ADVANCING GI PATIENT CARE 2022

Powered by: GI Alliance

APRIL 23–24, 2022
SOUTHLAKE, TEXAS

This activity is supported by an educational grant from Phathom Pharmaceuticals Inc., Ferring Pharmaceuticals Inc., Madrigal Pharmaceuticals, Merck & Co., Inc., Janssen Biotech, Inc., administered by Janssen Scientific Affairs, LLC, and Takeda Pharmaceuticals U.S.A., Inc.

GI Alliance

IRMCHCS
Rehoboth McKinley Christian Health Care Services

Newly Diagnosed Cirrhosis

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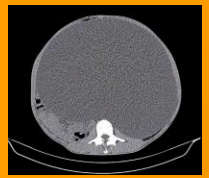
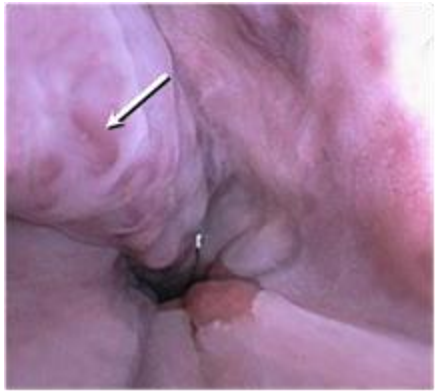


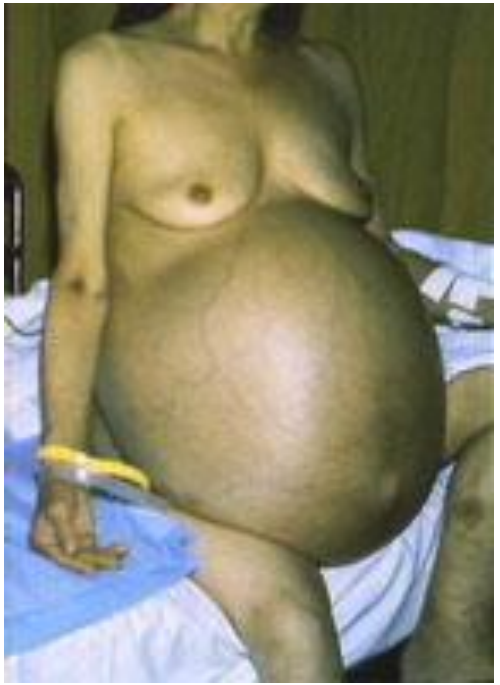
Disclosures

- No relevant financial relationships to disclose.



Learning Objectives

“Apply optimal management strategies to prevent and minimize long-term complications of cirrhosis…”



Referred From PCP for Newly Diagnosed Cirrhosis

55 yo WM with DM, obesity
AST 50, ALT 38, TB 1.1, Plt 110

US – “cirrhotic” appearing liver

What are the next best steps?

Overview – 5 W's + H

- Why?
- Who & Where?
- What? (Diagnosis)
- How? (Management)
- When? (Prognosis)

Why?

At risk for decompensation, liver cancer (HCC)

Associated with reduced survival ~ 12 years

1.32 M cirrhosis related deaths/yr worldwide~ (2.4%)

↑ # of cirrhotics requiring GI care ~ 4 M with liver disease in US

D'Amico et al. *J Hep*. 2006; 44:217; *Lancet Gastro Hep*. 2020; 5:245.

Who & Where in the Era of Personalized Medicine?

Who

Audience

- GI provider
- NOT transplant hepatologists
- NOT primary care providers

Patient before you:

- Individualized care
- Risk stratification
- Value/Outcome based care

Where

- Outpatient clinic

What Is Cirrhosis?

Structural – replacement of liver tissue by fibrous scar tissue, regenerative nodules

Functional – increase in hepatic vascular tone

Inflammation

Look for & **Confirm** the Diagnosis

What – Etiologies?

Treatable – HCV, PBC, AIH, HBV
Hemochromatosis, Wilson

Common – NAFLD
ETOH

Misc. – PSC, A1AT, BCS
Secondary Biliary, Cardiac

What – Decompensation?

Ascites

Variceal Bleeding (PVT)

Hepatic Encephalopathy

Hepatocellular Carcinoma

Jaundice

SBP, Hepatorenal Syndrome, Hydrothorax

What – Diagnosis

Gold Standard = Liver Biopsy
(Yet limited by sampling error, Risks)

Serologic Markers of Fibrosis:
APRI, FIB-4, Fibrotest, Fibrosure, Actitest

Imaging, Elastography

AASLD Guideline. 2009.

What – Indirect & Direct Markers of Fibrosis

APRI
AST, PLT
> 1~ 76% Sn
72% Sp for cirrhosis

FIB-4
Plt, AST, ALT, Age
> 3.25 ~ 97% Sp
67% PPV for cirrhosis

Fibrotest
Fibrosure

ActiTest
Hepascore

Good ability to differentiate significant fibrosis (F2-4) vs. those without (F0-1)
But not as good as distinguishing b/w stages, and indeterminate results are common

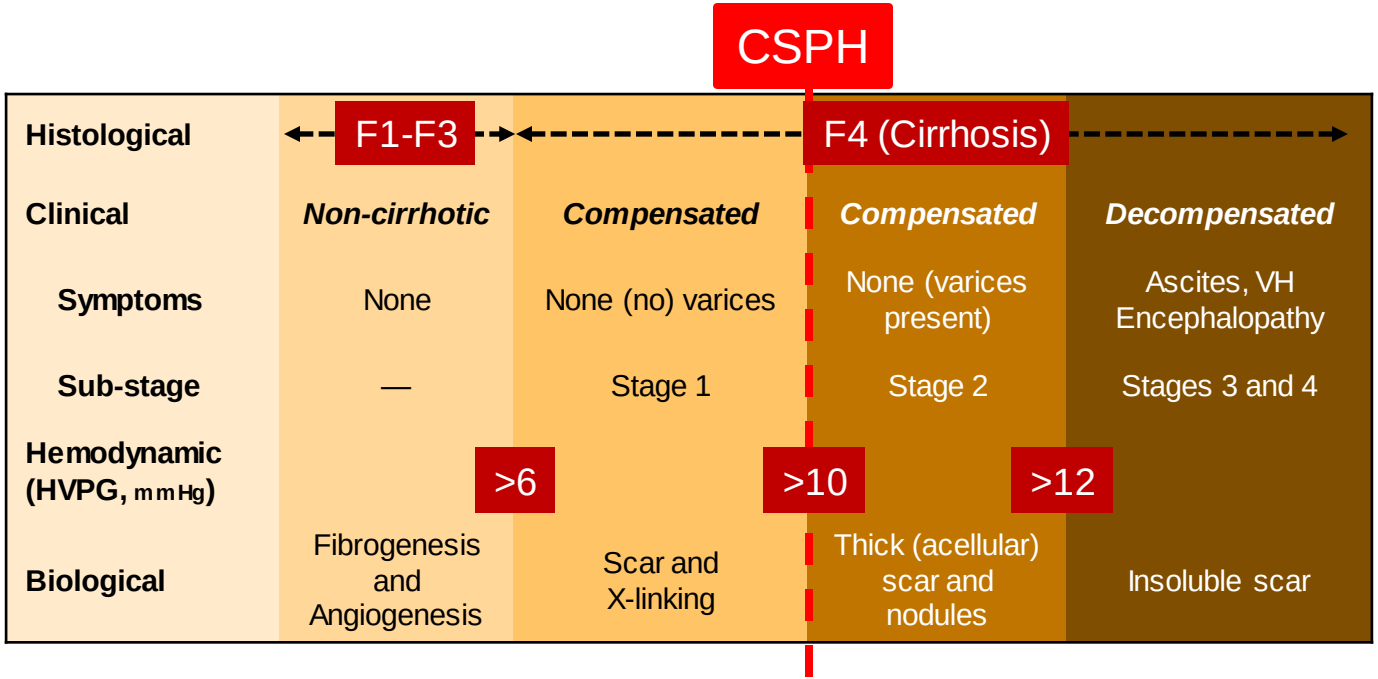
What – Imaging & Elastography

- US, CT, MRI
- Nodular Liver
- Caudate lobe enlargement
- Varices, portal HTN

- Transient Elastography
- MR Elastography

Always need to interpret the data in CONTEXT of the clinical presentation

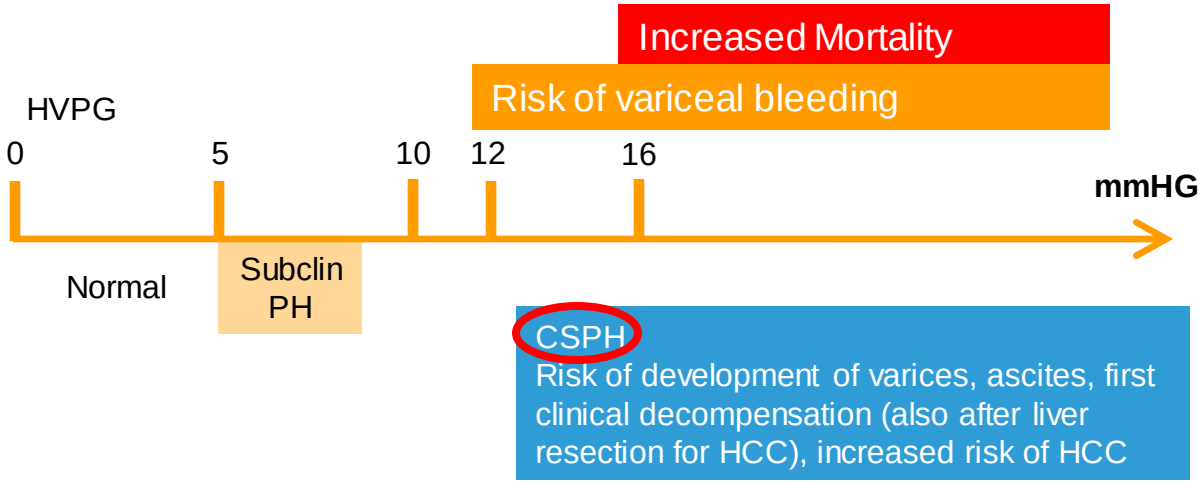
What – Staging



Garcia-Tsao et al. *Hepatology*. 2010.

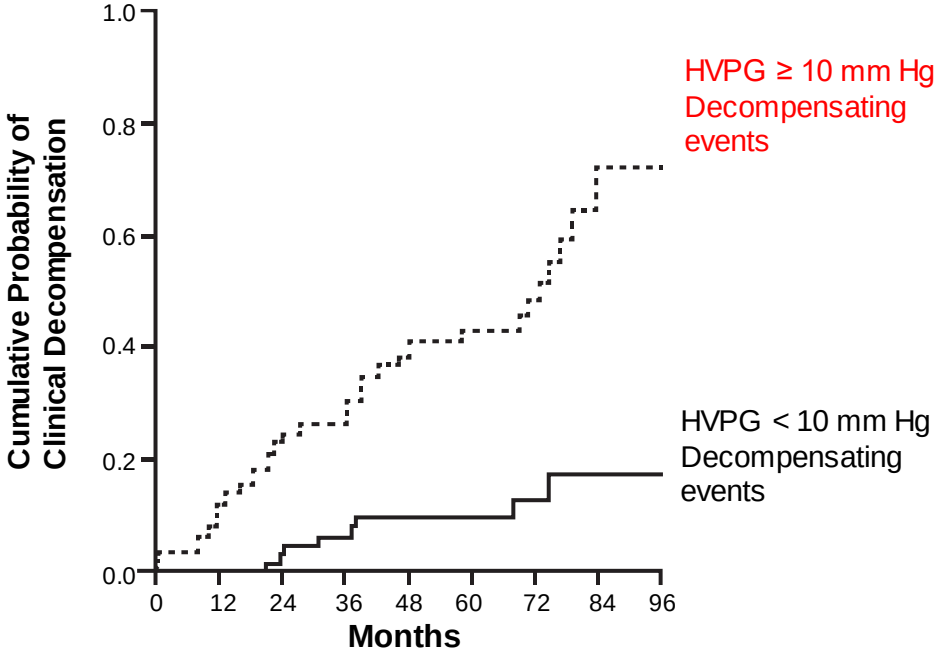
What – **C**linically **S**ignificant **P**ortal **H**ypertension ~ Detected by HVPG

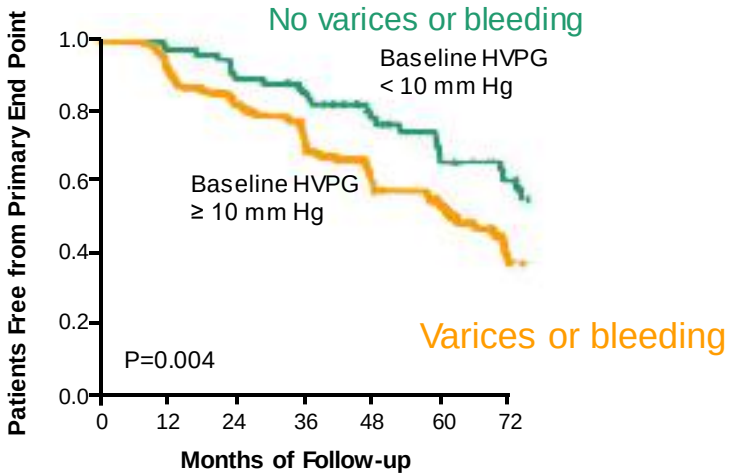
Relevant thresholds of HVPG in compensated cirrhosis (target population)v



HVPG: independently associated with prognosis in cirrhosis.

What – CSPH (Inc HVPG) Predicts Hepatic Decompensation



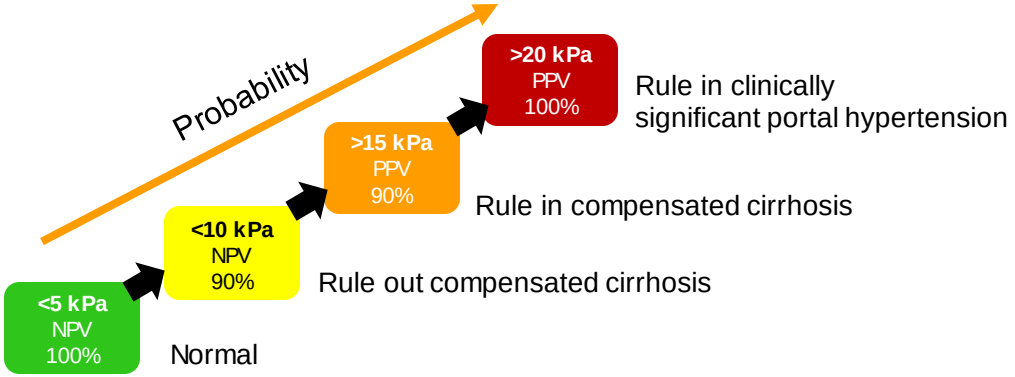


No. at Risk							
HVPG ≥ 10 mm Hg	134	120	96	78	48	36	14
HVPG < 10 mm Hg	79	74	67	58	41	32	24

Ripoll et al. *Gastroenterology.* 2007; Slide courtesy of Dr. Scott Naugler.

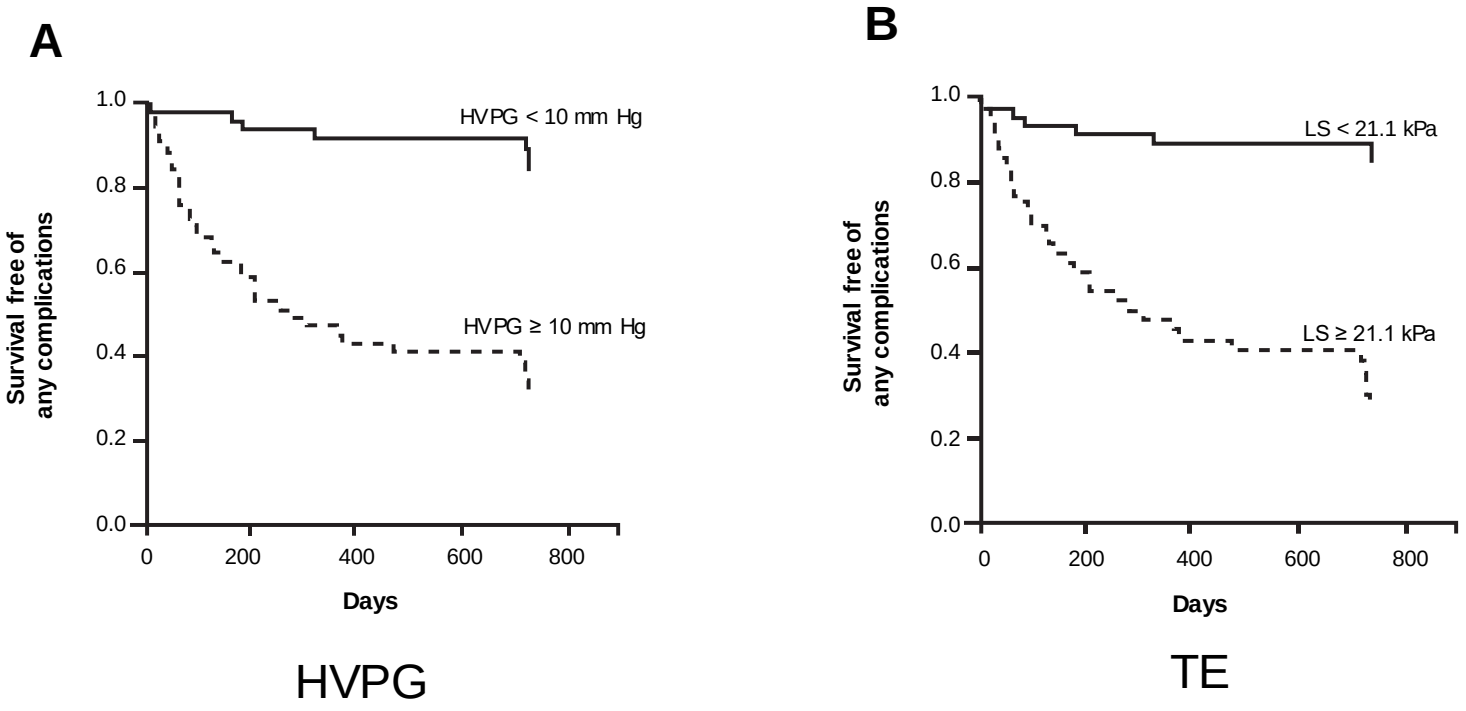
What – Transient Elastography (TE)

- Developed to assess hepatic fibrosis
- Can be used to predict CSPH
  - TE ≥ 20 kPa + Plts ≤ 150 or
  - TE ≥ 25 kPa
  - Impractical to do HVPG broadly



DeFrachis Baveno VI. *J Hepatol*. 2015.

What – TE Predicts Hepatic Decompensation



Robic et al. *J Hep*. 2011.

Outpatient Management

Etiological Testing- negative
APRI= 1.25, FIB-4= 4.06
US Elastography- cirrhotic appearing liver, 22 kPa=F4= **CSPH**

Liver Biopsy deferred by patient

What are the next best management steps?

How – Management?

Treat the underlying chronic liver disease & Monitor for complications

Detect & Manage CSPH

HCC Surveillance

Preventive Care

Set Prognosis Expectations Early

Liver Transplant Referral

How – Preventive Care

Dx & Rx
Cause:

HBV, HCV, AIH, PBC,
HH, WD, NAFLD, PSC

ETOH
Avoidance

Nutrition:
Avoid High &
Very Low BMI

APAP > NSAIDs
Statins ok
Herbals
CNS acting Rx

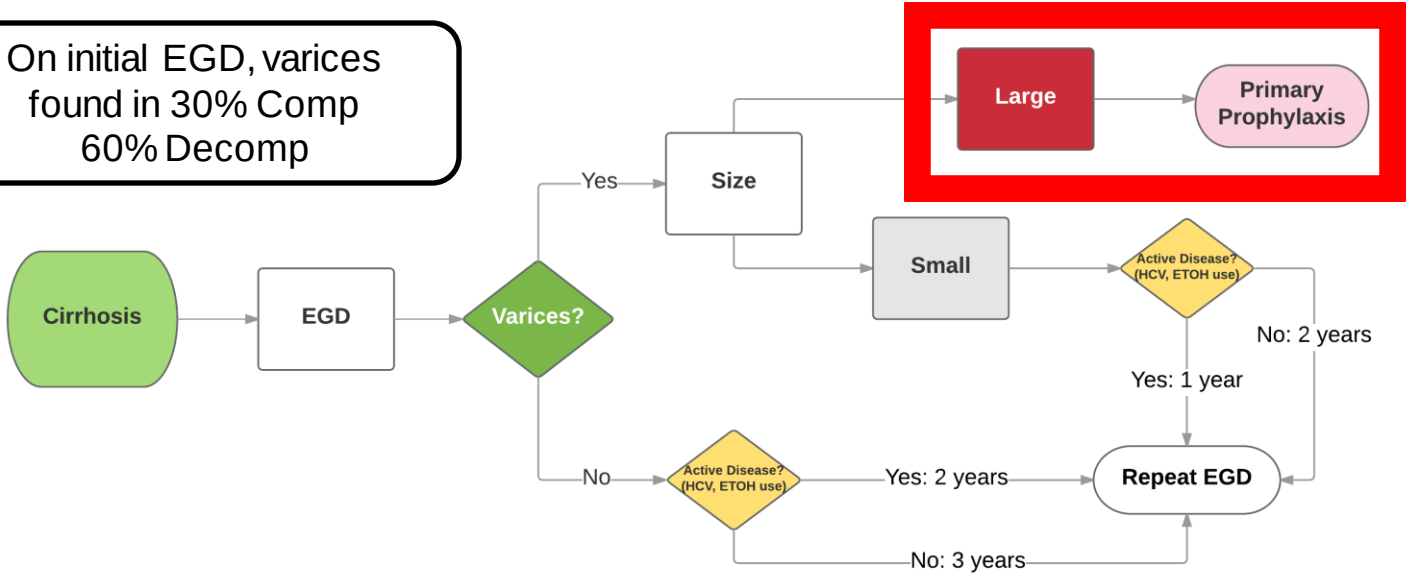
BMD q 2-3y
Dental Care
Tobacco

Vaccinations
HAV, HBV
Flu, Pneumo.
Covid-19

How – Old School Dx of CSPH

If CTP B/C – **Yearly** if no varices seen or intervention started

On initial EGD, varices found in 30% Comp 60% Decomp

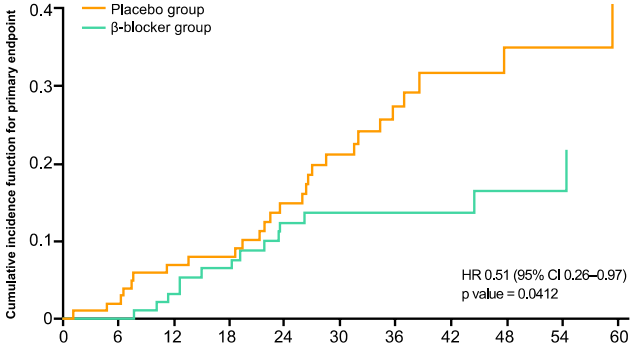


Garcia-Tsao. *Hep*. 2017; 68:310-335.

How – NSBB for CSPH

PREDESCI study

- RCT – BB to prevent decompensation in CSPH
- HVPG ≥ 10 mm Hg
- Propranolol/Carvedilol vs. Placebo



	Placebo group (n=101)	β-blockers group (n=100)	Risk (95% CI)*	p value†
Decompensation or death				
Overall‡	27 (27%)	16 (16%)	0.51 (0.26–0.97)	0.0412
Secondary outcomes				
Ascites	20 (20%)	9 (9%)	0.42 (0.19–0.92)	0.030
Gastrointestinal bleeding	3 (3%)	4 (4%)	1.52 (0.34–6.82)	0.61
Overt hepatic encephalopathy	5 (5%)	4 (4%)	0.92 (0.40–2.21)	0.98
Death from any cause	11 (11%)	8 (8%)	0.54 (0.20–1.48)	0.23
Varices	56 (56%)	58 (58%)	1.15 (0.65–2.02)	0.72
High-risk varices§	25 (25%)	16 (16%)	0.60 (0.30–1.21)	0.15
Spontaneous bacterial peritonitis	4 (4%)	2 (2%)	0.49 (0.10–2.70)	0.40
Other bacterial infections¶	19 (19%)	15 (15%)	0.81 (0.41–1.59)	0.54
Hepatorenal syndrome	1 (%)	1 (1%)	0.99 (0.06–15.96)	0.96
Hepatocellular carcinoma	17 (17%)	13 (13%)	0.76 (0.37–1.54)	0.43

Villanueva. *Lancet*. 2019; Slide Courtesy of Dr. Scott Naugler.

How – Carvedilol

Meta-analysis of individual patient data

ELIGIBLE

RCTs allocating adult cirrhotic patients

-to prevent 1st bleeding
-development/growth of varices
-decompensation

CARVEDILOL

CONTROL

No active therapy, placebo or EVL (high-risk EV)

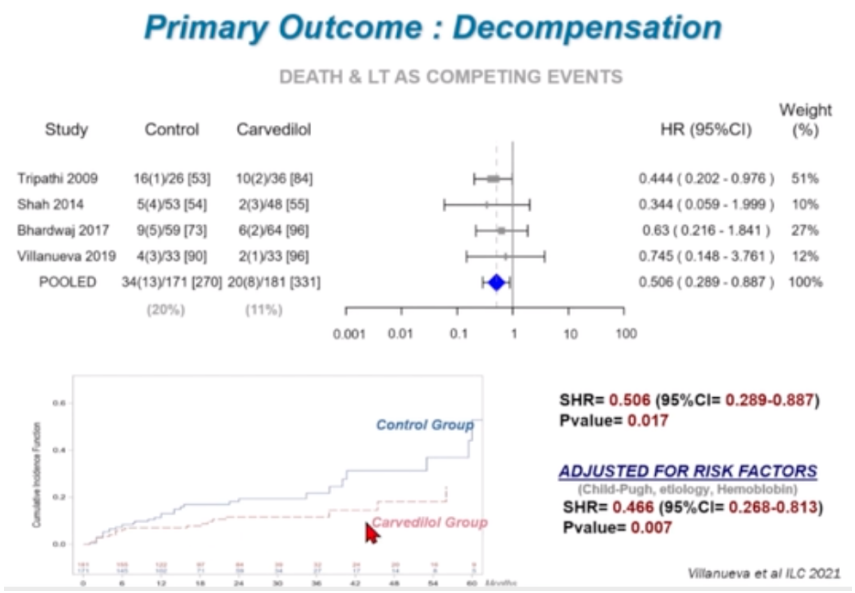
only patients without any previous decompensating event included to pool the individual data

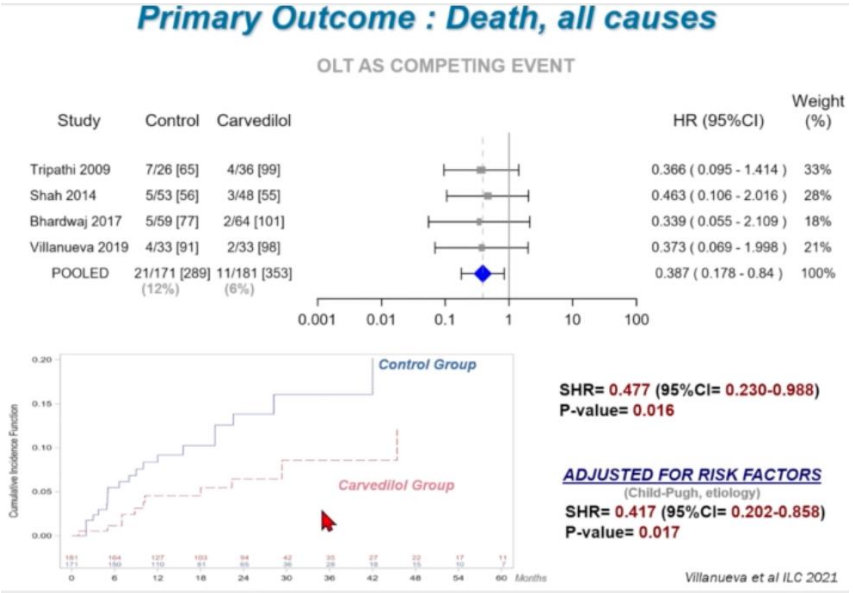
PRIMARY OUTCOME MEASURES

* Development of cirrhosis decompensation (ascites, PH-bleeding, overt HE)
* Death from any causes

Villanueva. *EASL*. 2021; Slide courtesy of Dr. Scott Naugler

How – Carvedilol prevents **Decompensation + Death**



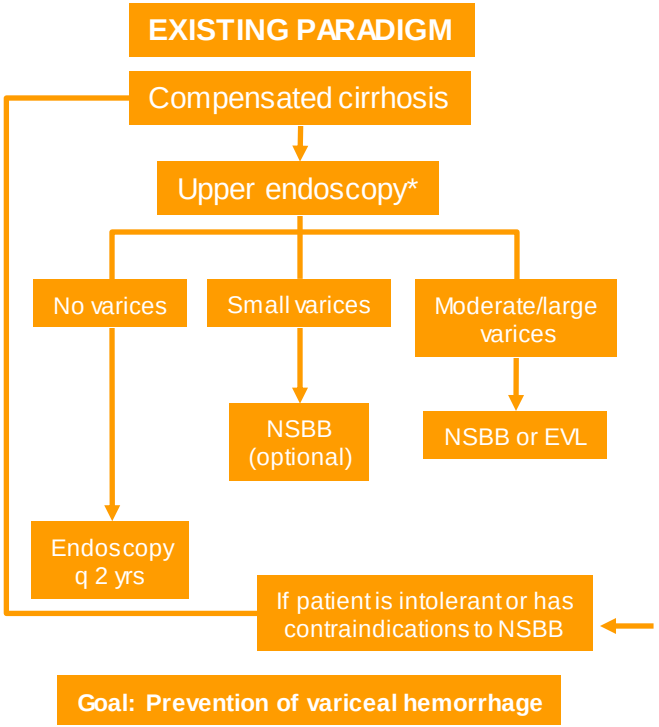


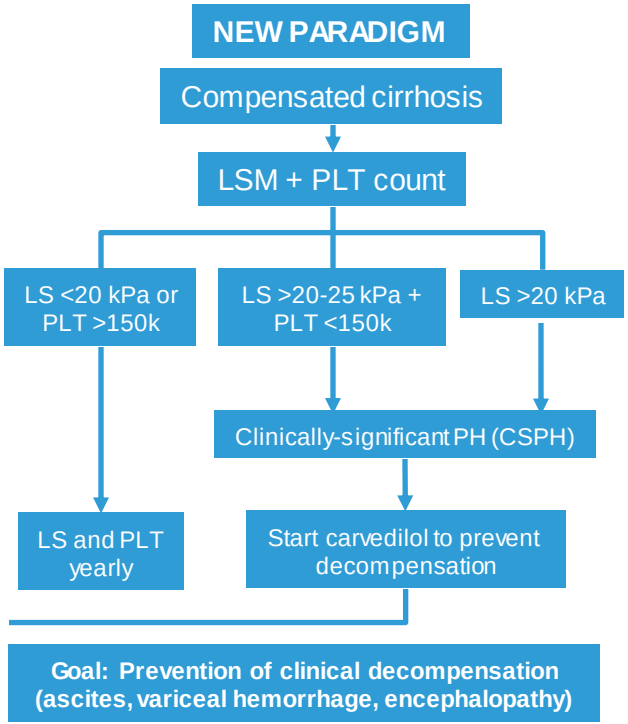
Villanueva. *EASL*. 2021; Slide courtesy of Dr. Scott Naugler.

How – Guidelines Changes Coming

	Baveno VI (2015)	Baveno VII (2021)
Compensated cirrhosis, No CSPH TE < 20 kPa Plt > 150,000	No screening EGD needed; repeat testing yearly	No screening EGD needed; repeat testing yearly
Compensated cirrhosis, CSPH TE ≥ 20 kPa and Plt ≤ 150,000	Do EGD for varices screening	
No varices/small varices CTP A-B	Repeat EGD 2 yrs	
Small varices, CTP C	Start NSBB	
Large varices	NSBB or EBL	

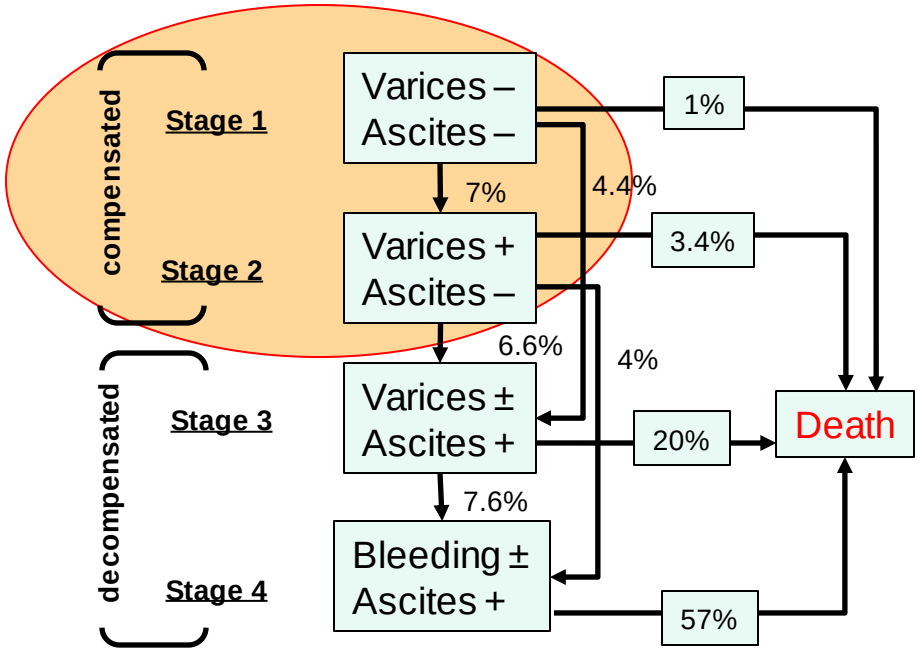
How – Paradigm Shift





Garcia-Tsao. *Gastro*. 2021.

When? Prognosis Defined by Decompensating Events



Median survival in:

- Compensated cirrhosis = 12-20 y
- Decompensated cirrhosis = ½- 2 y

D'Amico. *J Hep*. 2006.

Long Term Follow Up

CSPH Dx→ Carvedilol initiated at 3.125 mg BID
→ 6.25 mg BID as tolerated

Q 6 mo- Labs + US + AFP

Prognosis & Liver Transplant Referral Process Discussion

Take Aways

- Why? *Cirrhosis is common and leads to death*
- Who & Where? *Practicing GI in outpatient*
- What? *Make the cirrhosis Dx, Evaluate for CSPH*
- How? *Carvedilol, Rx underlying cause, Preventive care*
- When? *Have the Prognosis discussion early*

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