



# Acute Alcoholic Hepatitis



Time to consider Transplant

Bilal Bobat  
Liver Unit WDGMC



MEDICLINIC 

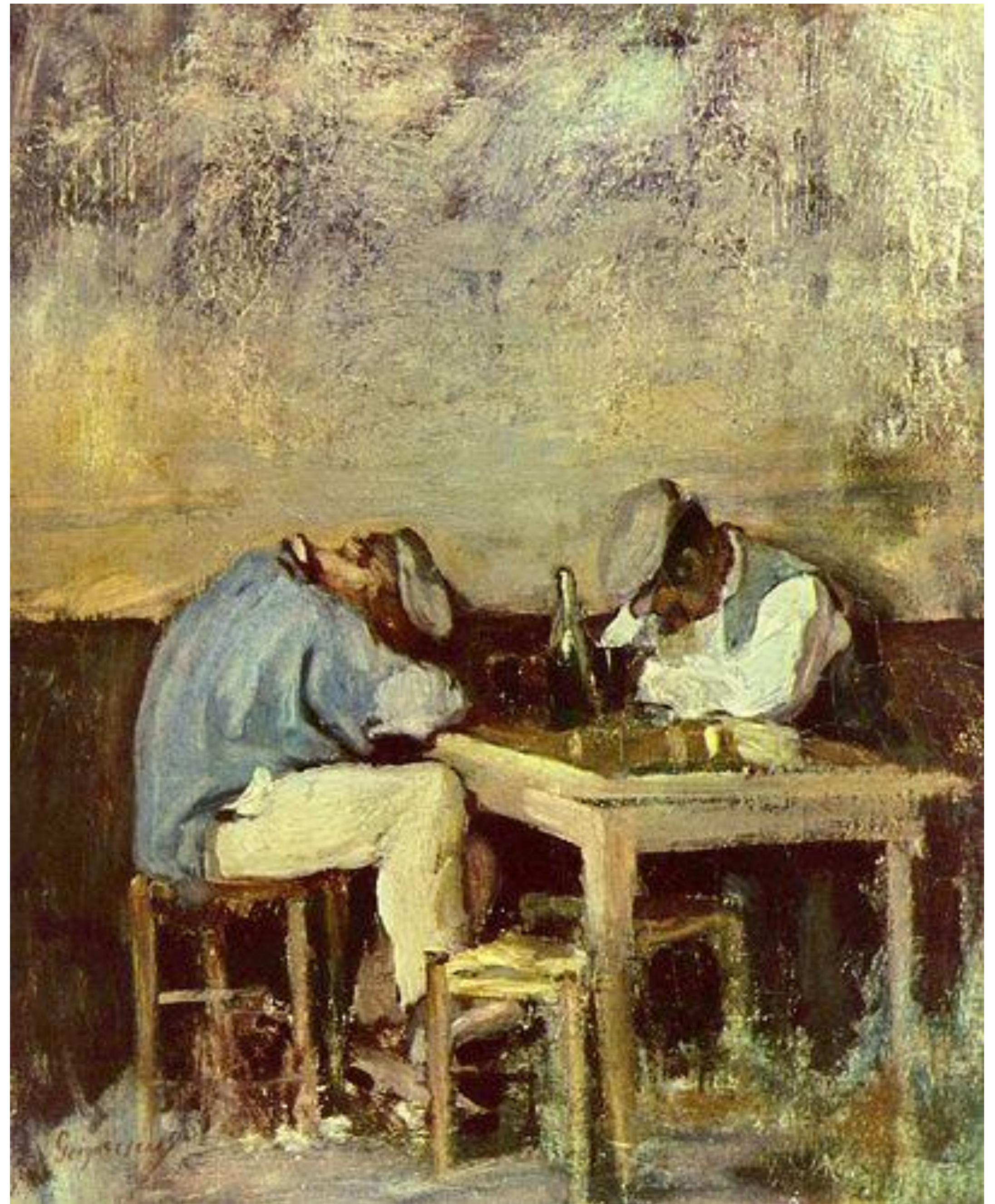


WITS  
TRANSPLANT

Progressive medicine, exceptional care.

# Definitions

- Alcohol Use Disorder
- Alcohol Associated Liver Disease
- Acute Alcoholic Hepatitis
- ACLF



Two Drinkers  
Nicolae Grigorescu

# Definitions

- Alcohol Use Disorder

**Definition: A problematic pattern of alcohol use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:**

1. Alcohol is often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.
3. A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects.
4. Craving, or a strong desire or urge to use alcohol.
5. Recurrent alcohol use resulting in a failure to fulfil major role obligations at work, school, or home.
6. Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.
7. Important social, occupational, or recreational activities are given up or reduced because of alcohol use.
8. Recurrent alcohol use in situations in which it is physically hazardous.
9. Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol.
10. Tolerance, as defined by either of the following:
  - a. A need for markedly increased amounts of alcohol to achieve intoxication or desired effect.
  - b. A markedly diminished effect with continued use of the same amount of alcohol.
11. Withdrawal, as manifested by either of the following:
  - a. The characteristic withdrawal syndrome for alcohol.
  - b. Alcohol (or a closely related substance, such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms.

The presence of at least 2 of these criteria indicates an AUD. The severity of the AUD is defined as:

- Mild: The presence of 2 to 3 criteria
- Moderate: The presence of 4 to 5 criteria
- Severe: The presence of 6 or more criteria

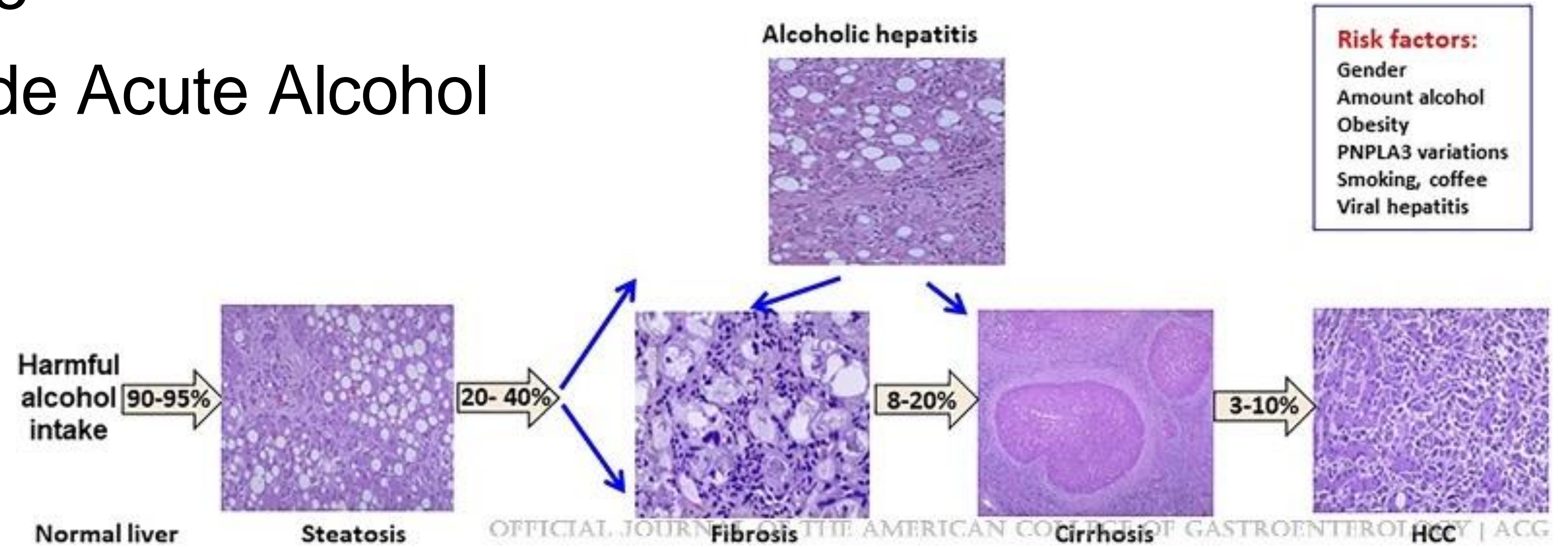
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# Definitions

- Alcohol Associated Liver Disease

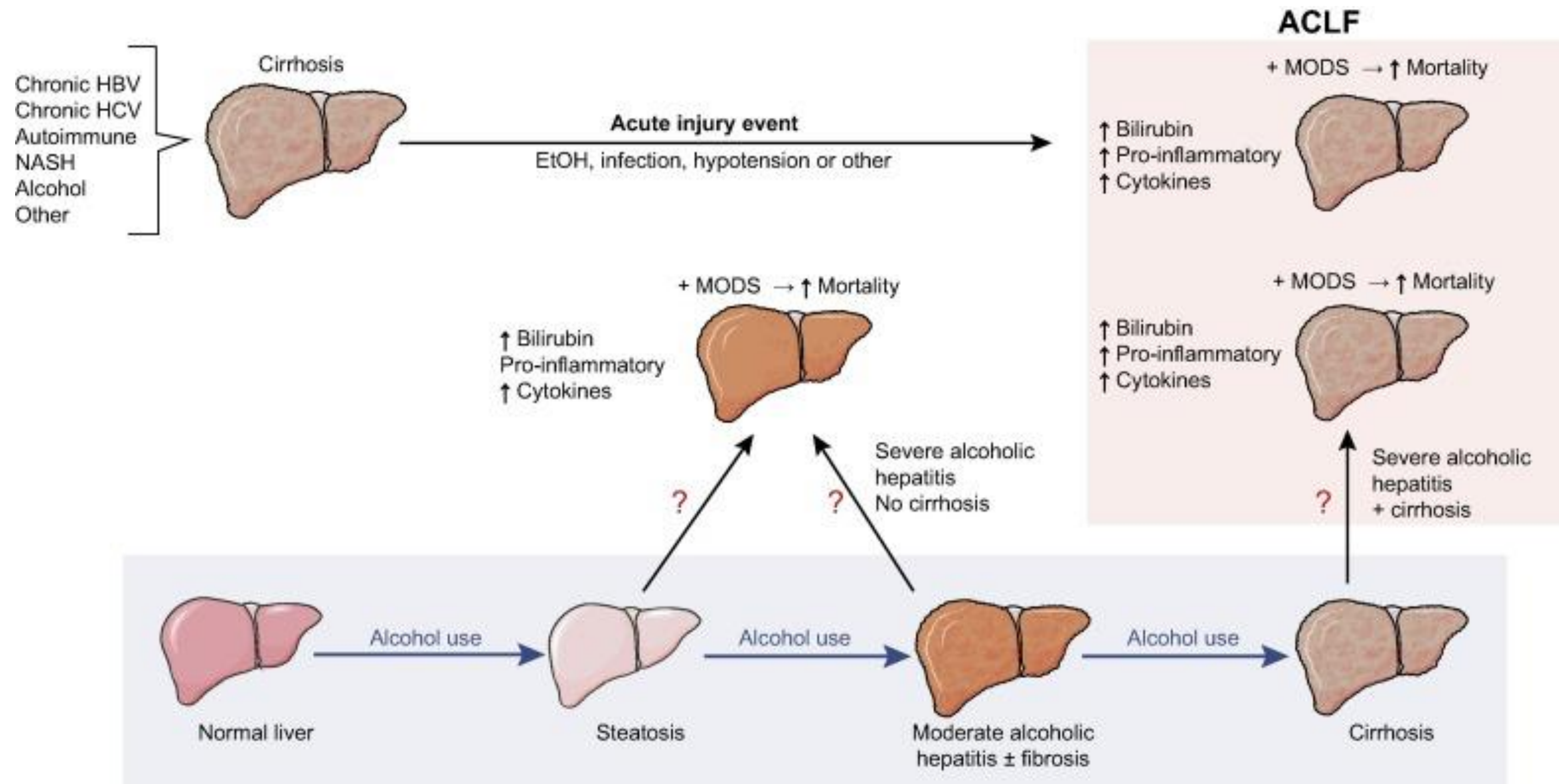
## Spectrum of Disease

Complications include Acute Alcohol Hepatitis and ACLF



# Definitions

- Alcohol Associated Liver Disease



# South Africa and Alcohol

## Heavy drinking and contextual risk factors among adults in South Africa: findings from the International Alcohol Control study

[Pamela J. Trangenstein](#), [Neo K. Morojele](#), [Carl Lombard](#), [David H. Jernigan](#) & [Charles D. H. Parry](#) 

[Substance Abuse Treatment, Prevention, and Policy](#) **13**, Article number: 43 (2018) | [Cite this article](#)

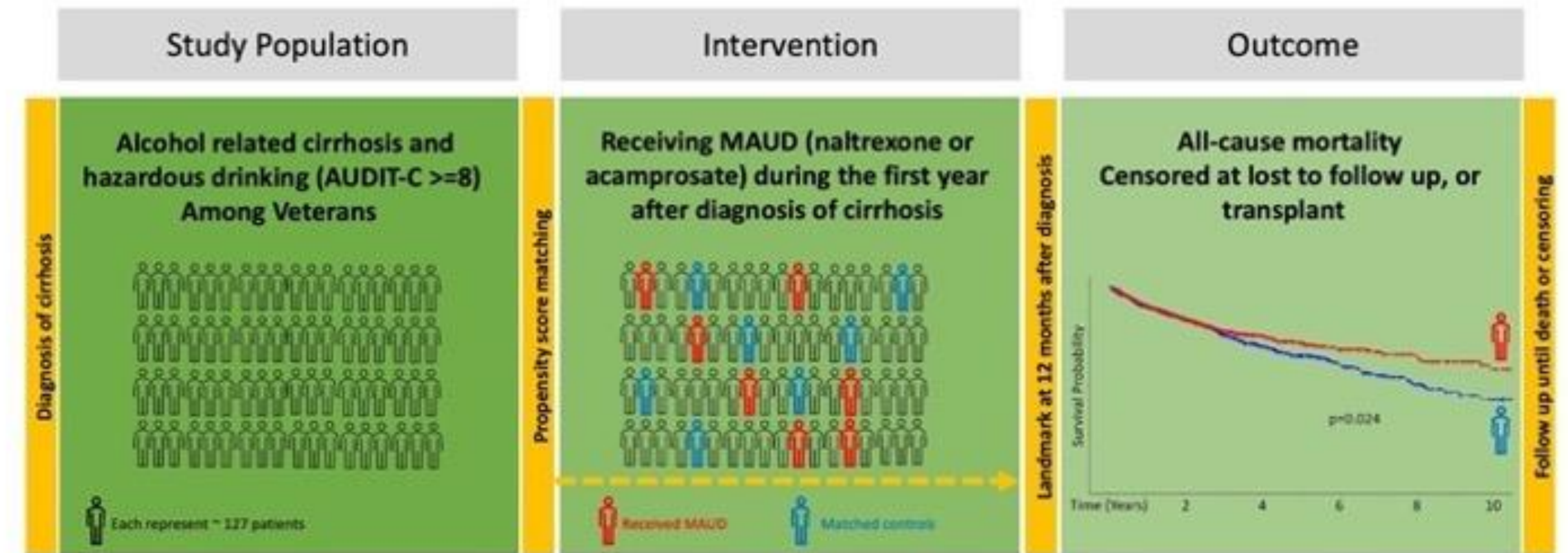
- 47% Regular drinkers
- 53% Heavy drinkers
- 3.5% increase in Alcohol use over the last 30 years
- Global Burden of Disease Study 2020 reported 1.78 million deaths attributed to alcohol consumption

# Alcohol Use Disorder and management

- Few patients get help
- 22% of patients with AUD were offered Intervention
- Prejudice and Stigma

- CAGE or AUDIT

## Medications for Alcohol Use Disorder (MAUD) Improve Survival in Alcohol Related Cirrhosis



Rabiee, et al. *Hepatol Commun.* 2023.

HEPATOLOGY COMMUNICATIONS

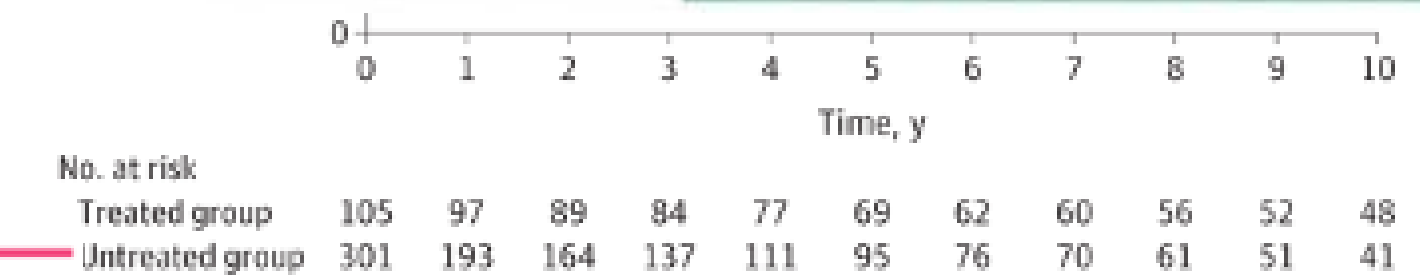
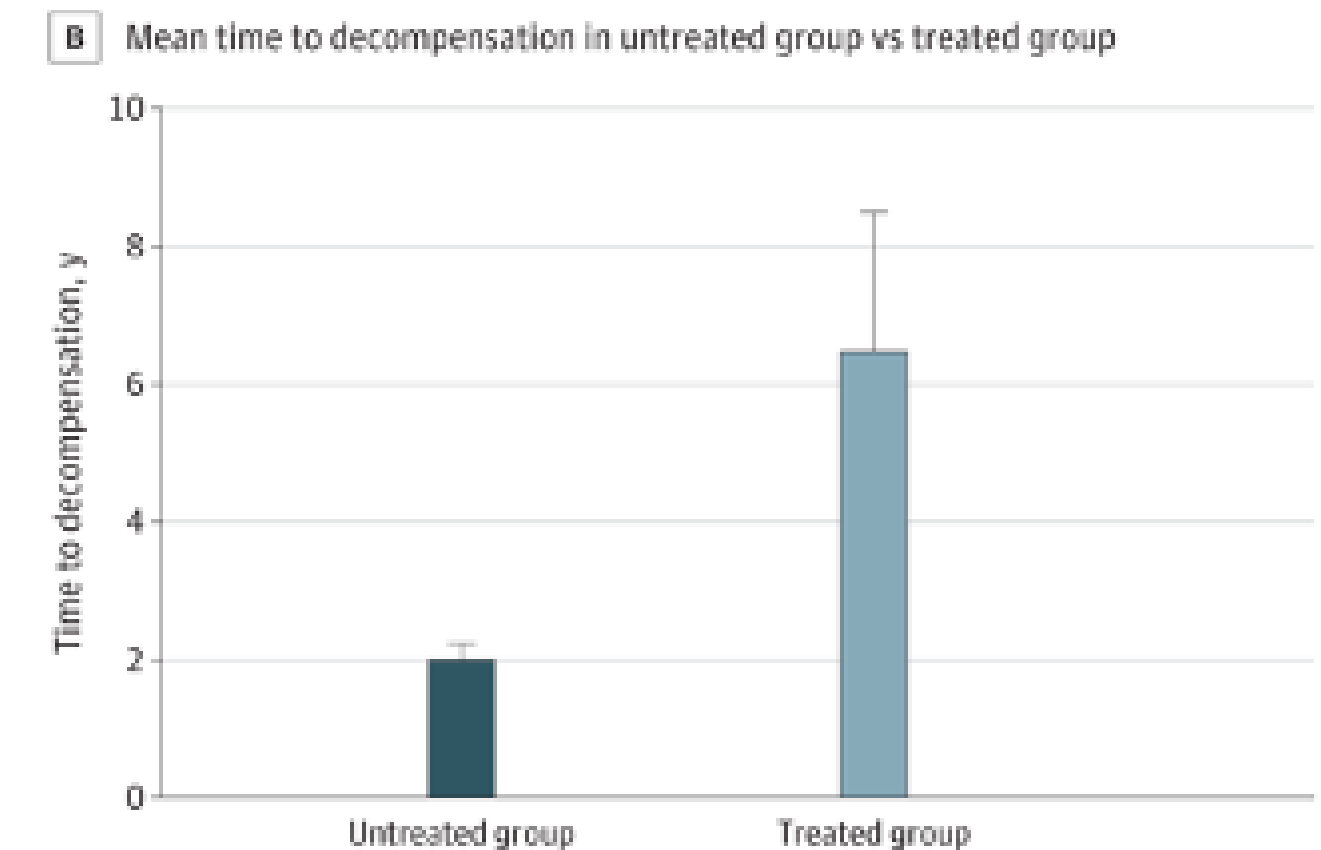


Table 2. Odds Ratios for the Development of Alcohol-Associated Liver Disease After Medical Addiction Therapy

Medical addiction therapy	Adjusted odds ratio (95% CI)	P value
Any pharmacotherapy	0.37 (0.31-0.43)	<.001
Gabapentin	0.36 (0.30-0.43)	<.001
Topiramate	0.47 (0.32-0.66)	<.001
Baclofen	0.57 (0.36-0.88)	.01
Naltrexone	0.67 (0.46-0.95)	.03
Disulfiram	0.86 (0.43-1.61)	.66
Acamprosate	2.59 (1.84-3.61)	<.001



# AUD Pathway

**Alcohol**

**Scoring:**  
A total of 5+ indicates increasing or higher risk drinking.  
An overall total score of 5 or above is AUDIT-C positive.

**TOTAL**

Questions	Scoring system					Your score
	0	1	2	3	4	
How often do you have a drink containing alcohol?	Never	Monthly or less	2 - 4 times per month	2 - 3 times per week	4+ times per week	
How many units of alcohol do you drink on a typical day when you are drinking?	1 - 2	3 - 4	5 - 6	7 - 9	10+	
How often have you had 6 or more units if female, or 8 or more if male, on a single occasion in the last year?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	

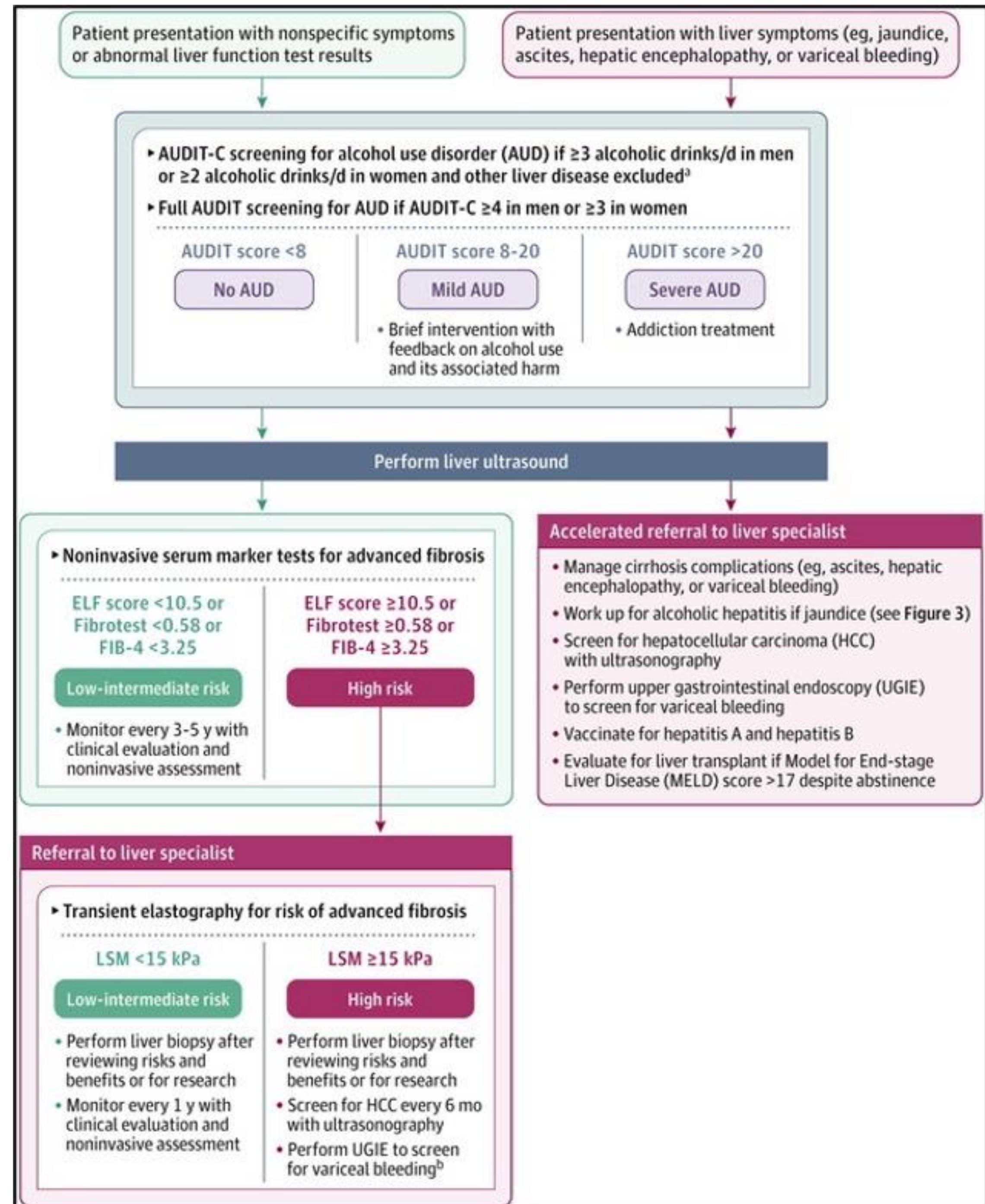
  

Questions	Scoring system					Your score
	0	1	2	3	4	
How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you failed to do what was normally expected from you because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you needed an alcoholic drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you been unable to remember what happened the night before because you had been drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
Have you or somebody else been injured as a result of your drinking?	No		Yes, but not in the last year	Yes, during the last year		
Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested that you cut down?	No		Yes, but not in the last year	Yes, during the last year		

**Scoring:** 0 - 7 Lower risk, 8 - 15 Increasing risk, 16 - 19 higher risk, 20+ possible dependence

**TOTAL**

PTO



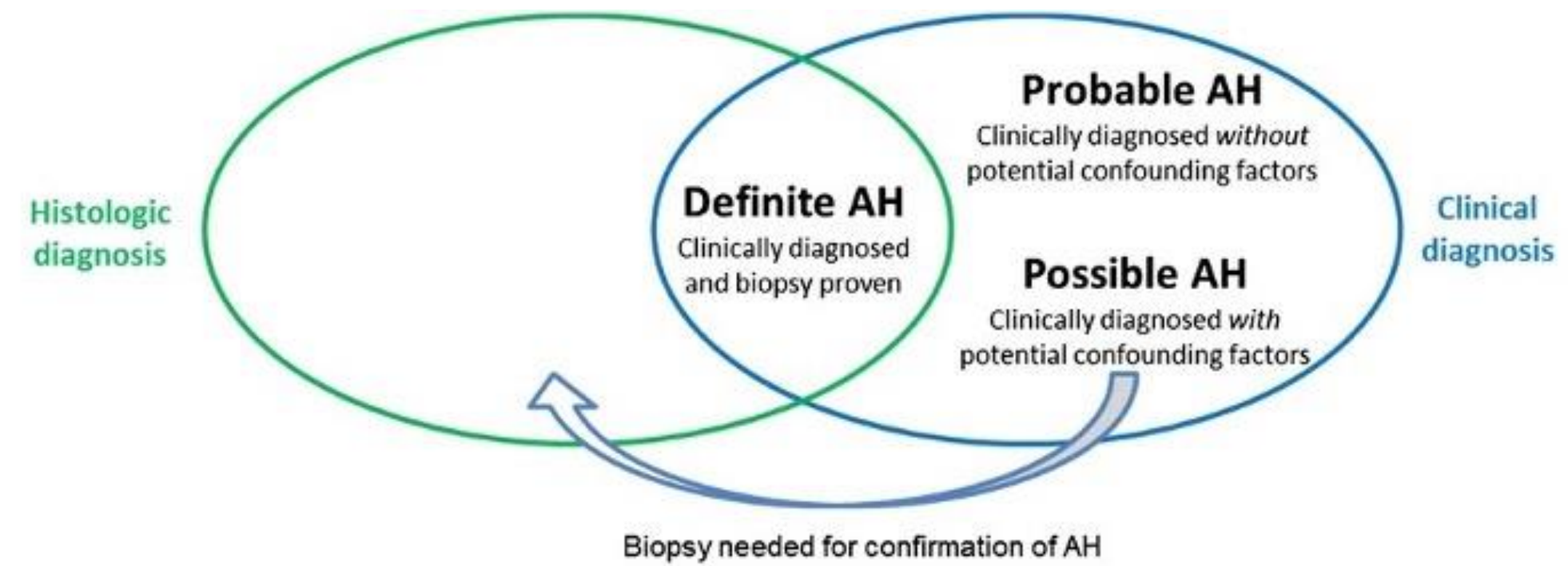


# Severe Acute Alcohol Hepatitis

Abrupt onset of liver failure

Sudden onset of jaundice in an individual with recent active alcohol use

It is defined by set clinical, biochemical and histological criteria



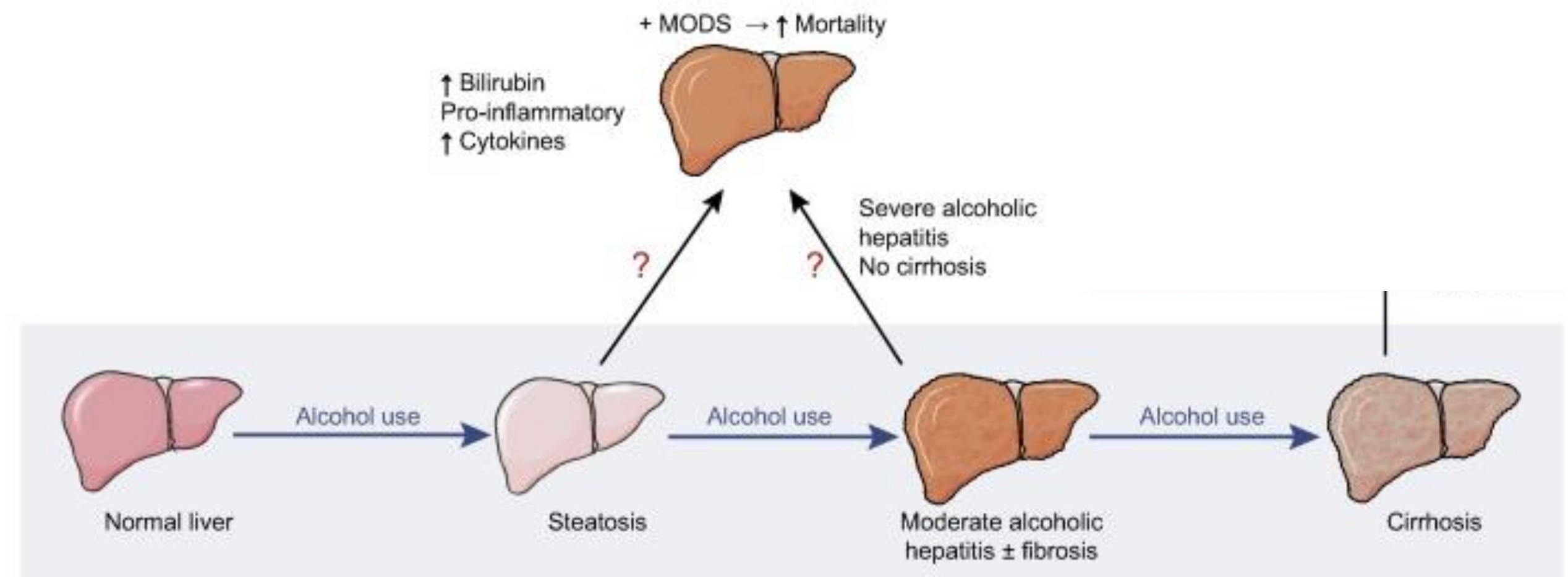
**Clinical diagnosis of AH**

- Onset of jaundice within prior 8 weeks
- Ongoing consumption of >40 (female) or 60 (male) g alcohol/day for ≥6 months, with <60 days of abstinence before the onset of jaundice
- AST >50, AST/ALT >1.5, and both values <400 IU/L
- Serum total bilirubin >3.0 mg/dL

**Potential confounding factors**

- Possible ischemic hepatitis (e.g., severe upper gastrointestinal bleed, hypotension, or cocaine use within 7 days) or metabolic liver disease (Wilson disease, alpha 1 antitrypsin deficiency)
- Possible drug-induced liver disease (suspect drug within 30 days of onset of jaundice)
- Uncertain alcohol use assessment (e.g., patient denies excessive alcohol use)
- Presence of atypical laboratory tests (e.g., AST <50 or >400 IU/L, AST/ALT <1.5), ANA >1:160 or SMA >1:80.

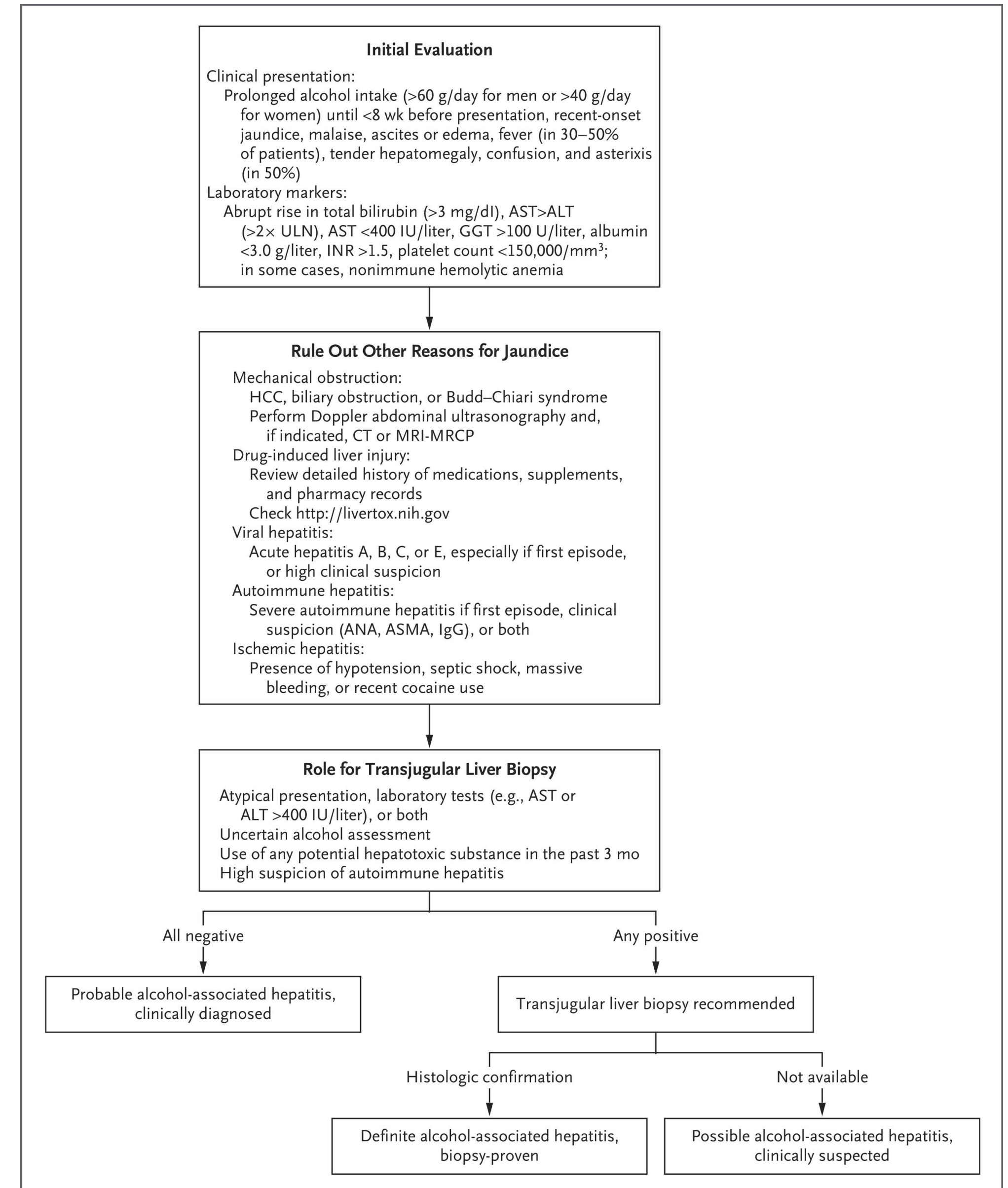
HEPATOLOGY



# Severe Acute Alcohol Hepatitis

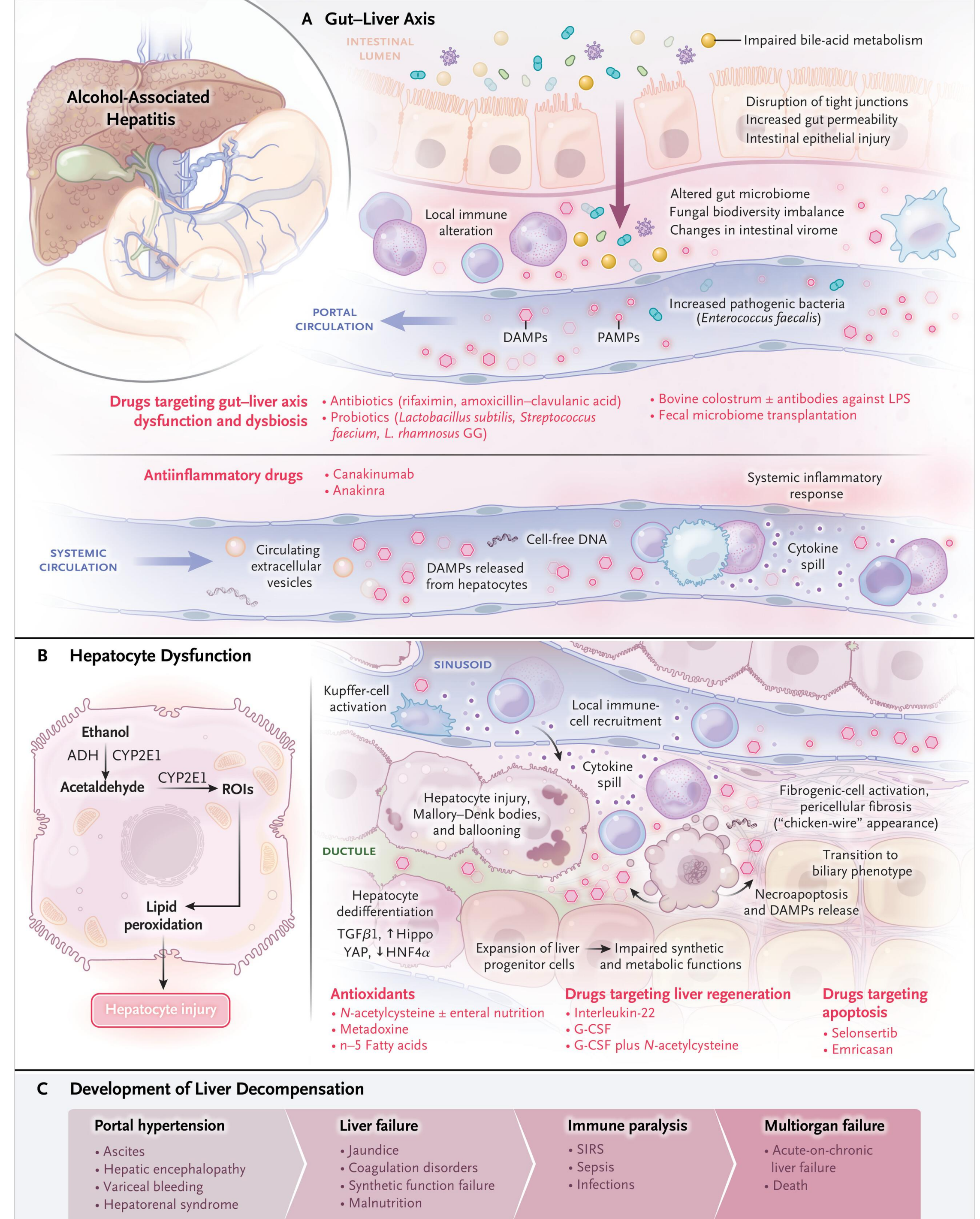
## Criteria

- Onset of jaundice within the previous 8 weeks
- Ongoing consumption of more than 3 drinks (approximately 40 g) per day for women and 4 drinks (approximately 50 to 60 g) per day for men for 6 months or more
- Less than 60 days of abstinence before the onset of jaundice
- Total serum bilirubin level of more than  $>50 \mu\text{mol}$  per liter
- AST level of more than 50 IU per liter, and a ratio of AST to ALT of more than 1.5, with both values less than 400 IU per liter
- Exclusion of other liver diseases such as drug-induced liver injury and ischemic hepatitis



# Severe Acute Alcohol Hepatitis

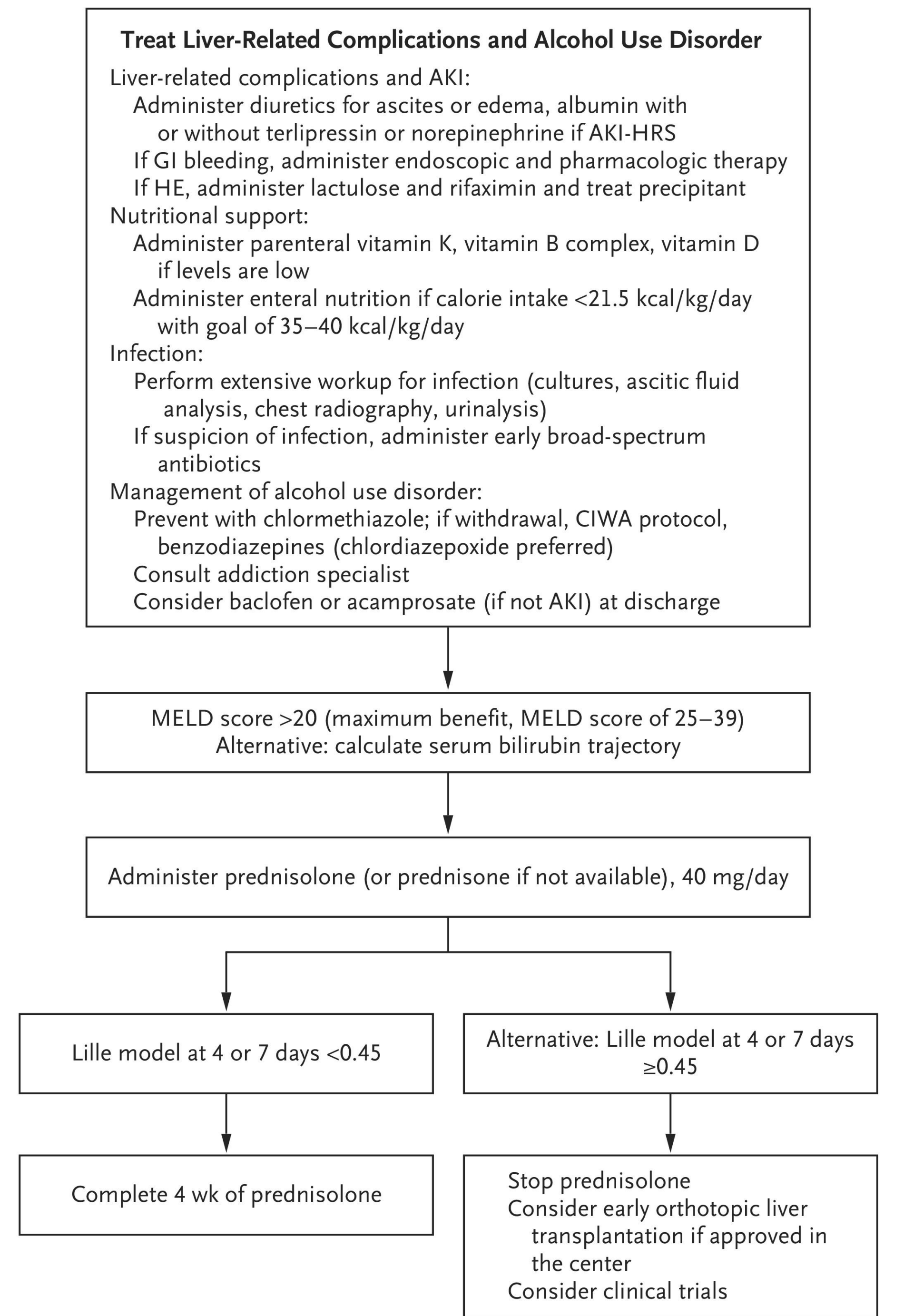
- 20-50% Mortality with hospitalised patients
- Scoring systems to predict Mortality
- MELD >20
- MDF >32
- Lille score on day 4 or 7



# Severe Alcohol Hepatitis

## Management

- Supportive
- Nutritional support
- Prednisone
- NAC



# Non Responders

## Liver transplantation



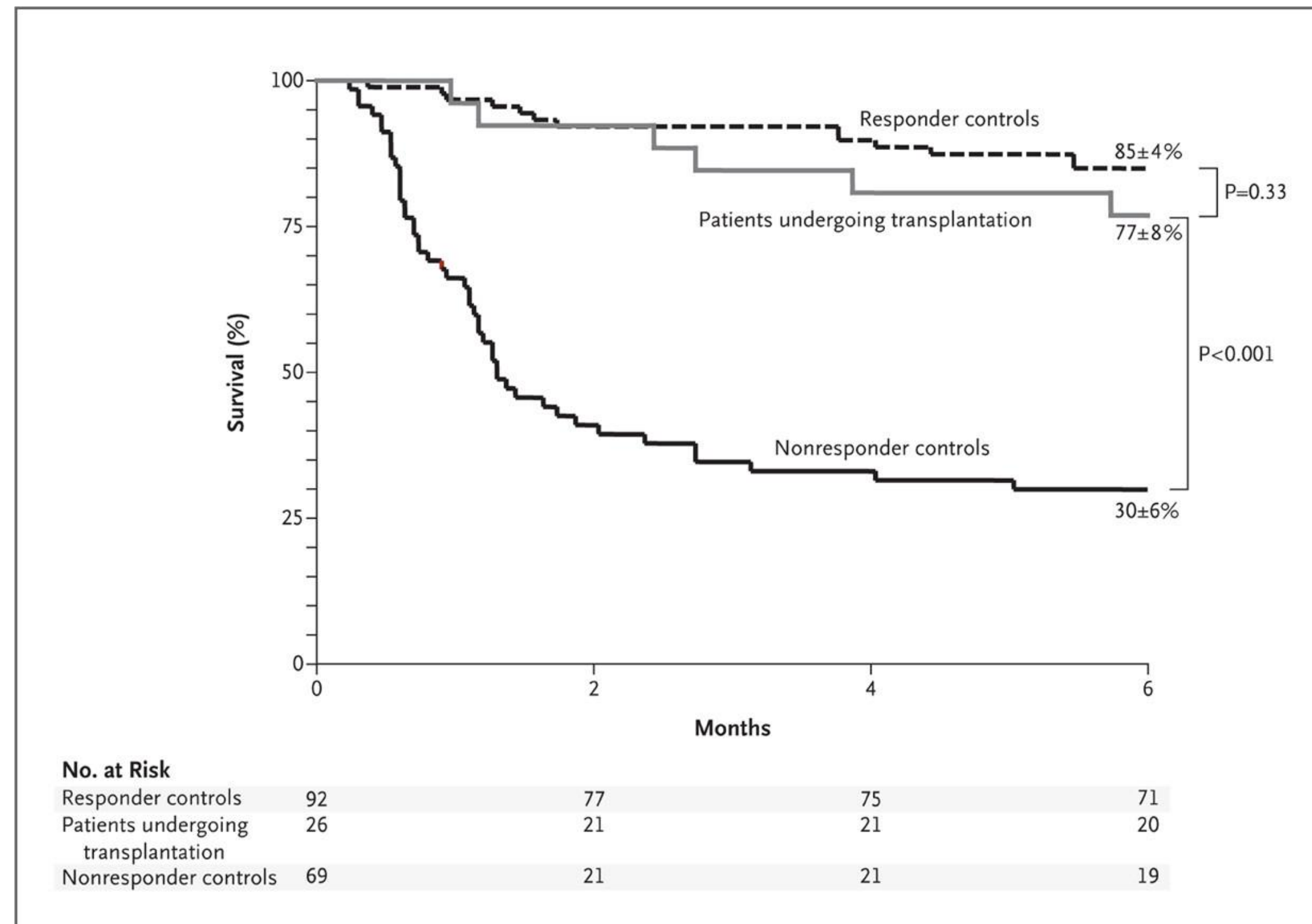
ORIGINAL ARTICLE



## Early Liver Transplantation for Severe Alcoholic Hepatitis

**Authors:** Philippe Mathurin, M.D., Ph.D., Christophe Moreno, M.D., Ph.D., Didier Samuel, M.D., Ph.D., Jérôme Dumortier, M.D., Ph.D., Julia Salleron, M.S., François Durand, M.D., Ph.D., Hélène Castel, M.D., <sup>+14</sup>, and Jean-Charles Duclos-Vallée, M.D., Ph.D. [Author Info & Affiliations](#)

Published November 10, 2011 | N Engl J Med 2011;365:1790-1800 | DOI: 10.1056/NEJMoa1105703



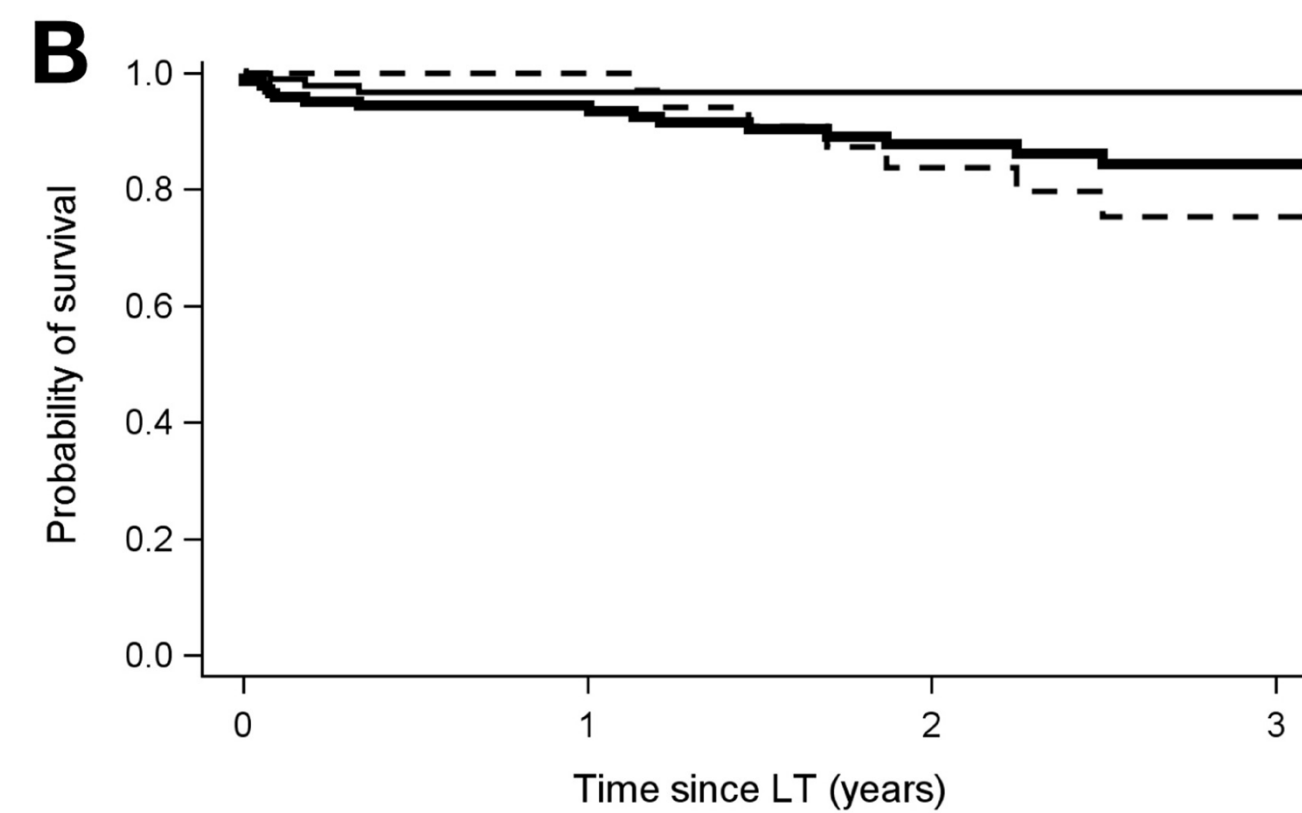
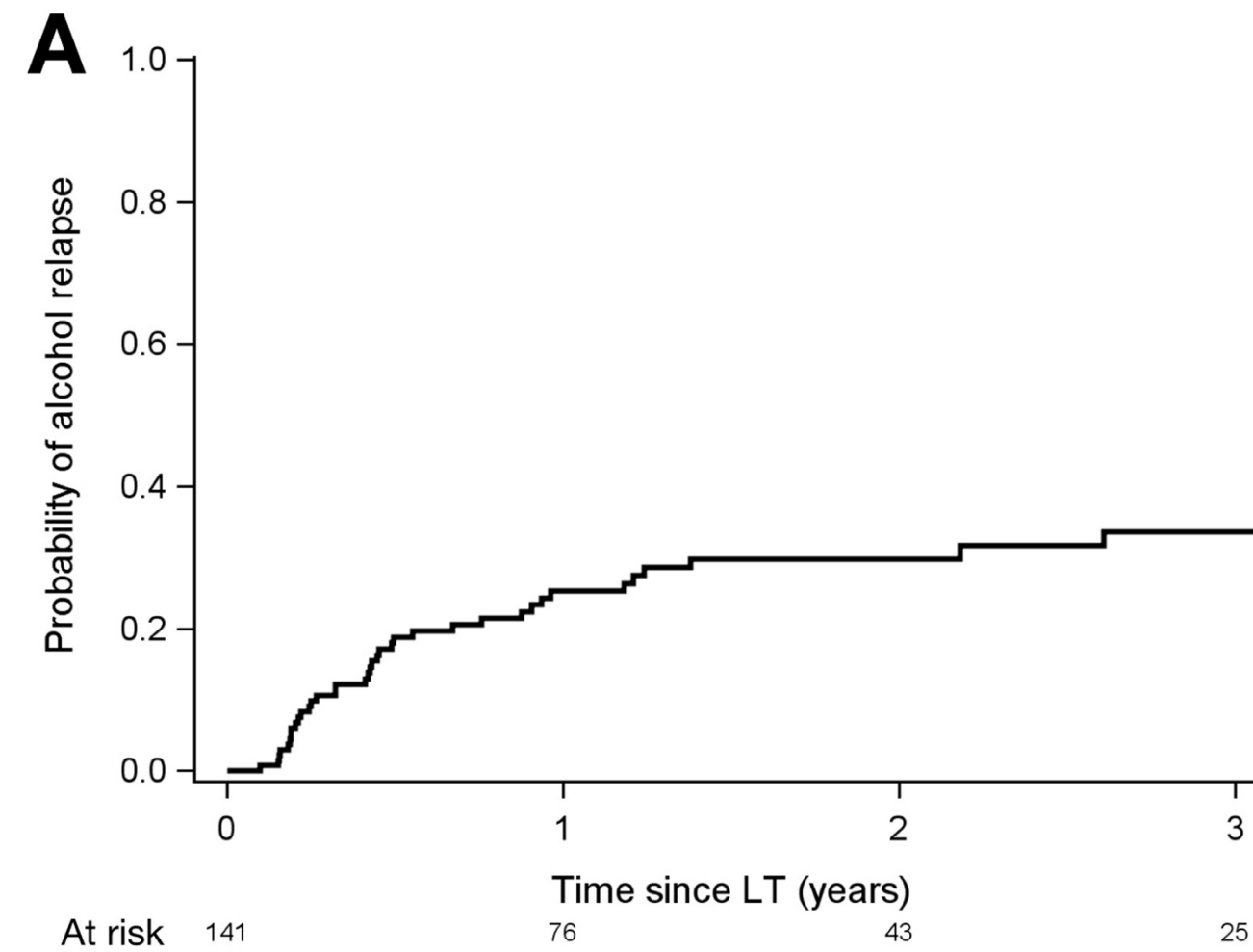
- 26 carefully selected patients
- 10% of all patients with AAH
- Transplantation showed a significant survival benefit.

# Non Responders

## Liver Transplantation

### American Consortium of Early Liver Transplantation for Alcoholic Hepatitis: ACCELERATE-AH

12 centers in 8 UNOS regions



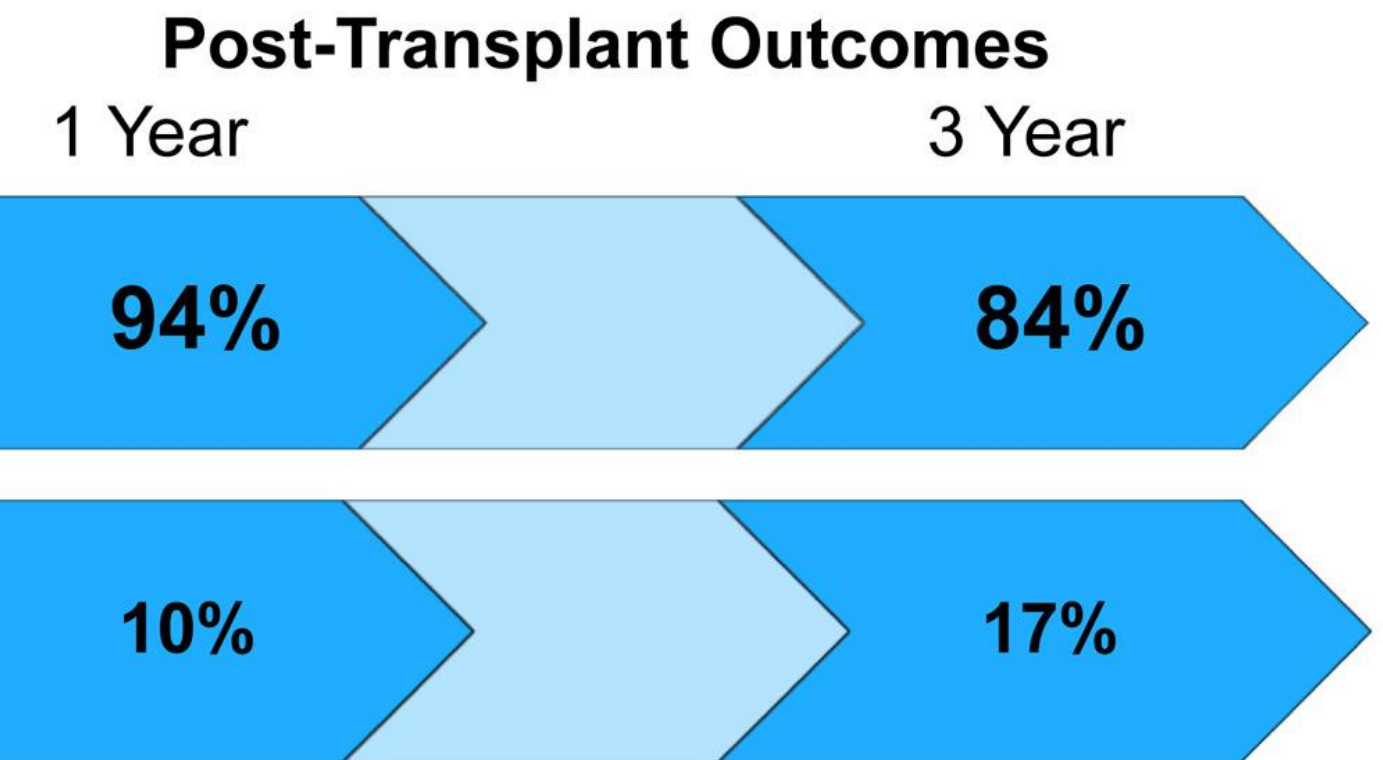
	Overall	No	Yes
Overall	147	103	44
No	101	67	34
Yes	46	36	10

Early Transplant  
= no specific sobriety  
period (n=147)

→ Survival

→ Sustained  
Alcohol Use  
After  
Transplant

*Mortality without  
transplant up to  
70% at 6 months*



Gastroenterology

- Confirmed the prior French study
- 34% went back to Alcohol, most returned to dangerous drinking patterns
- Significant survival benefit for patients who abstained

# Liver transplantation

## What about the 6 month rule?

- Many recover and don't need transplant
- Allows to assess commitment to rehabilitation
  
- 6 month rule is inadequate to assess long term alcohol abstinence
- Severe Alcohol Hepatitis- Patients are unlikely to survive that long!

# Liver Transplant for Acute Alcohol Hepatitis

Is this then the new standard of Care?

- First presentation
- Absence of other comorbidities
- Non response to medical management
  
- Psychosocial assessment
- Structure in place to support post transplant
- Transparency

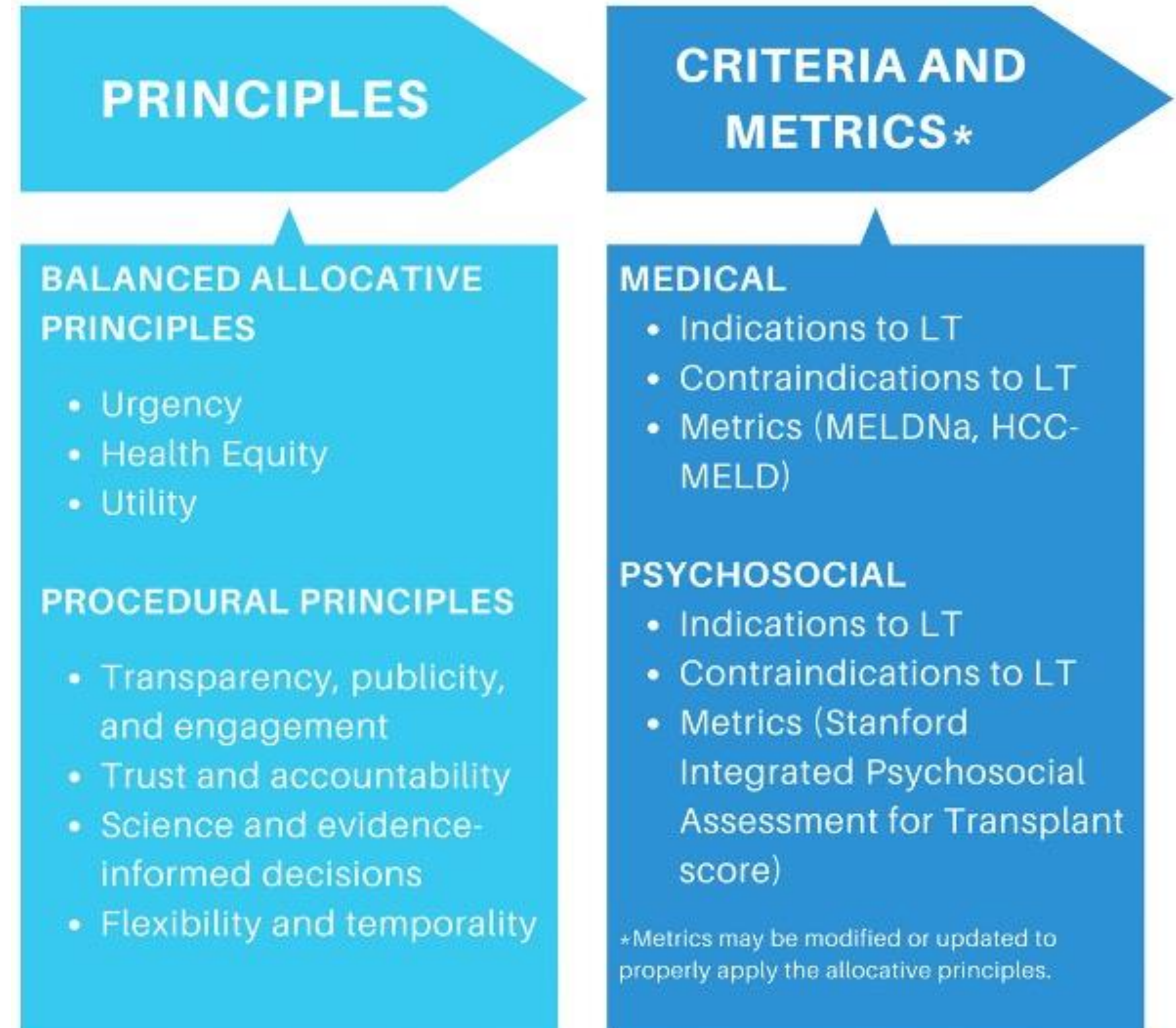


# Ethics

## Justice

- Considerable stigma amongst medical personnel and the public
- Equity
- Utility
- Urgency

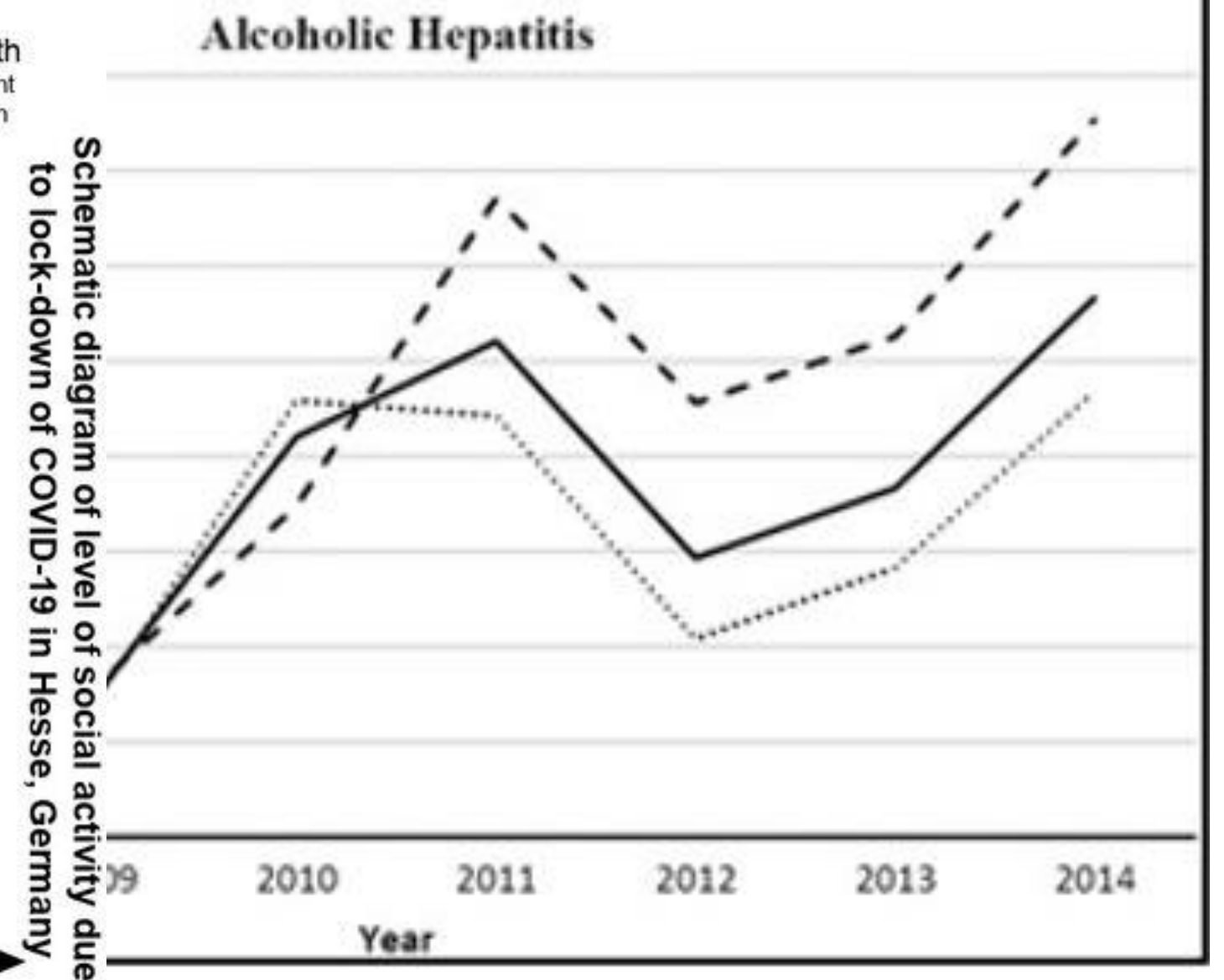
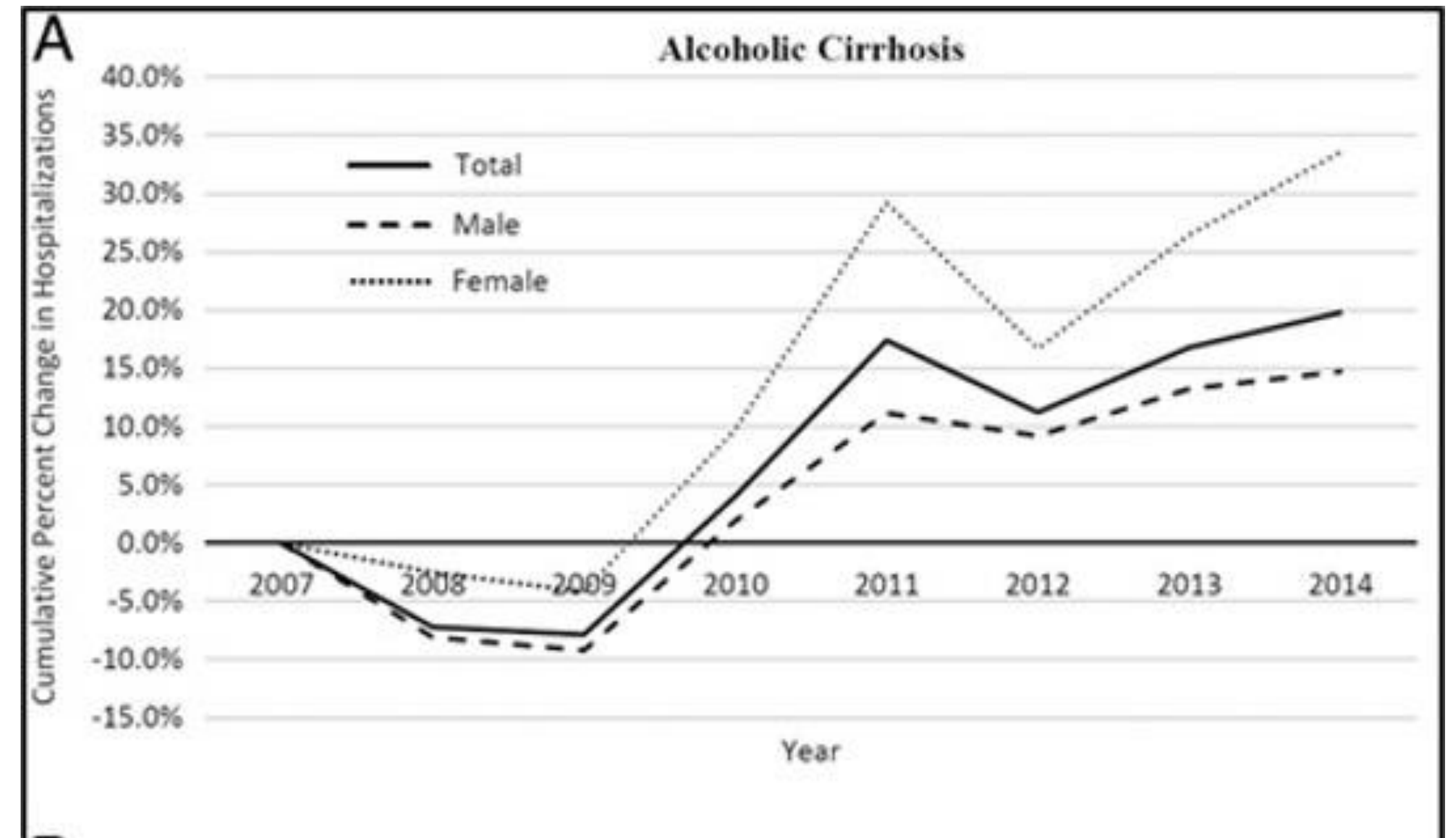
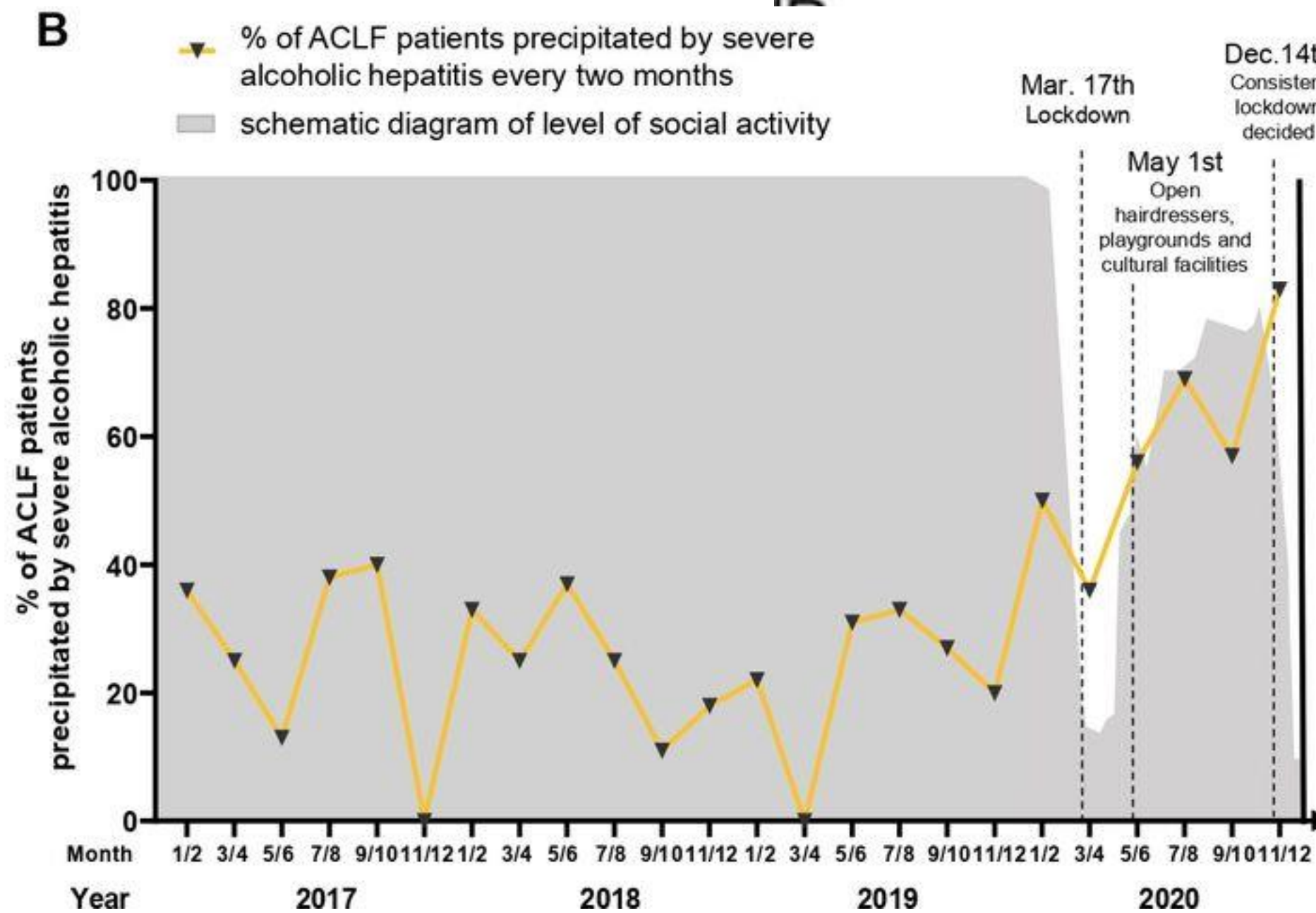
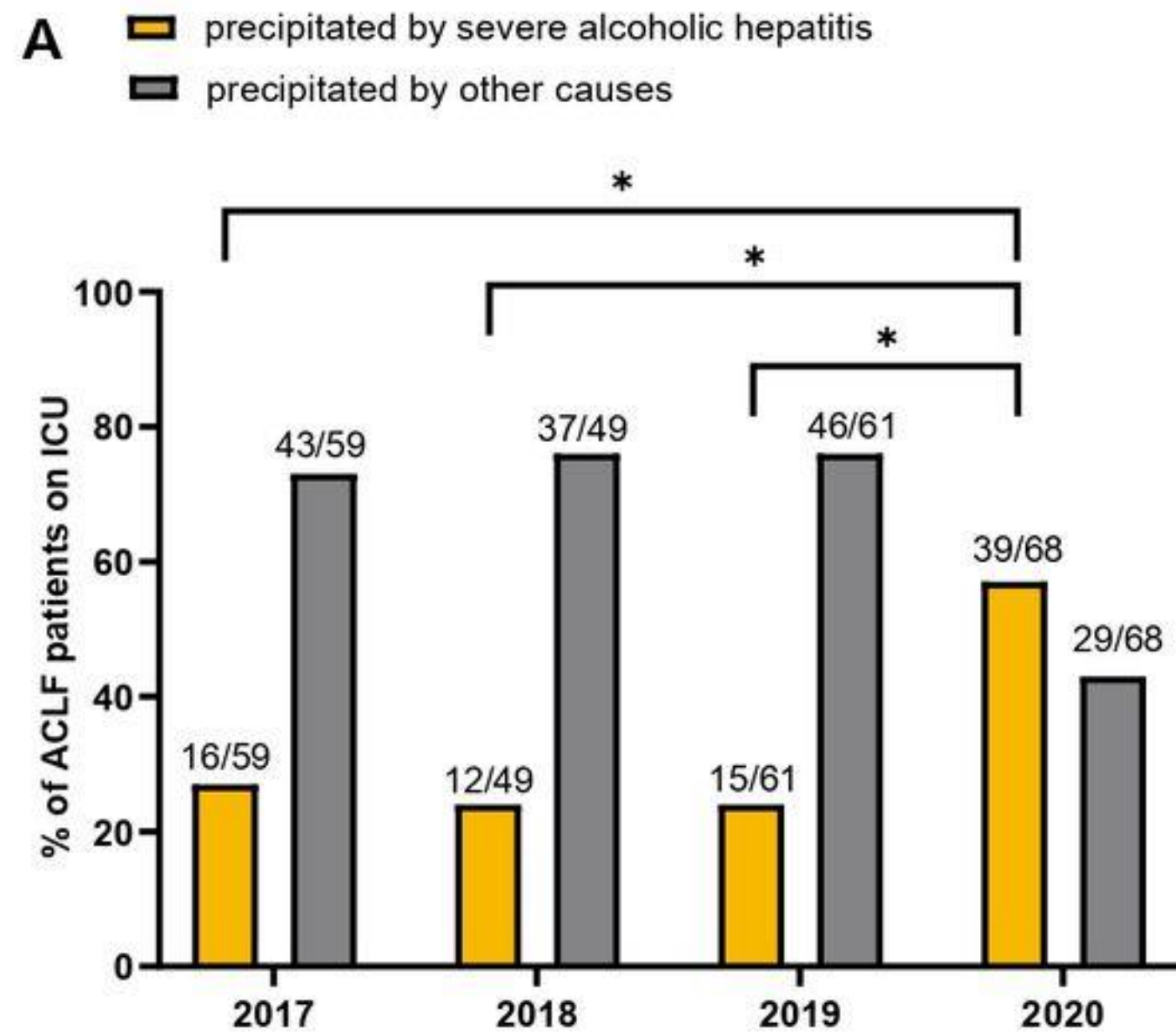
## EQUITABLE BENEFIT APPROACH





# Trends

- Young individuals
- Rising females



# Case for South Africa to look at our policies

- Strong drinking culture
- Poor Mental health support
- Growing capacity
- Living donor program
- Addiction specialists





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MEDICLINIC



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Progressive medicine, exceptional care.