

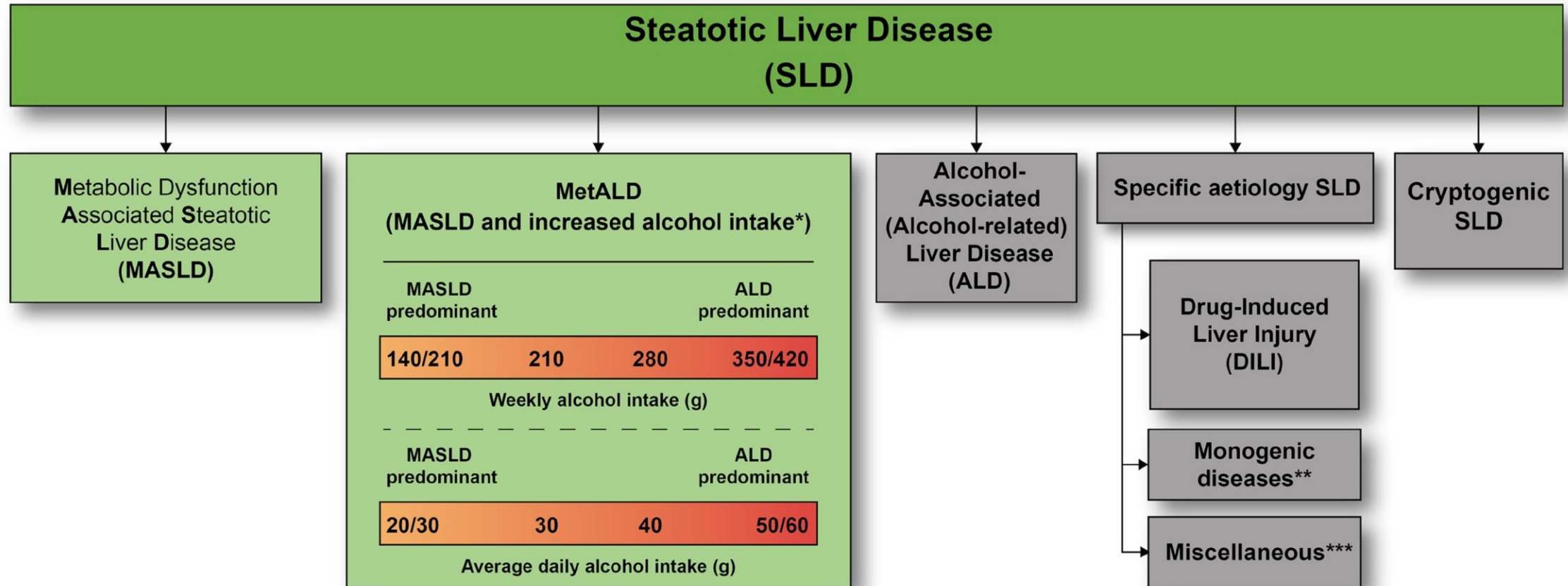
# Debate Met ALD classification represents a major advancement in the field ? I say no

P Mathurin  
Hôpital Claude Huriez  
Lille



# New Nomenclature

## Metabolic dysfunction-associated steatotic liver disease (MASLD)



\*Weekly intake 140-350g female, 210-420g male (average daily 20-50g female, 30-60g male)

\*\*e.g. Lysosomal Acid Lipase Deficiency (LALD), Wilson disease, hypobetalipoproteinemia, inborn errors of metabolism

\*\*\*e.g. Hepatitis C virus (HCV), malnutrition, celiac disease

## New Nomenclature

### Misclassification due to not recognized definition of metabolic syndrome

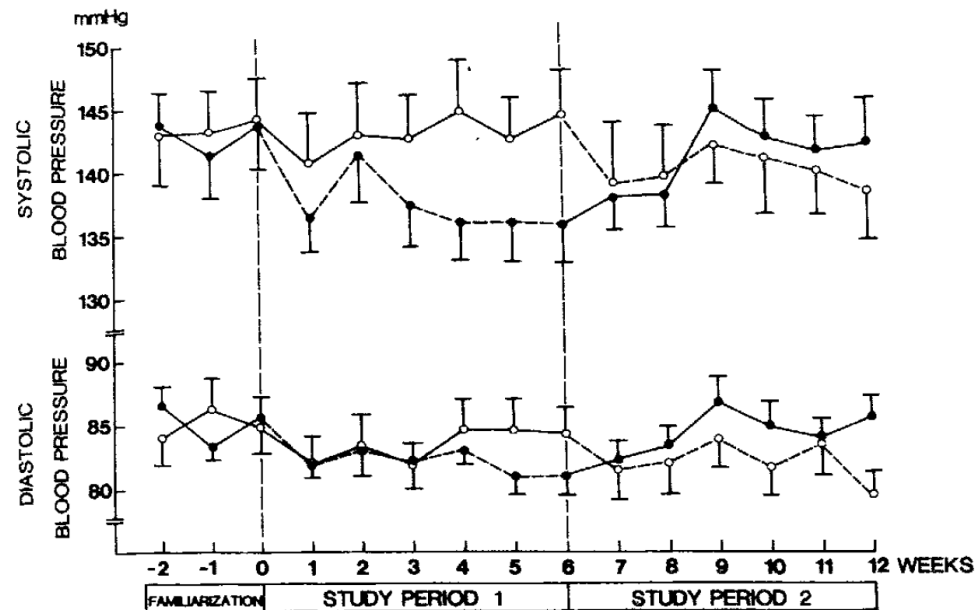
- Frequent Clinical Situation
  - ☒ Male or Female
  - ☒ Drinking 20-50 g/day or 30-60 g/day
  - ☒ Systolic Blood pressure 150 mmHg and Diastolic Blood Pressure 95 mmHg
    - ☒ No other criterion of metabolic syndrome
- ***Diagnosis MetALD according to the international definition***
  - Problem : No metabolic syndrome according to the international definition
  - Problem: Alcohol is the main cause of steatosis and high blood pressure

# Regular alcohol use raises blood pressure

Demonstration of alcohol effect evidence from RCT

TABLE I—INITIAL CHARACTERISTICS OF SUBJECTS

—	Group A (n = 22)	Group B (n = 22)
<i>Age (yr) *</i>	52.7 (2.4)	53.2 (2.4)
<i>Body-mass index (kg/m<sup>2</sup>) *</i>	27.4 (0.8)	27.8 (1.0)
<i>Alcohol consumption (ml/week) *</i>	505 (56)	475 (45)



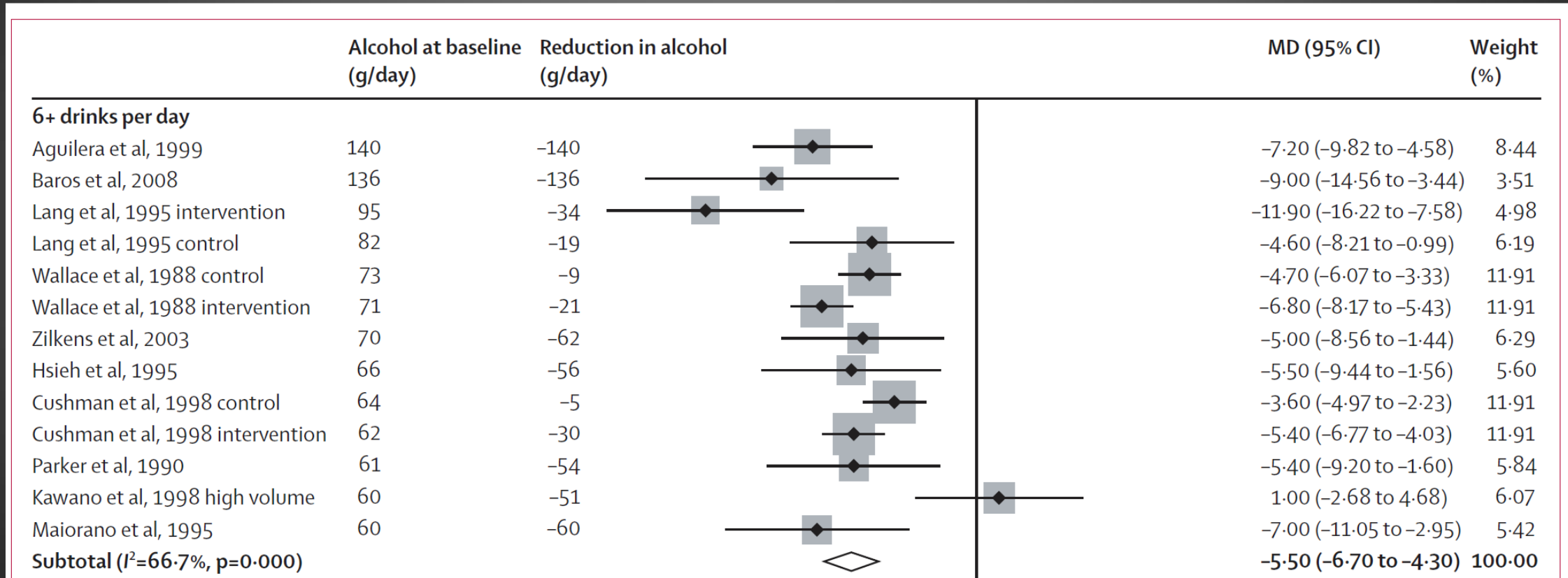
Group mean (and SEM) supine systolic and diastolic blood pressures.

● = group A; ○ = group B; ----- = low alcohol period.

# Effect of a reduction of alcohol consumption on blood pressure on

Evidence from meta-analysis RCT

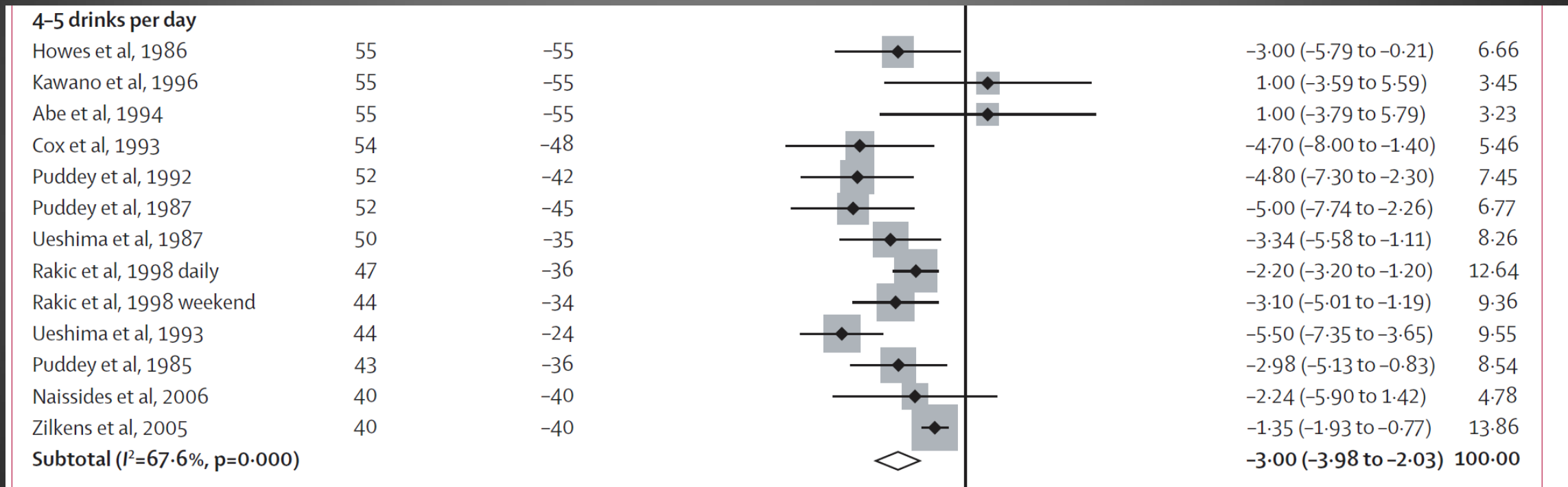
Heavy Drinking



# Effect of a reduction of alcohol consumption on blood pressure on

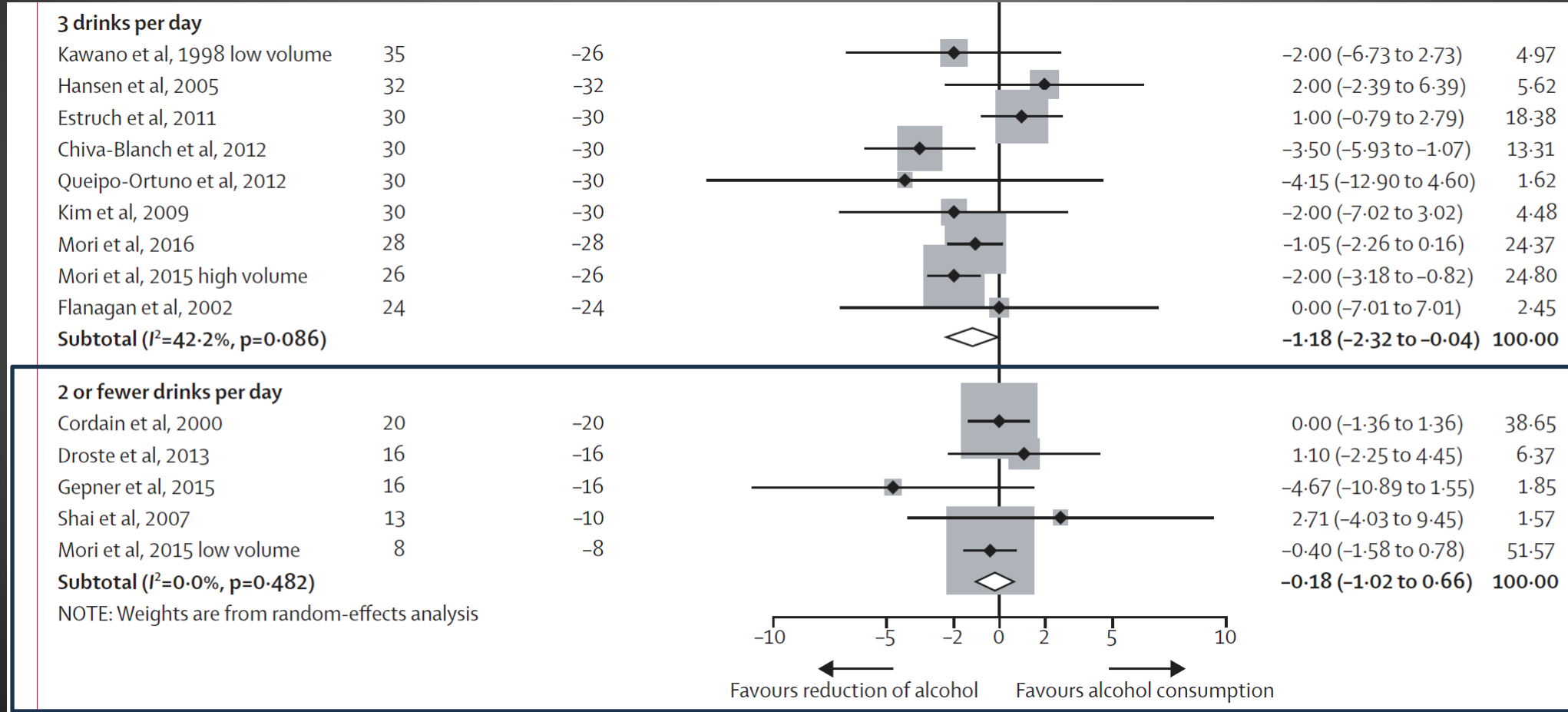
Evidence from meta-analysis RCT

Intermediate drinking



# Effect of a reduction of alcohol consumption on blood pressure on

## Evidence from meta-analysis RCT Moderate and low drlinking





# 9 % Of High Blood Pressure are attributable to alcohol consumption





VIDÉOS   ACTUS   CONGRÈS   WEBINAIRES   CAS CLINIQUES   DOSSIERS   THÉMATIQUES   

[ACCUEIL](#) > [ACTUS](#) > [DÉPÊCHES](#) > [LA CONSOMMATION EXCESSIVE D'ALCOOL IMPLIQUÉE DANS PRÈS DE 9% DES...](#)

## La consommation excessive d'alcool impliquée dans près de 9% des cas d'HTA chez les hommes

Mis à jour le mercredi 26 juin 2024 dans [Facteurs de risque](#) [Vasculaire](#)





La consommation excessive d'alcool, au-delà d'une moyenne de 10 verres par semaine, est responsable de 8,9% des cas d'hypertension artérielle (HTA) chez les hommes mais de seulement 0,6% des cas chez les femmes, soit 624.000 hommes et 31.000 femmes de 18 à 74 ans, selon une étude publiée mardi dans le Bulletin épidémiologique hebdomadaire (BEH).



## New Nomenclature

### Misclassification due to not recognized definition of metabolic syndrome

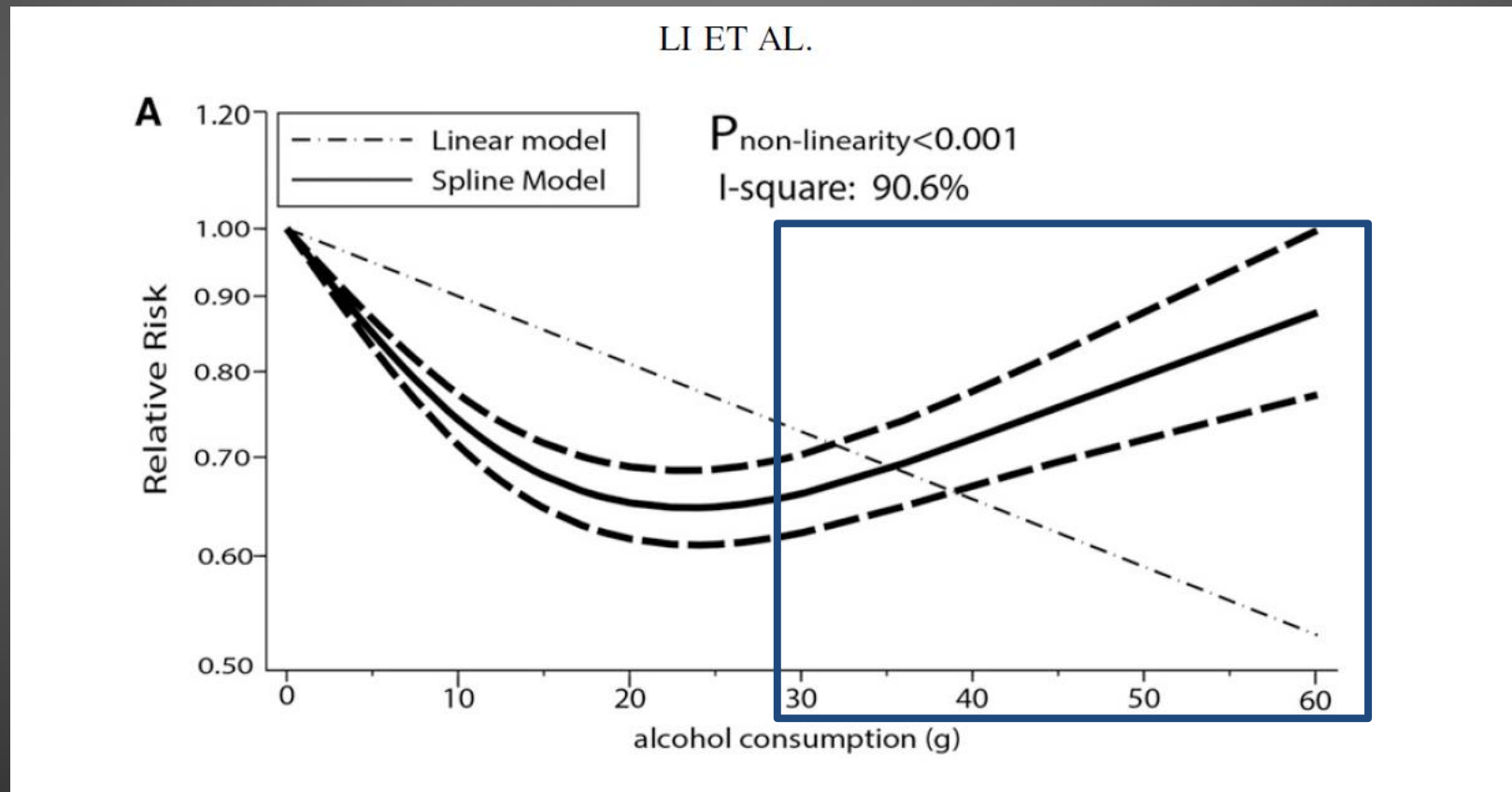
- Frequent Clinical Situation
  - ☒ Male or Female
  - ☒ Drinking 20-50 g/day or 30-60 g/day
  - ☒ Triglycerid higher than 1,5 gram
    - ☒ No other criterion of metabolic syndrome
- ***Diagnosis MetALD according to the international definition***
  - Problem : No metabolic syndrome according to the international definition
  - Problem: Alcohol is the main cause of steatosis and abstinence or reduction of alcohol consumption may normalize Triglycerid

# Moderate alcohol consumption and Type 2 diabetes

## Meta-Analysis

706,716 individuals: 275,711 men and 431,005 women

Nonlinear relationship between dose of alcohol and risk of diabetes



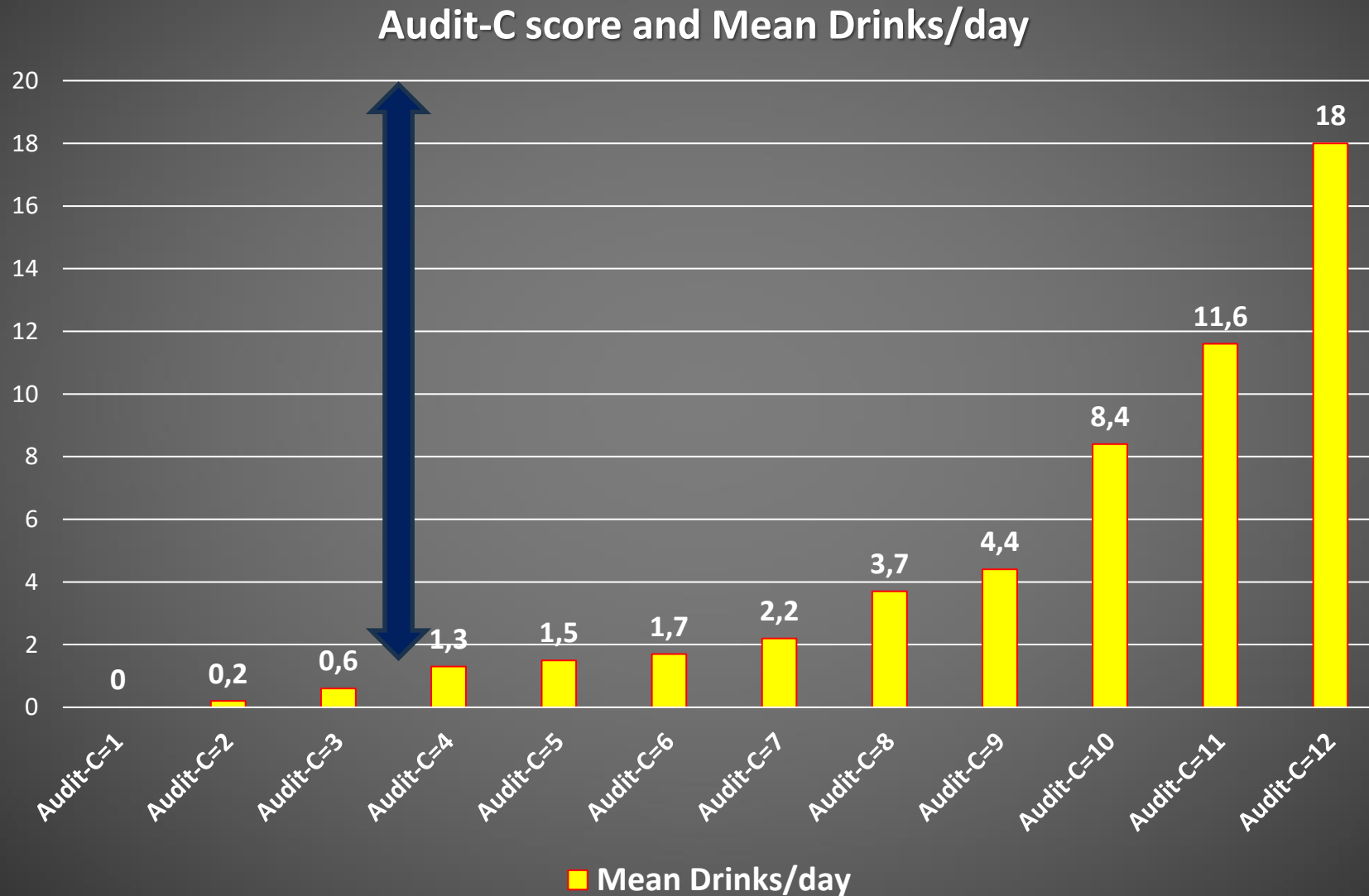
Stampfer MJ, Am J Epidemiol 1988

**MetALD**

**Alcohol addiction is forgotten**

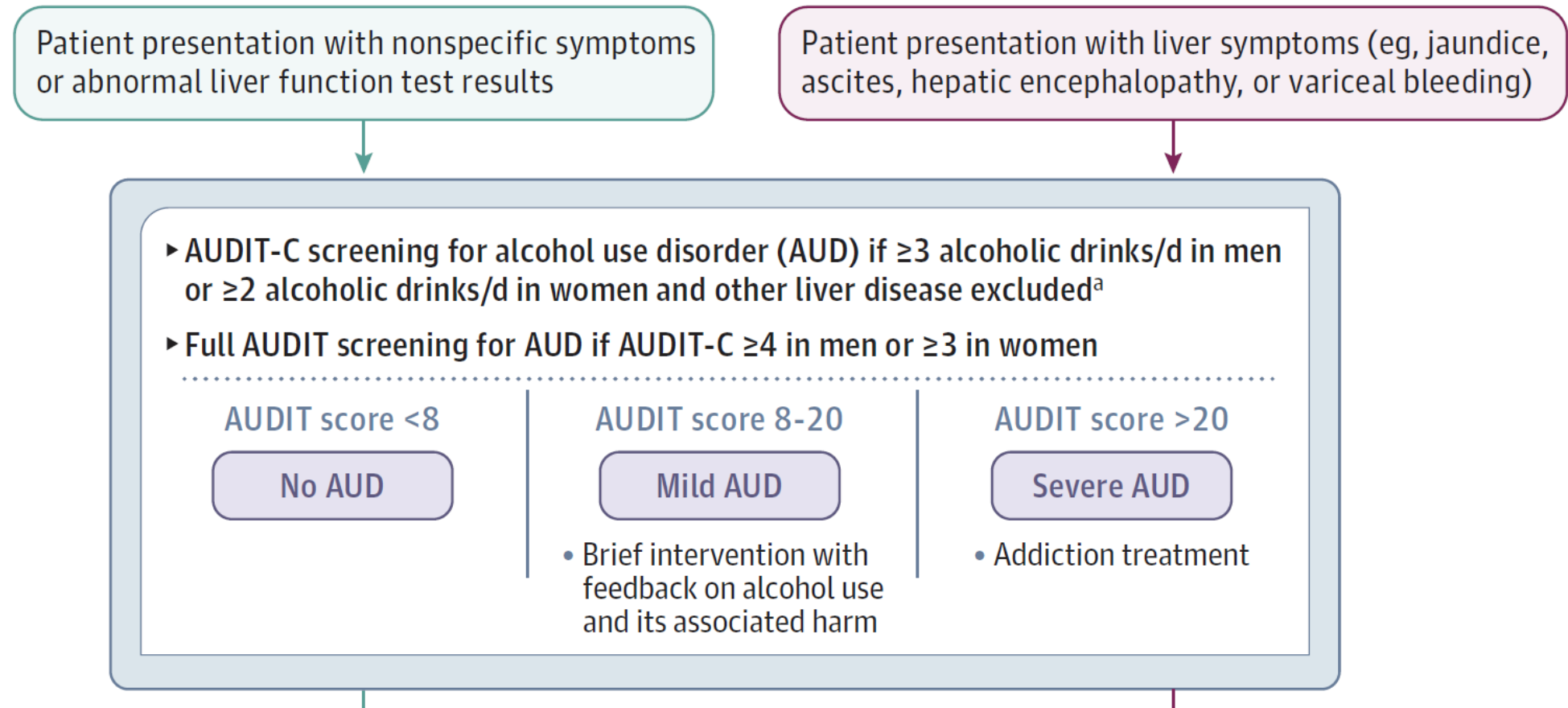
# MET ALD : alcohol addiction

*Lessons from the American Survey of 26,546 U.S. adults*



# Screening of Alcohol Use Disorder (AUD)

Figure 2. Diagnostic and Therapeutic Approach to Alcohol-Associated Liver Disease (ALD)



# MET ALD : alcohol addiction

## *Lessons from the American Survey of 26,546 U.S. adults*

Mean Daily Drinking, AUD Severity, and Alcohol Dependence Across AUDIT-C Scores Among Past-Year Drinkers ( $N = 26,546$ )

	AUDIT-C score					
	4	5	6	7	8	9
Mean drinks/d <sup>a</sup> (95% CI)	1.3 (1.2,1.3)	1.5 (1.4,1.6)	1.7 (1.6,1.7)	2.2 (2.0,2.3)	3.7 (3.5,3.9)	4.4 (4.0,4.8)
AUD severity <sup>c</sup> (95% CI)	0.5 (0.5,0.6)	1.0 (0.9,1.1)	1.4 (1.3,1.5)	1.5 (1.3,1.6)	2.2 (2.1,2.4)	2.8 (2.4,3.1)
% Alcohol dependent <sup>d</sup> (95% CI)	4 (3,5)	9 (7,10)	14 (12,17)	16 (13,19)	26 (23,29)	35 (29,41)

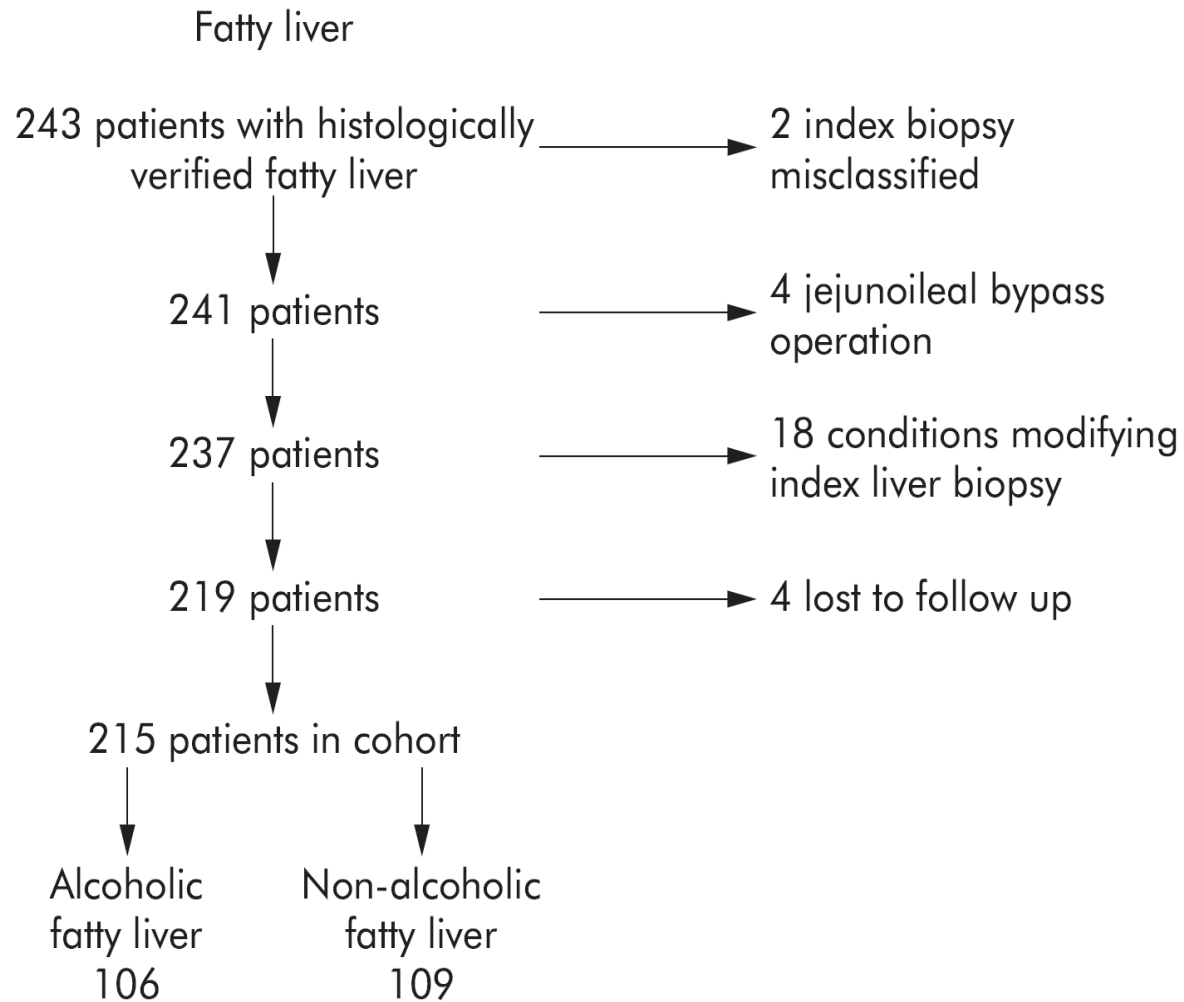


**This New Nomenclature is coming after the  
attempted terminology of Dual etiology Fatty  
Liver Disease**

**Both terminologies are missing the important  
differences in disease progression and natural  
history between NAFLD and ALD**

# NAFLD Cannot be Mixed with ALD

## New Terminology should be related to natural history

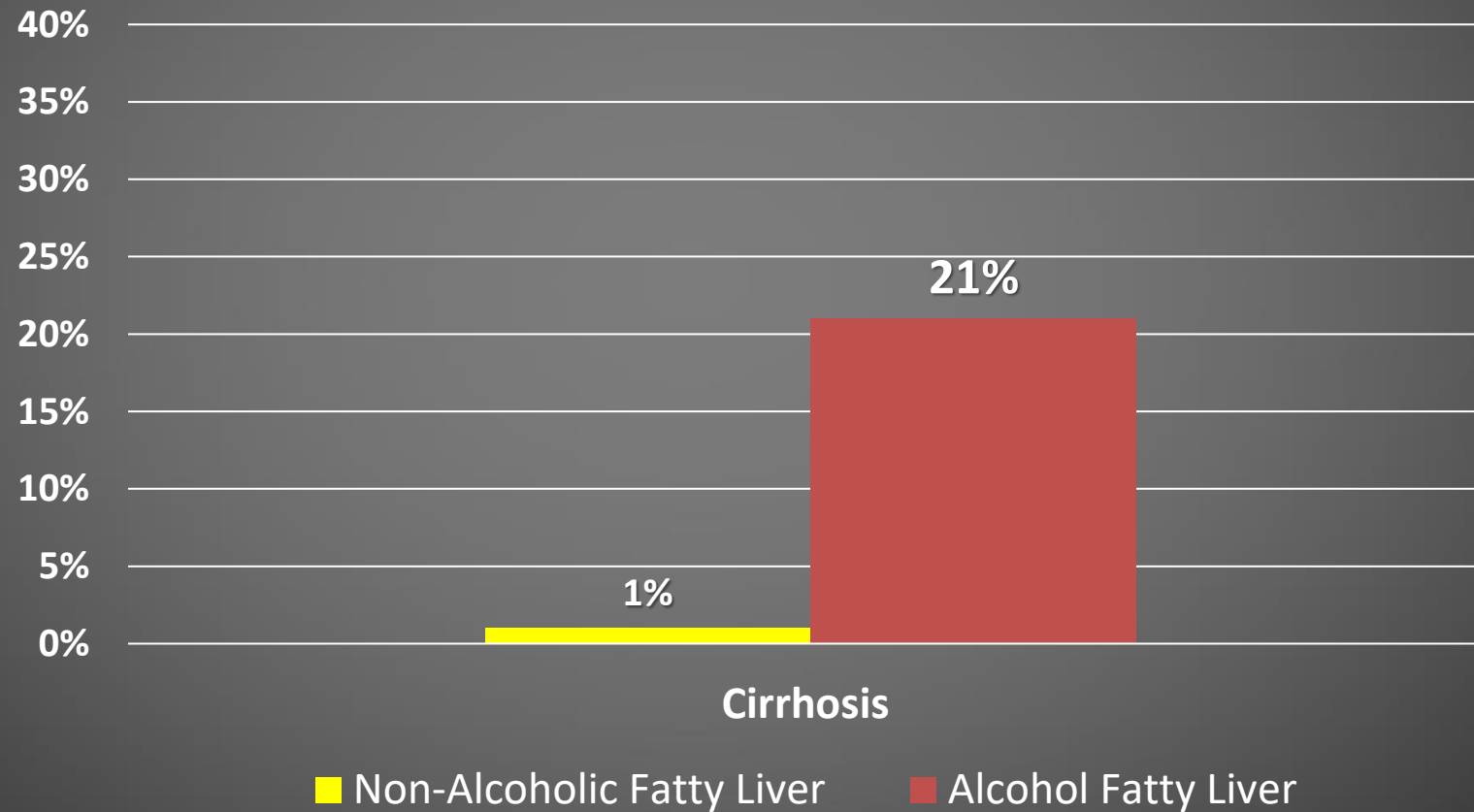


16,7 Years of Follow-up

S Dam-Larsen, Gut 2004

# NAFLD Cannot be Mxed with ALD

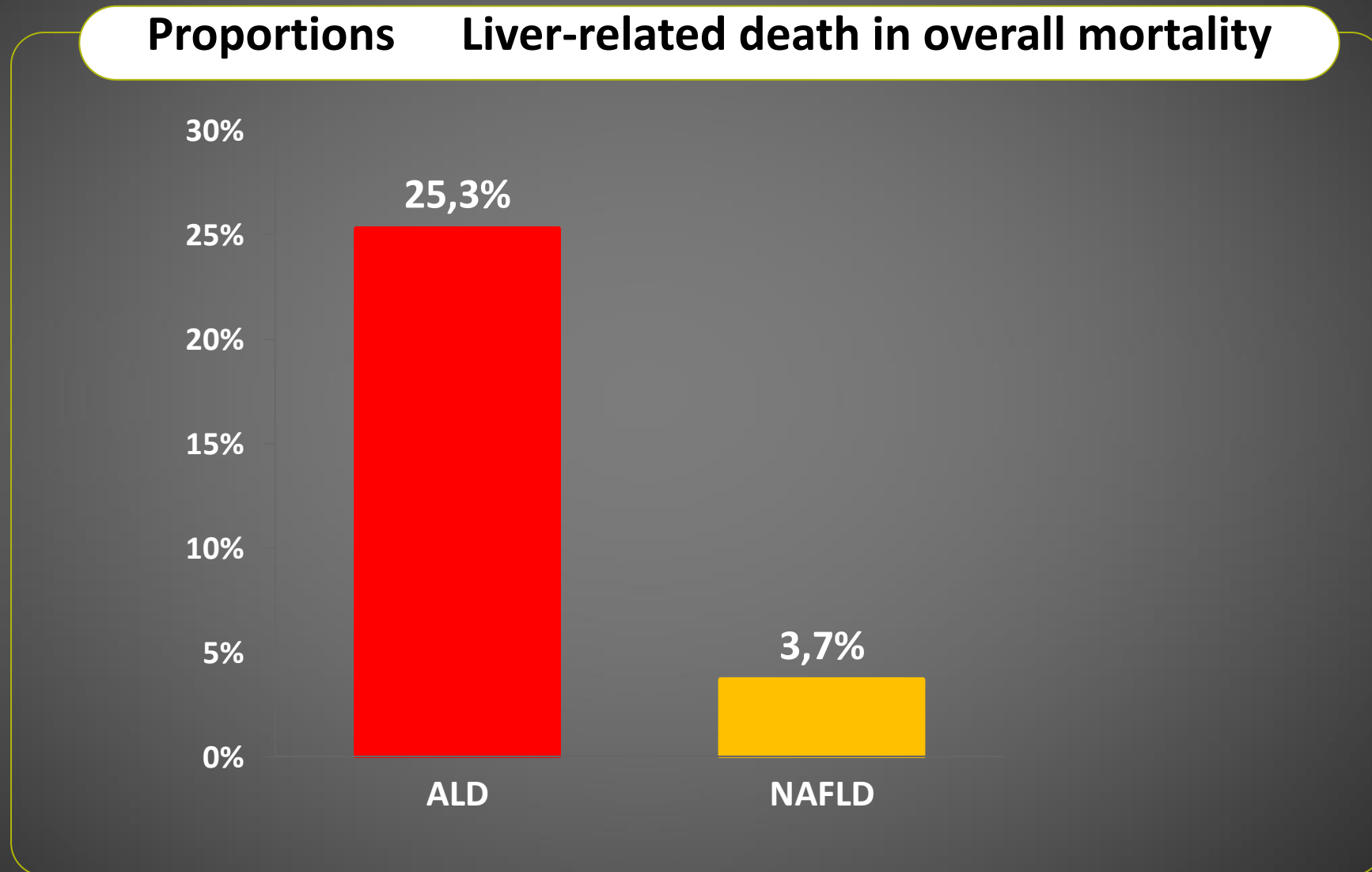
## New Terminology should be related to natural history



S Dam-Larsen, Gut 2004

# ALD and NAFLD

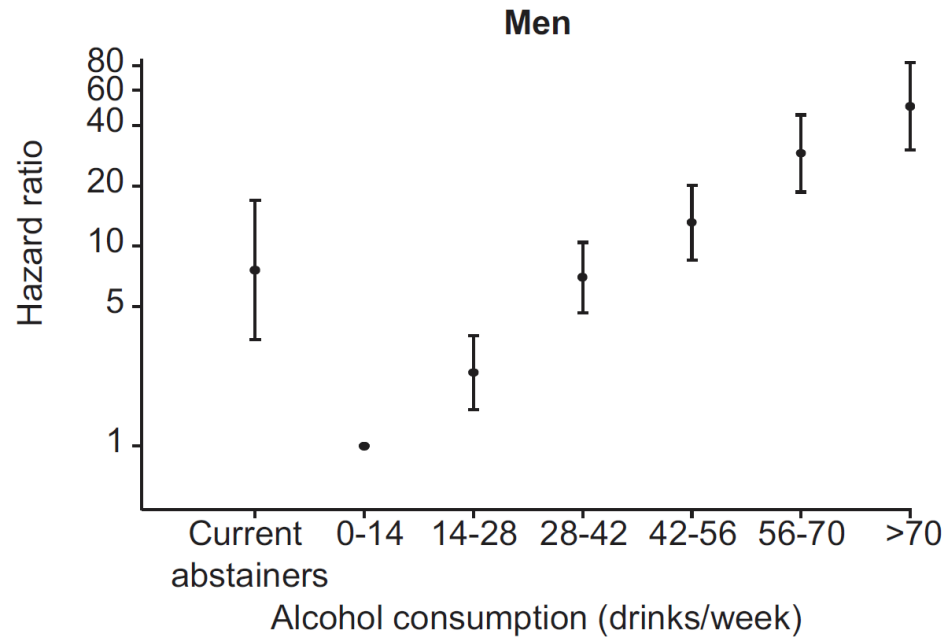
Dual etiology of fatty liver disease a concept that challenges statistic



S Dam-Larsen, Gut 2004

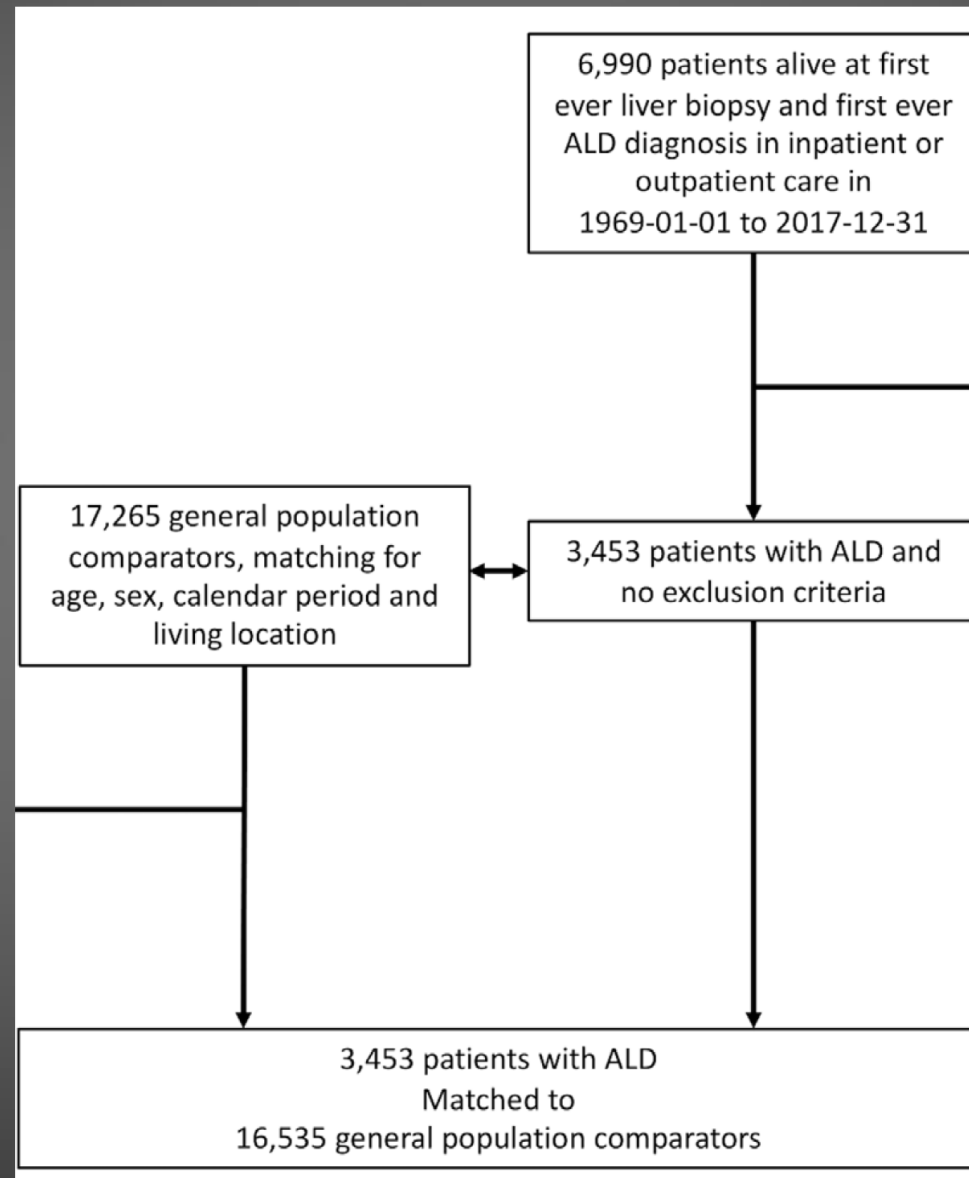
# ALD and NAFLD

## The issues of Current Abstainers and Alcohol Intake



# Liver Mortality and ALD

## *Biopsy confirmed ALD*

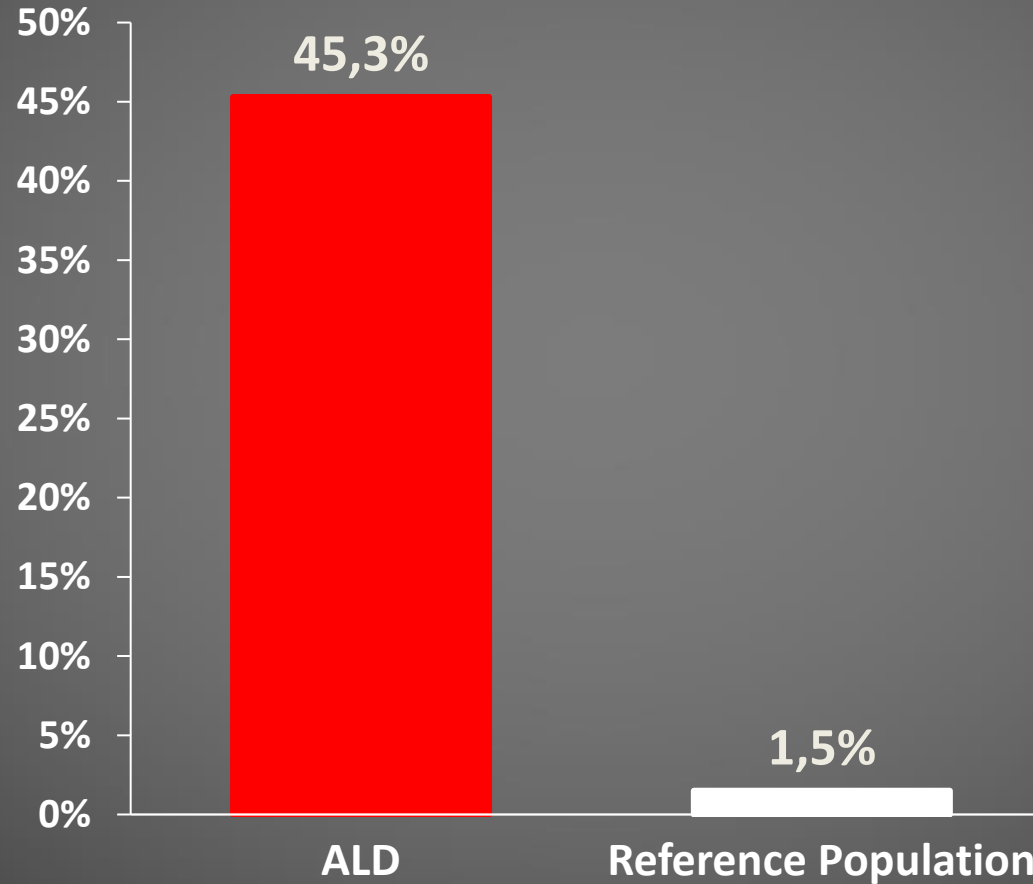




# Competitive Risk of Mortality and ALD

## *Biopsy confirmed ALD*

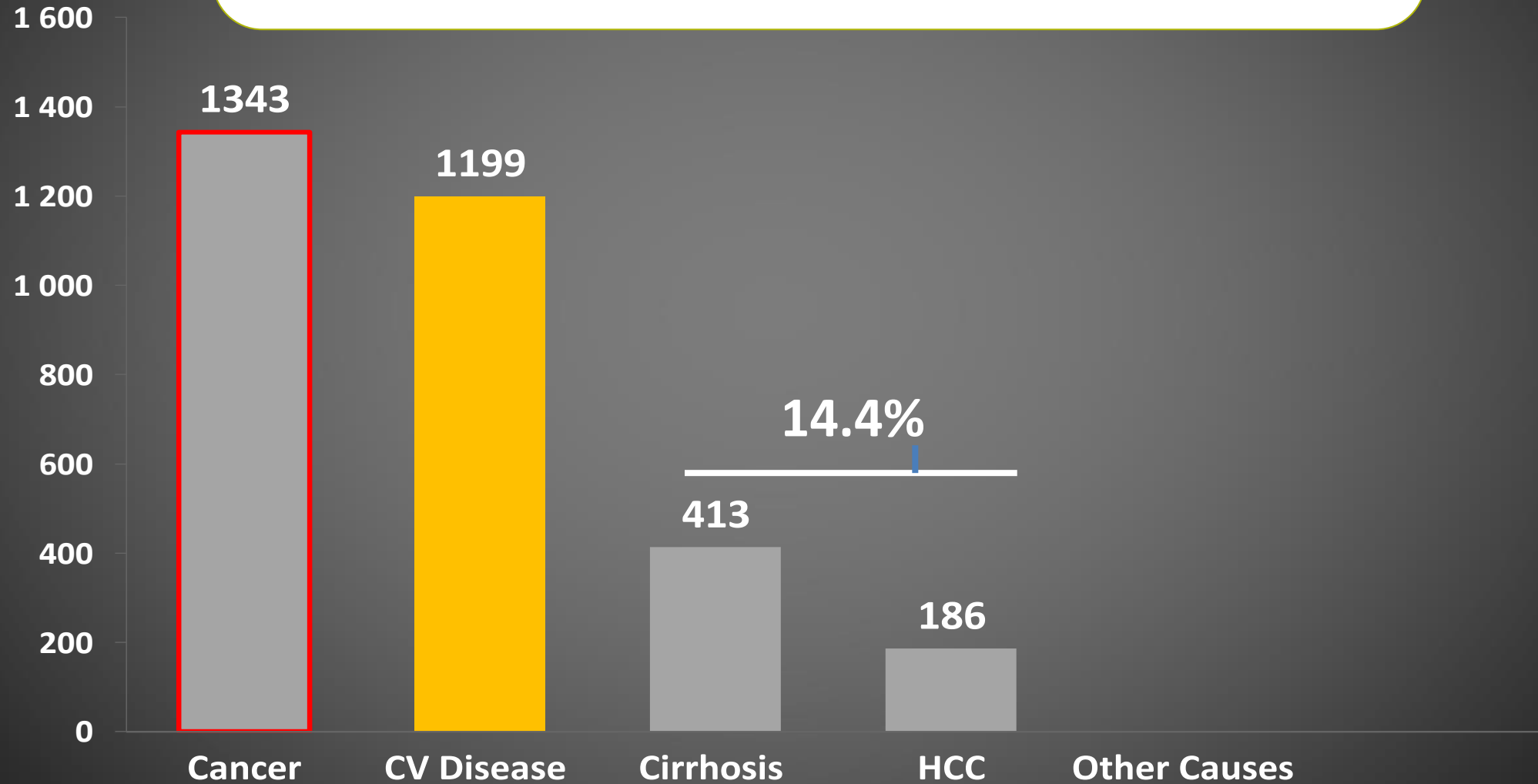
Proportions of Liver-related death in overall mortality



# Competitive Risk of Mortality and NAFLD

## *Biopsy confirmed NAFLD*

### Distribution of Deaths on Overall NAFLD



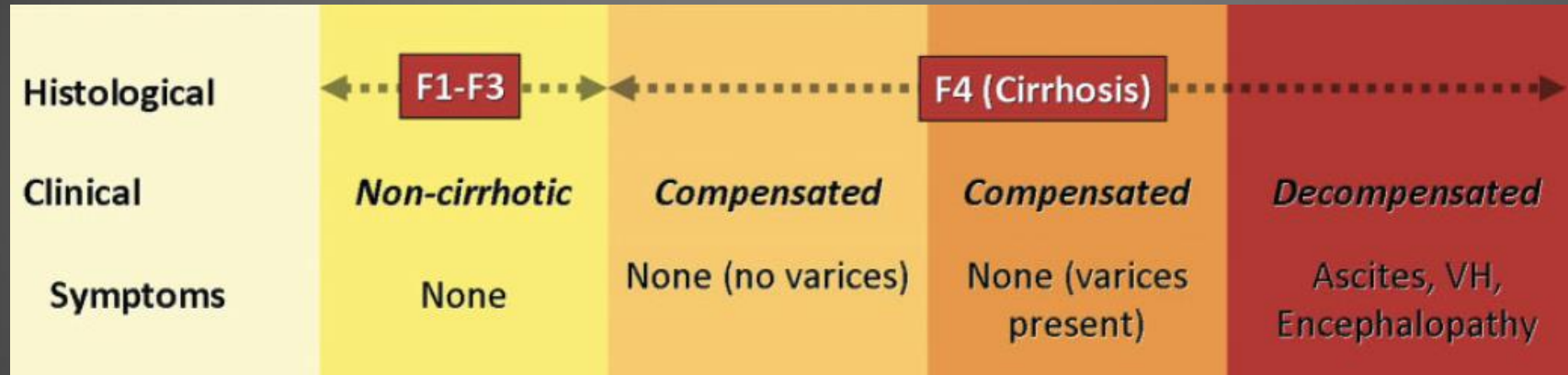
SG Simon, Gut 2021

**Isn't it time to get out of the dogma of etiology in terminology**

**Isn't it time to move to attributable risk factors**

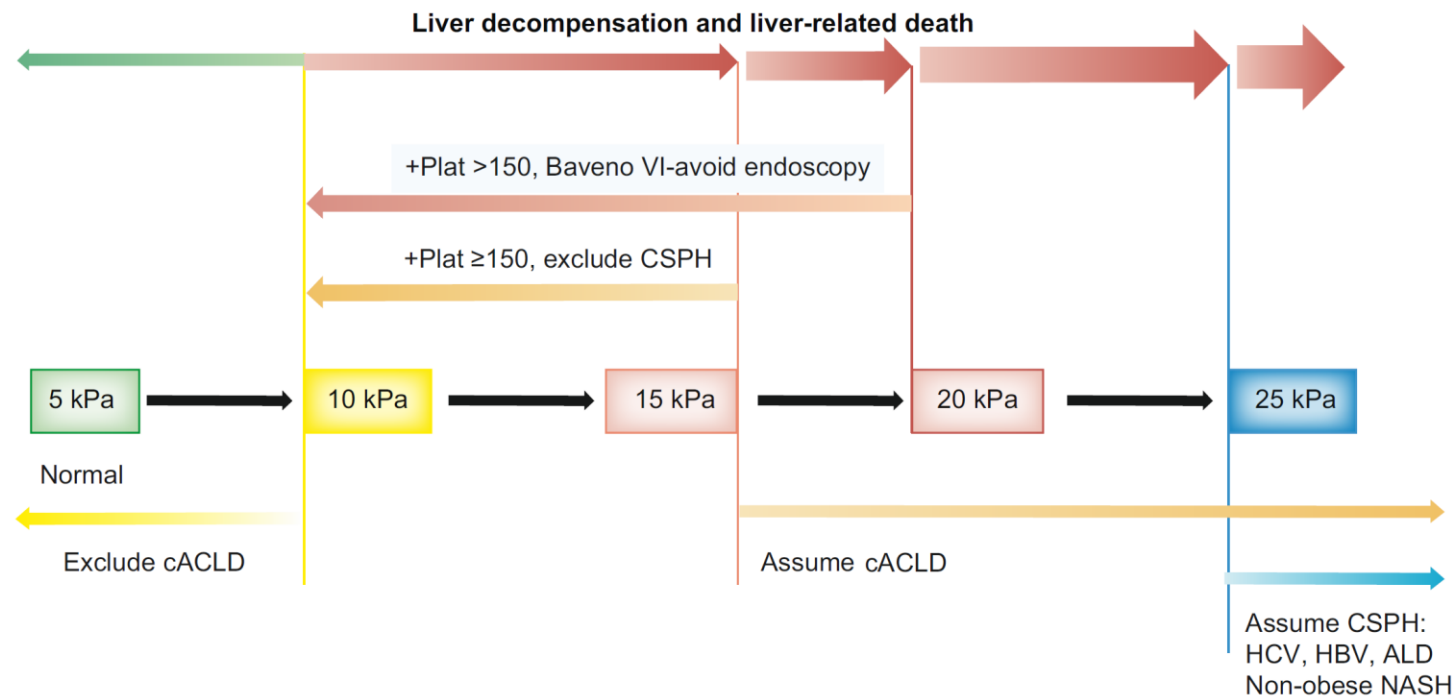
# Other Approaches of Nomenclature non-based on etiology but based on outcome or risk of liver-related event

Garcia-Tsa G, Hepatology 2010



# Other Approaches of Nomenclature non-based on etiology but based on outcome or risk of liver-related event

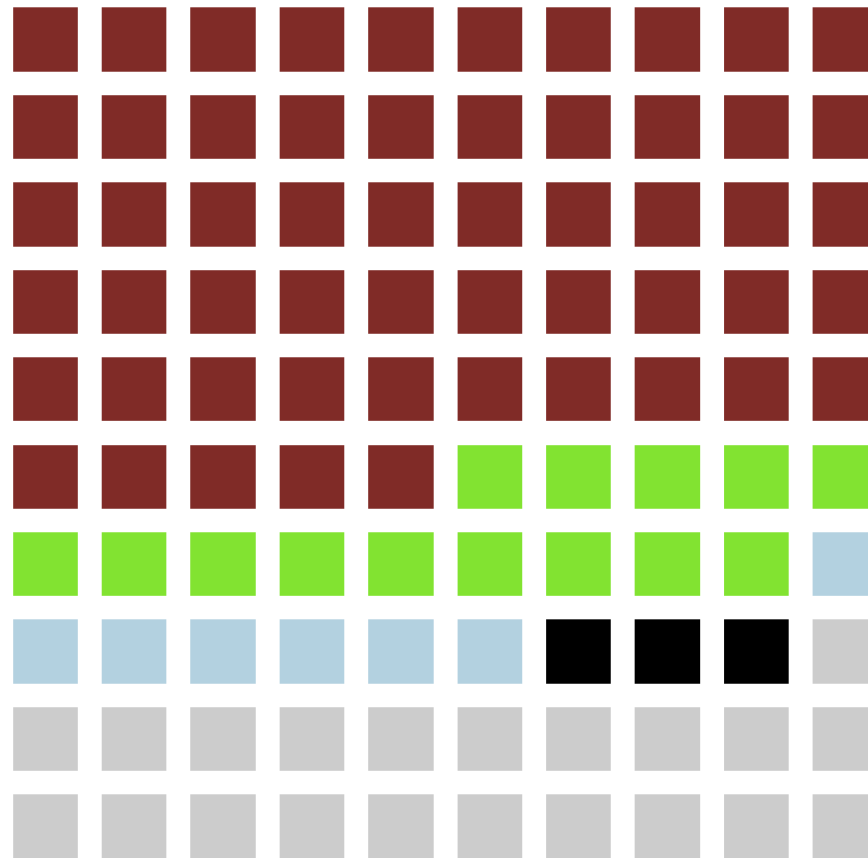
## Compensated Cirrhosis of Compensated Chronic Liver Disease



**Fig. 1. Algorithm for the non-invasive determination of cACLD and CSPH.** ALD, alcohol-related liver disease; cACLD, compensated advanced chronic liver disease; CSPH, clinically significant portal hypertension; NASH, non-alcoholic steatohepatitis.

# The concept of Attributable Risk Factor: Alcohol main factor of liver event

**Attributable risks of liver disease progression to a liver-related complications in a retrospective, in-hospital, cohort, of more than 50,000 T2D patients, 2010-2020**



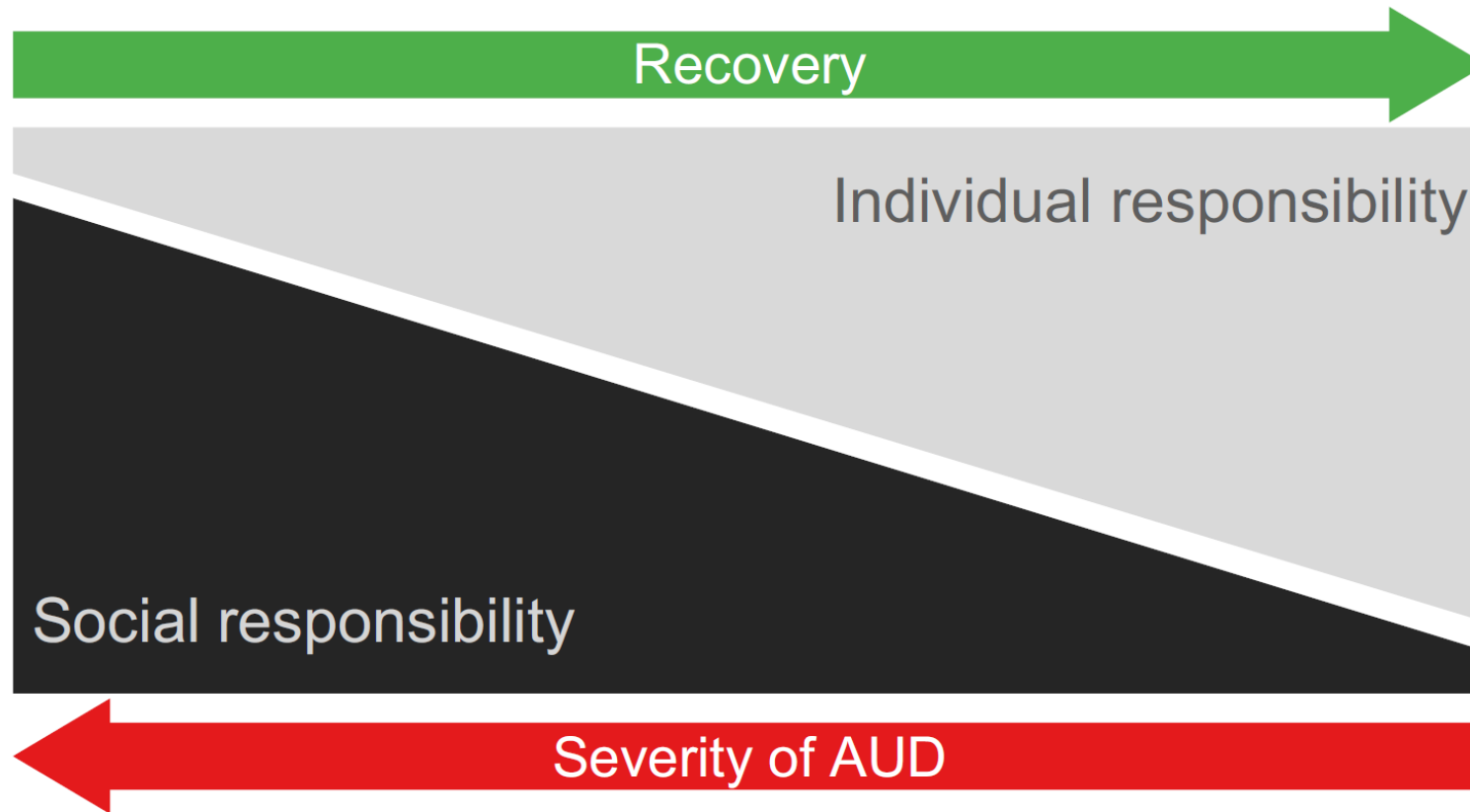
The attributable fraction reflects the number of liver events that would have been prevented in the absence of a risk factor. Attributable fractions were computed with Cox models stratified on sex with age as the time scale, and adjusted for alcohol use disorders, non-metabolic liver-related risk factors, obesity, and non-liver-related risk factors.

- Alcohol use disorders
- Liver-related risk factors
- Obesity
- Non-liver-related risk factors
- No risk factor identified



**IN SUMMARY**

# Responsibility and the continuum model of AUD



**Fig. 1. Dynamic model of responsibility in AUD.** Greater severity of AUD implies lower individual responsibility and higher responsibility of the social environment. Recovery as a process increases individual responsibility. Source: 77. AUD, alcohol use disorder.

# Define a threshold for heavy use: a feasible approach?

- Applying an exact threshold to a continuum is arbitrary and consequently define thresholds and cut-points for heavy use is a difficult issue
  - Is somebody who drinks 60 g of pure alcohol on average a day a non-heavy user, while somebody who drinks 70 g a heavy user?
- Thresholds are frequently used in many systems for treatment decision-making
- Patterns of drinking particularly the frequency of heavy drinking occasions are important,
  - Drinking 10 drinks 3 days a week is more harmful than drinking 5 drinks 6 days a week

# Define a threshold for heavy use: a feasible approach?

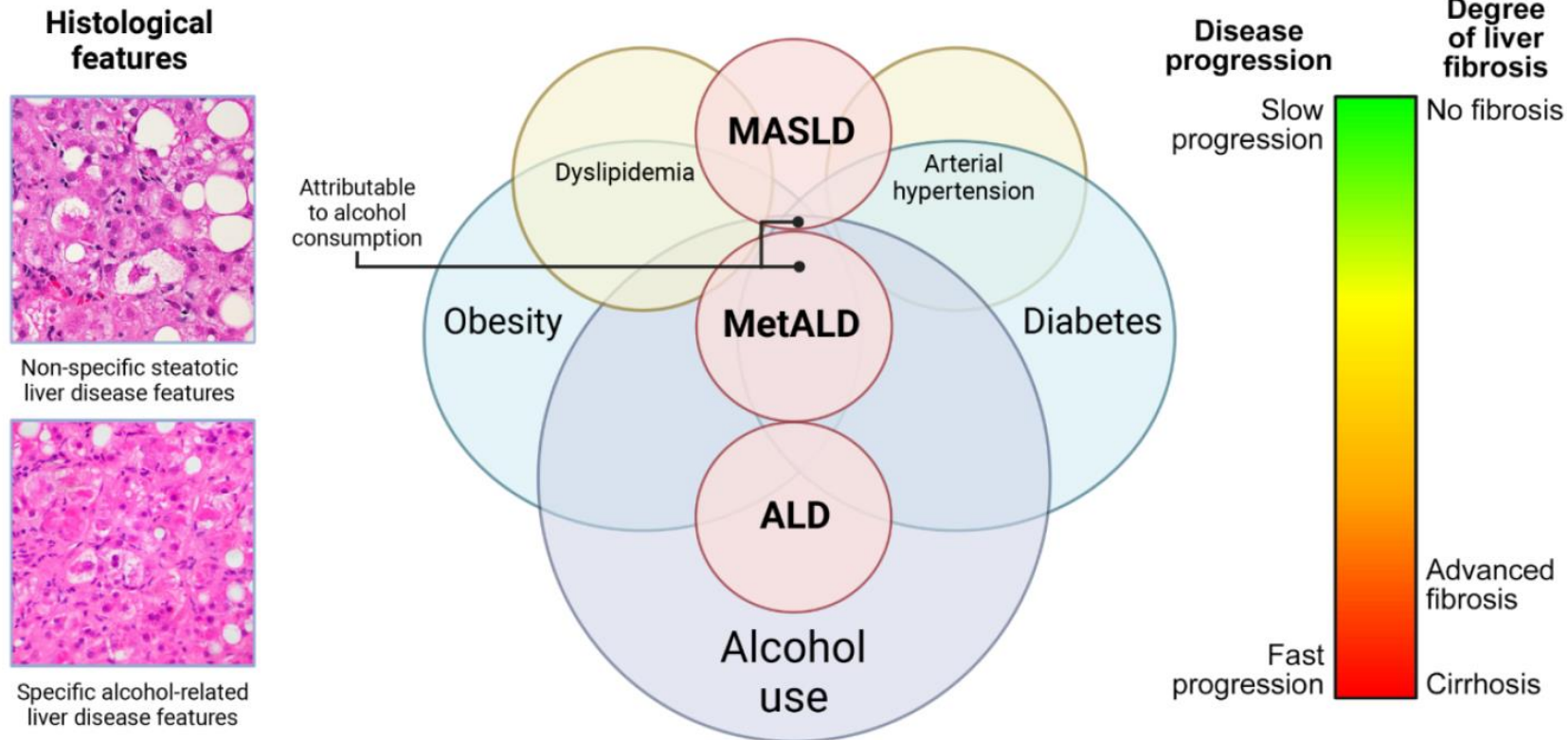
## Guidelines of the European Medicines Agency

- **Guidelines of European Medicines Agency for threshold for brief interventions**
  - >40 g pure alcohol on average per day for men and 20 g for women
  - or alternatively at two 60 g (men)/48 g (women) drinking occasions per week

# Alcohol Consumption and Metabolic Dysfunction: Position statement by an expert panel on alcohol-associated liver disease

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## The alcohol-attributable risk of steatotic liver disease



# Alcohol Consumption and Metabolic Dysfunction: Position statement by an expert panel on alcohol-associated liver disease

