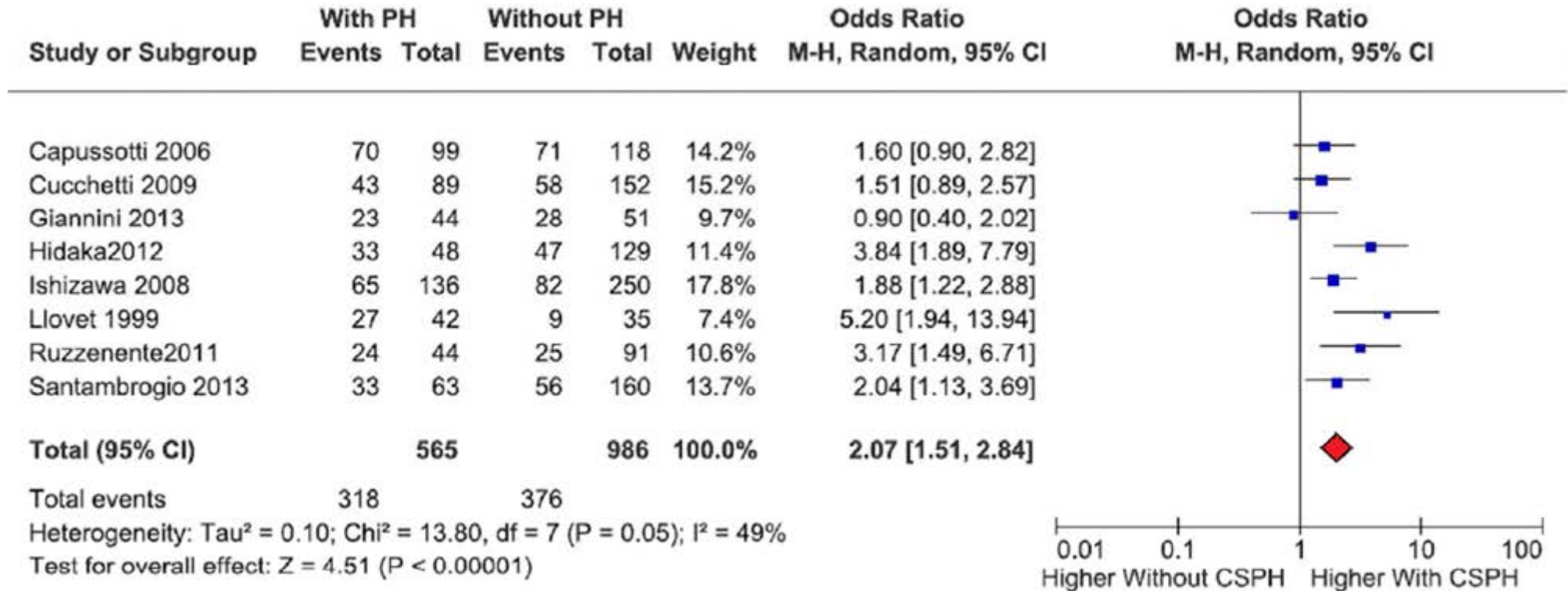
Antiviral Therapy Improves Portal Hypertension Implications for Hepatic Resection

The Founders of BCLC: Staging and Treatment Strategy



Portal Hypertension and Hepatic Resection for Small HCC

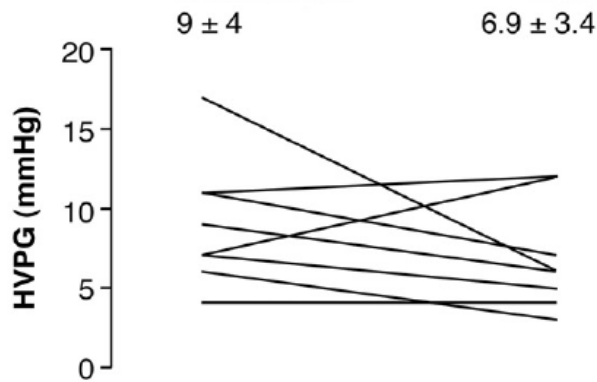
A Meta-analysis, 5-year Mortality



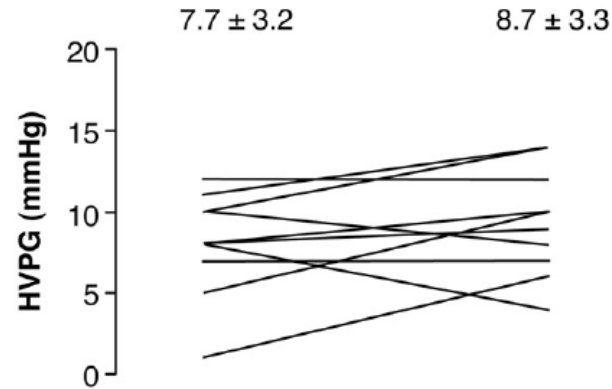
Effect of SVR to P+R on Hepatic Venous Pressure Gradient in HCV Cirrhosis

A study in Melbourne of 47 patients with cirrhosis treated with P+R

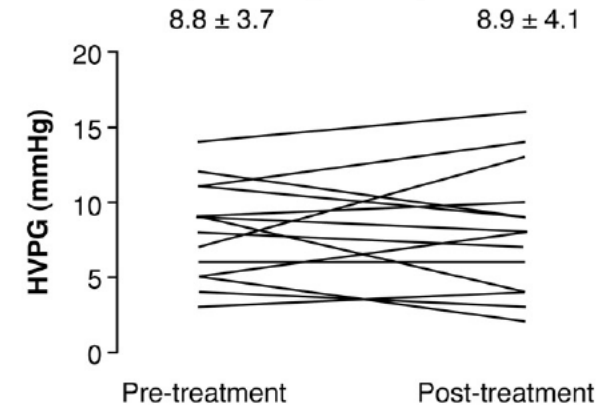
Sustained virological responders



Relapsers

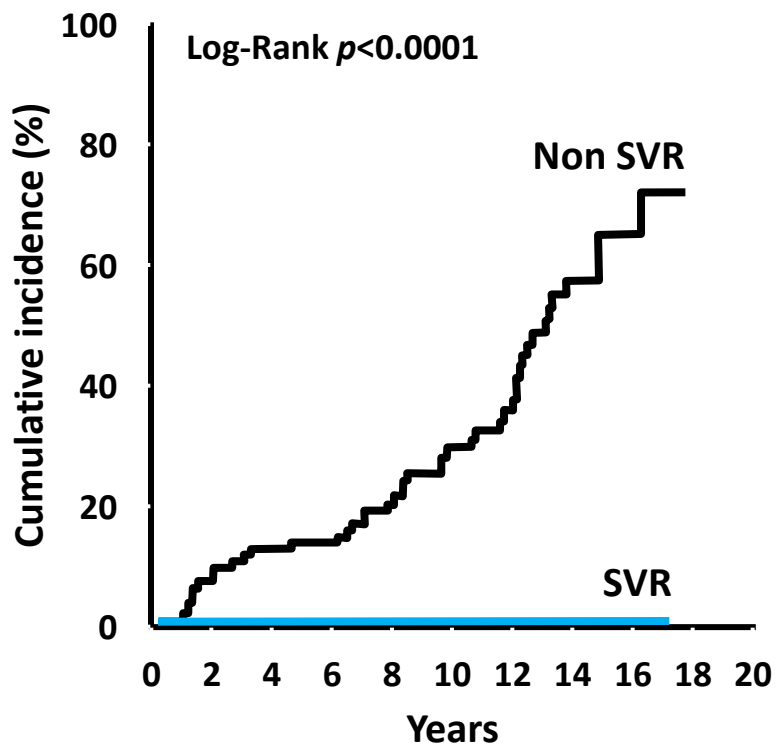


Primary non-responders

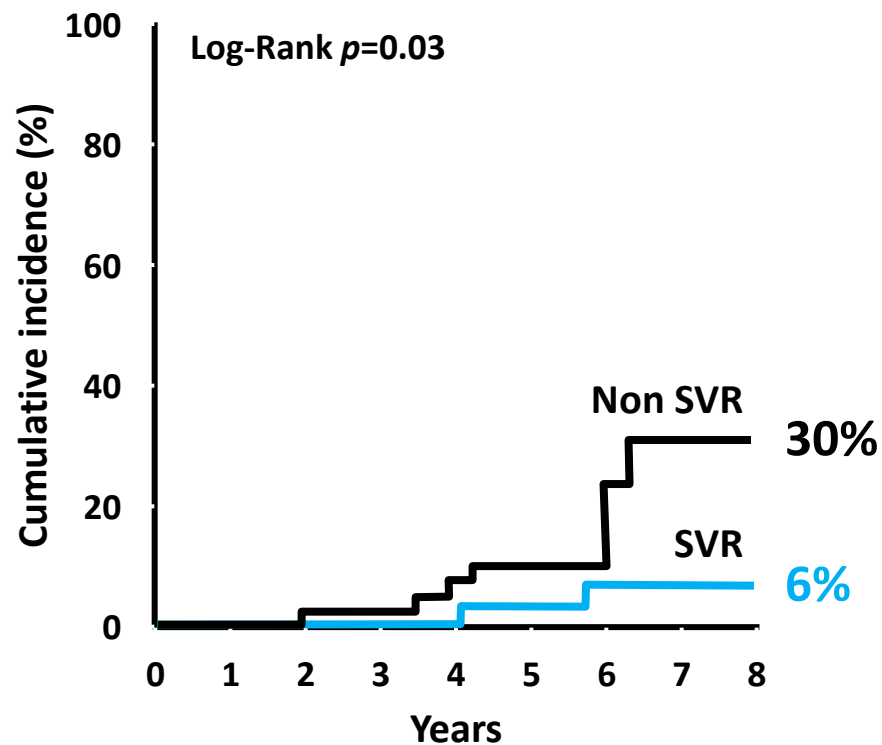


Significant association between $\geq 20\%$ HVPG decline, histological response and SVR

The Impact of an SVR to Peg+Rbv on Development of Esophageal Varices in HCV Cirrhotics



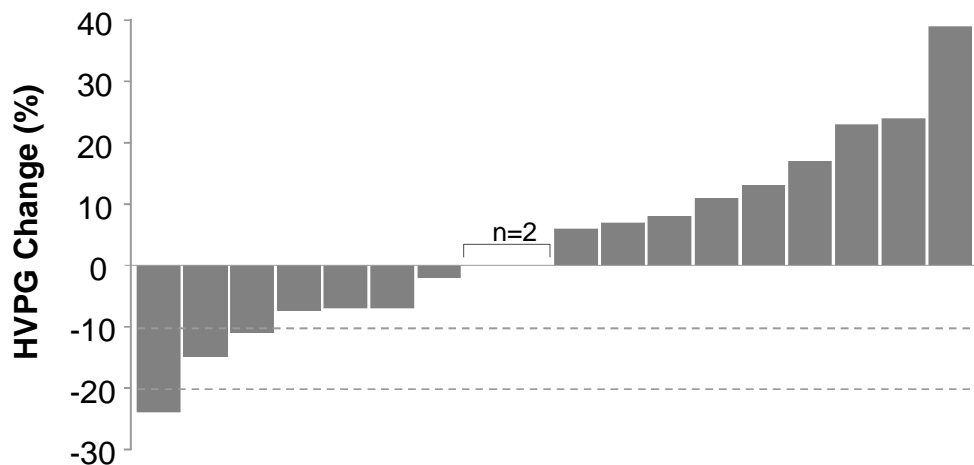
Patients at risk						
No SVR	115	89	65	35	7	0
SVR	34	30	27	17	7	0



Patients at risk									
No SVR	53	53	52	46	36	26	20	7	3
SVR	57	57	56	49	43	34	20	11	3

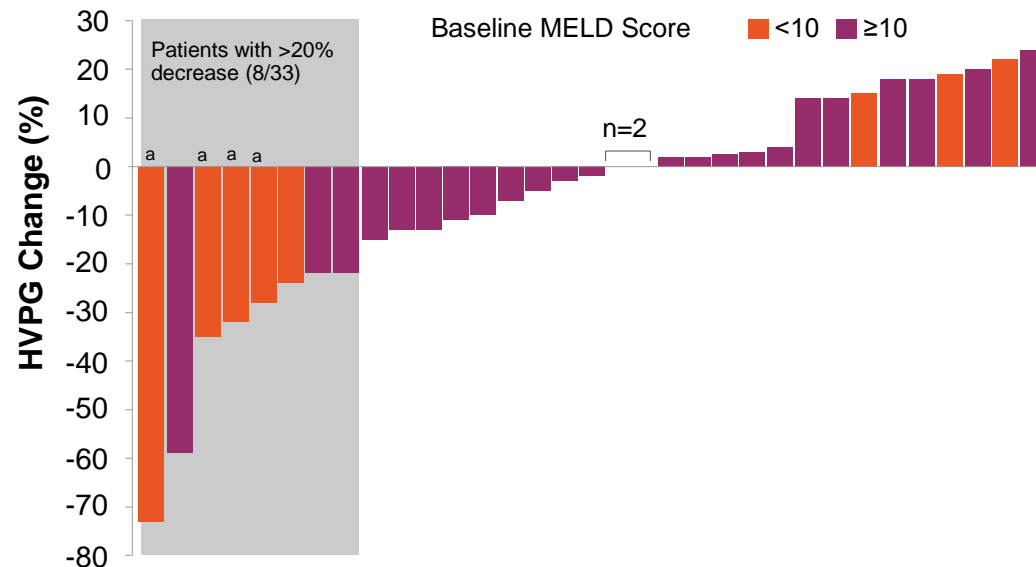
SOF+RBV in Compensated and Decompensated Cirrhotics with Portal Hypertension

Observation Period in Patients with BL HVPG ≥ 12 mmHg* (24 weeks)



*No patient had HVPG ≤ 12 mm Hg at end of observation period

Changes After Treatment in Patients with BL HVPG ≥ 12 mmHg (n=33)



^aPatients with HVPG ≤ 12 mm Hg at end of treatment

- There were clinically meaningful improvements in portal hypertension in addition to improvements in liver biochemistry, CTP and MELD scores

HVPG = hepatic venous pressure gradient

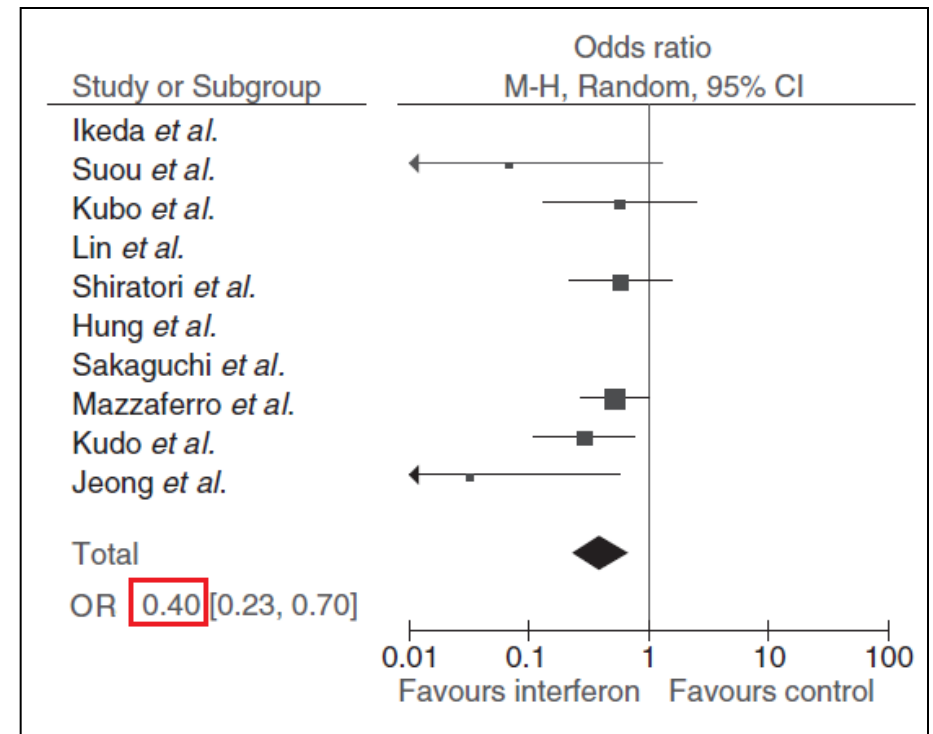
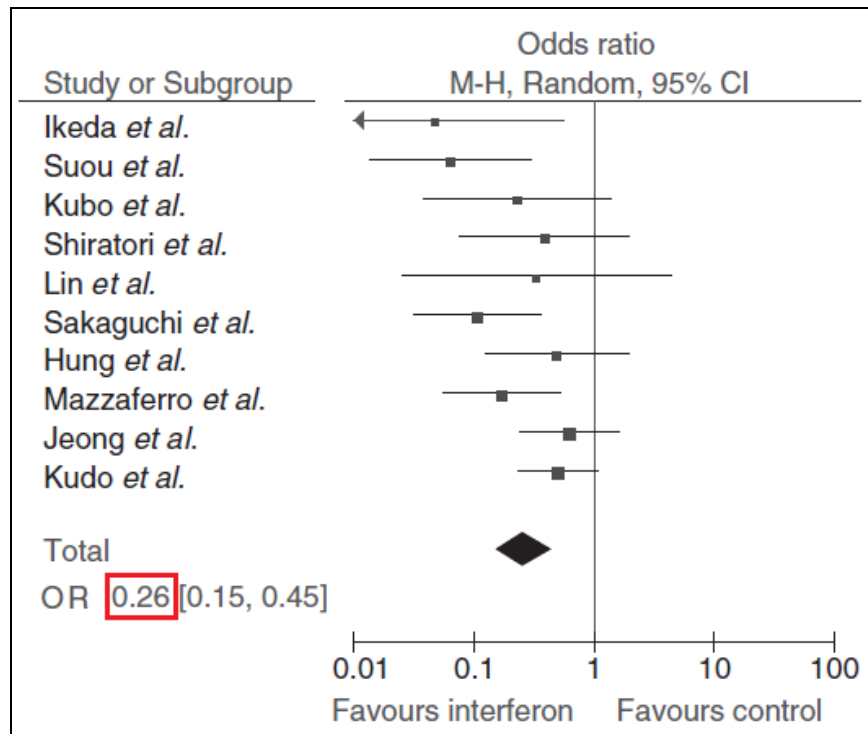
A reduction in HVPG $\geq 20\%$ or below the 12-mm Hg threshold markedly reduces the risk of variceal bleeding, and varices may decrease in size

**Is Late Recurrence of HCC Prevented
by Antiviral Therapy?**

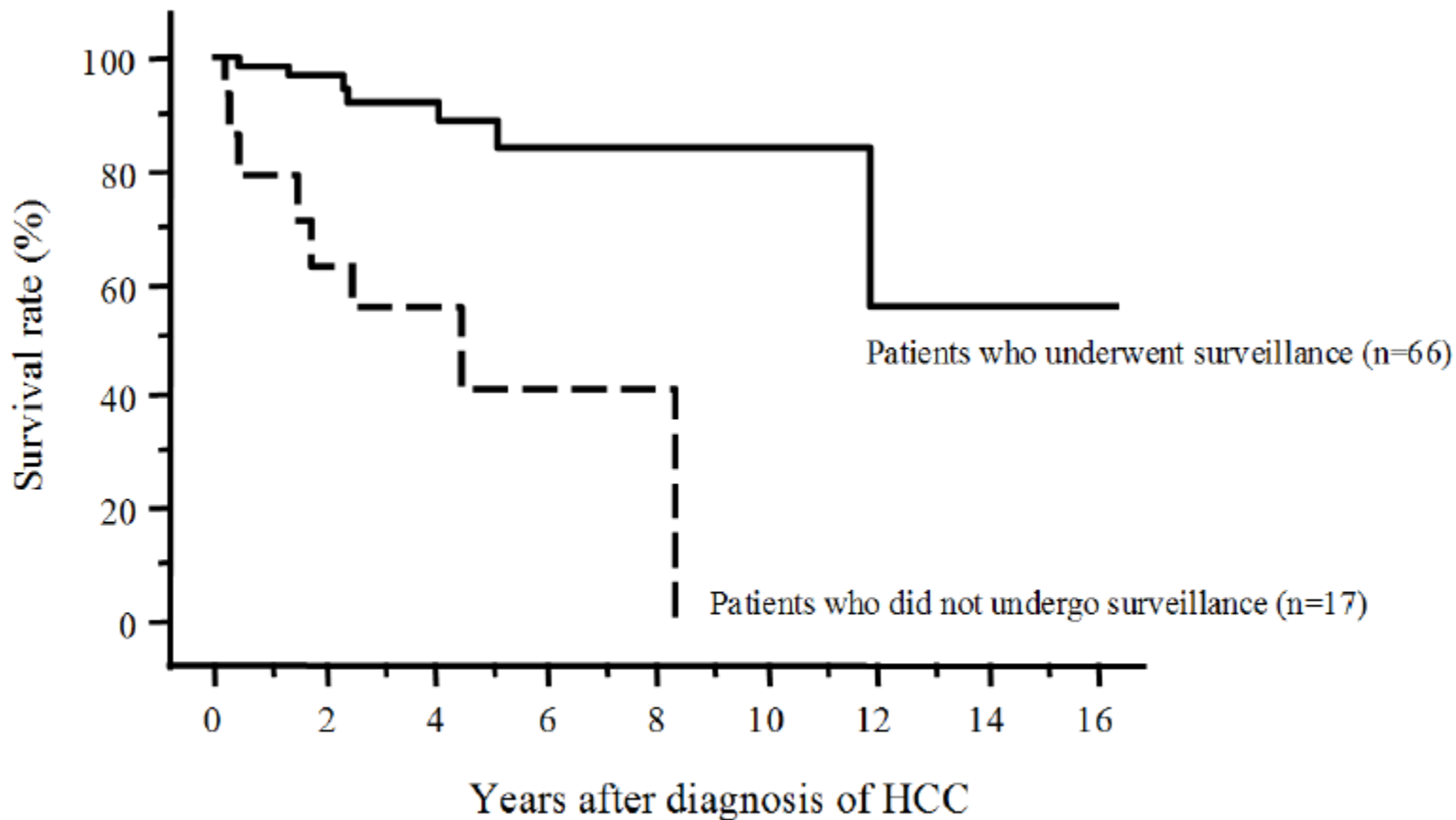
Association Between IFN and Improved HCV-related Outcomes Following Ablation or Resection

HCC Recurrence

Overall Survival



Survival of HCC Detected in Patients after the Eradication of HCV: a Multicenter Study in Japan



Patients at risk

Surveillance (+)	66	49	31	16	10	6	2	2
Surveillance (-)	17	8	4	2	2			

($p < 0.0001$)

Reconsidering Non-transplant Options for HCC in the Era of Donor Shortage

Drivers of Treatment Selection	In favor of Transplantation	In favor of Resection	In favor of Ablation
Patient			
<ul style="list-style-type: none"> • Age • Performance Status • Comorbidities 	<ul style="list-style-type: none"> • ≤ 70 years • any grade (high MELD) • No 	<ul style="list-style-type: none"> • ≤ 75 years • 0 • no / minor 	<ul style="list-style-type: none"> • no limit • 0 • major
Tumor			
<ul style="list-style-type: none"> • Size • Number • Location within liver • Vascular invasion (branch / segment) • Satellites • AFP • Perceived anti-tumor efficacy 	<ul style="list-style-type: none"> • single ≤ 5 cm • up to 3 nodules ≤ 3 cm • any site • absent • not counted when < 1 cm • < 1,000 ng/ml • very high 	<ul style="list-style-type: none"> • ≥ 3 cm • single • peripheral / exophytic • not relevant by some • not relevant only in anatomic resections • the lower the better • high 	<ul style="list-style-type: none"> • ≤ 3 cm • up to 3 nodules • central, far from vessels, bile tract and viscera • absent • absent • any level • high
Liver disease			
<ul style="list-style-type: none"> • Cirrhosis • Portal hypertension • Bilirubin (NV ≤ 1 mg/dl) • MELD score 	<ul style="list-style-type: none"> • yes • any • any • any 	<ul style="list-style-type: none"> • no • absent / mild • normal • very low 	<ul style="list-style-type: none"> • yes • any • normal / ≤ 2 x nv • low