

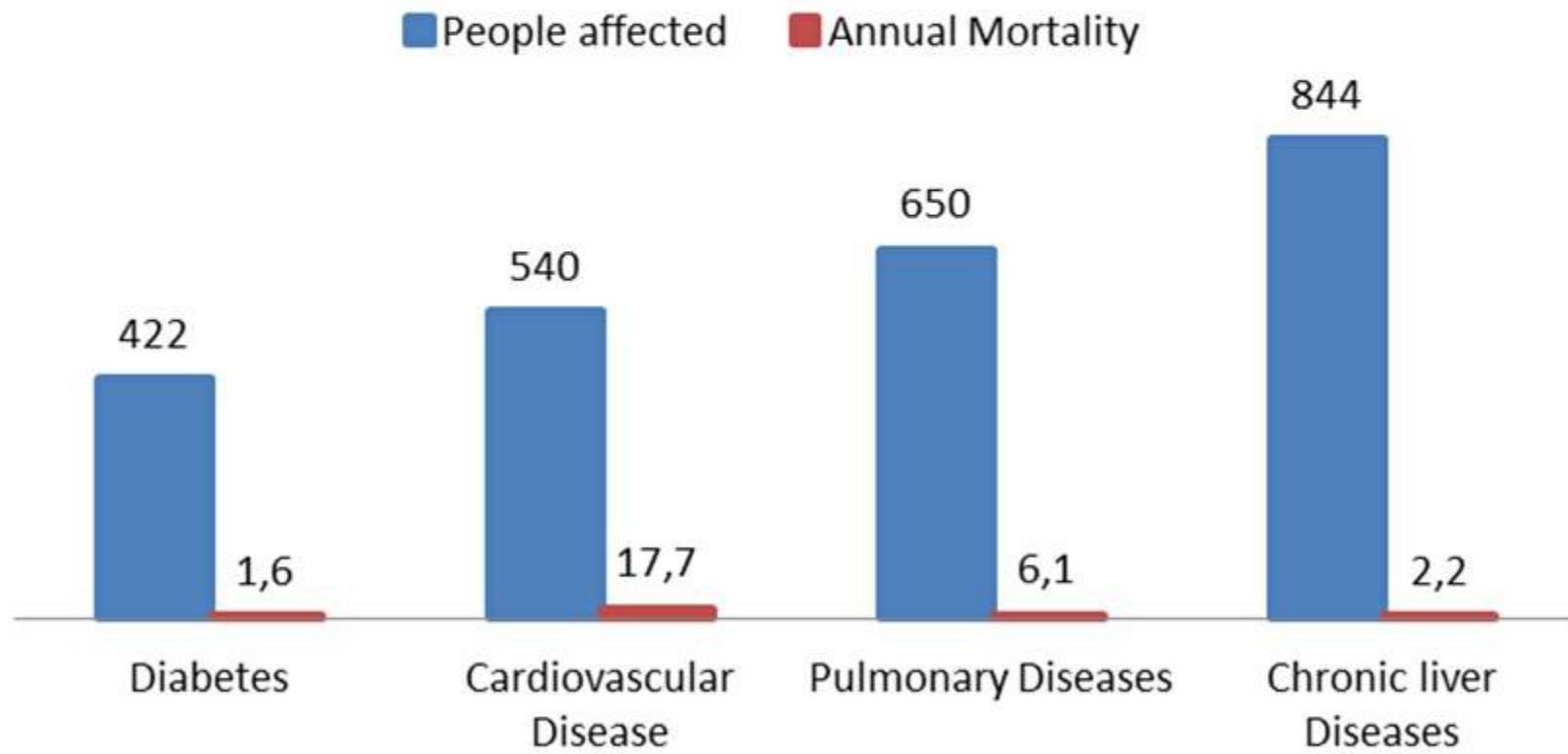
Chronic Liver Diseases: A Huge Public Health Problem Needing Large Scale Screening

CLDs

A Very High Prevalence

Global main chronic diseases and CLDs

Main Chronic Diseases Worldwide



The keys figures are in million of people or deaths

Marcellin P. and Kutala B.
Liver Int. 2018 Feb;38 Suppl 1:2-6.

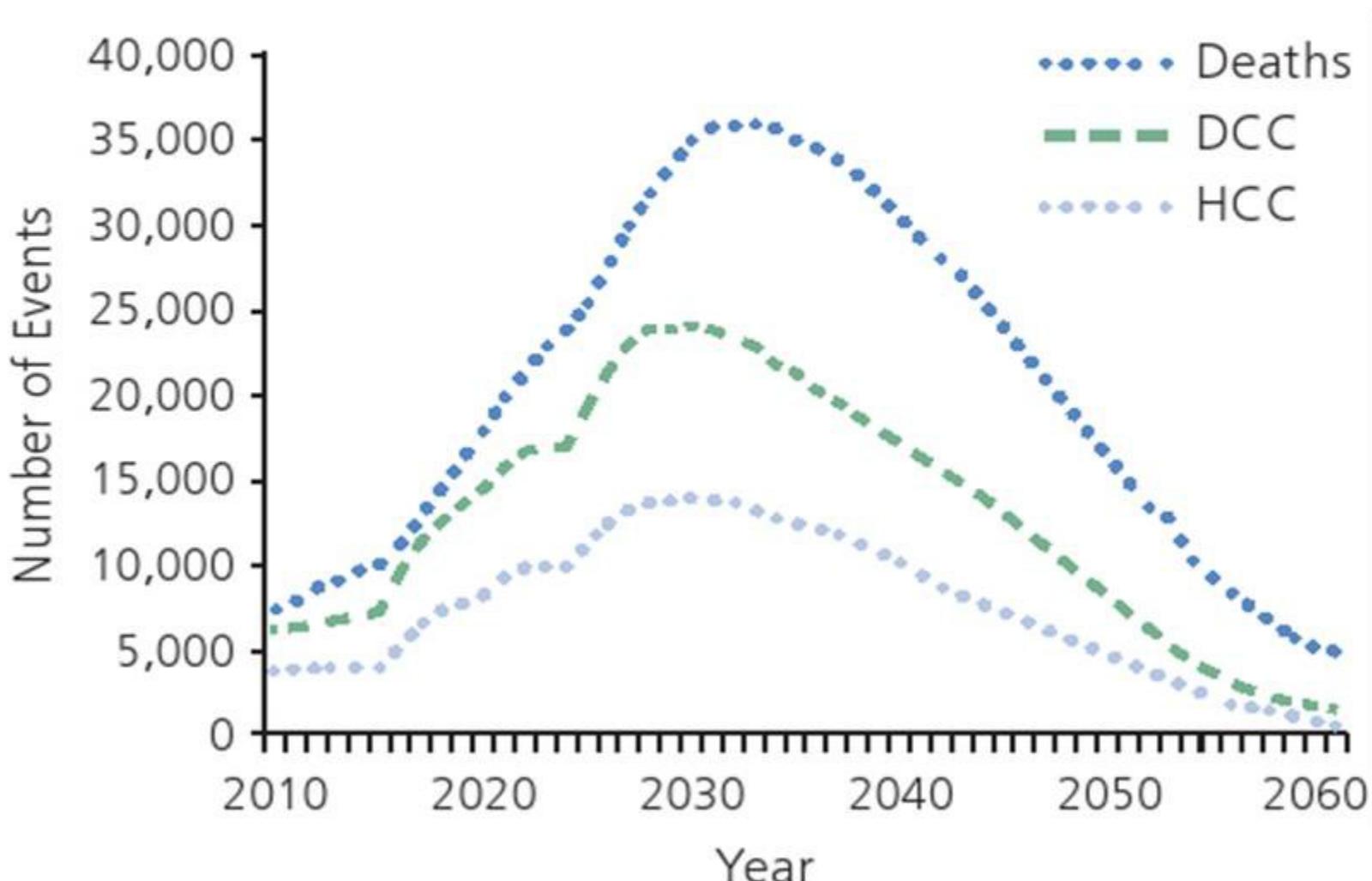
Global Burden of CLDs

- Prevalence of CLDs : **18,5%**
- Prevalence of cirrhosis: **4.5% to 9.5%**
- Annual incidence of cirrhosis: **633,000**
- Liver transplantations per year: **26,000**
- Annual incidence of HCC: **5.6%**
- HCC one of the most common cancers: **6th**

CLDs

A High Morbidity and Mortality

Forecasting the morbidity and mortality associated with HCV in US



CLDs

A High and Increasing Public Health Burden

The economic burden of CLDs

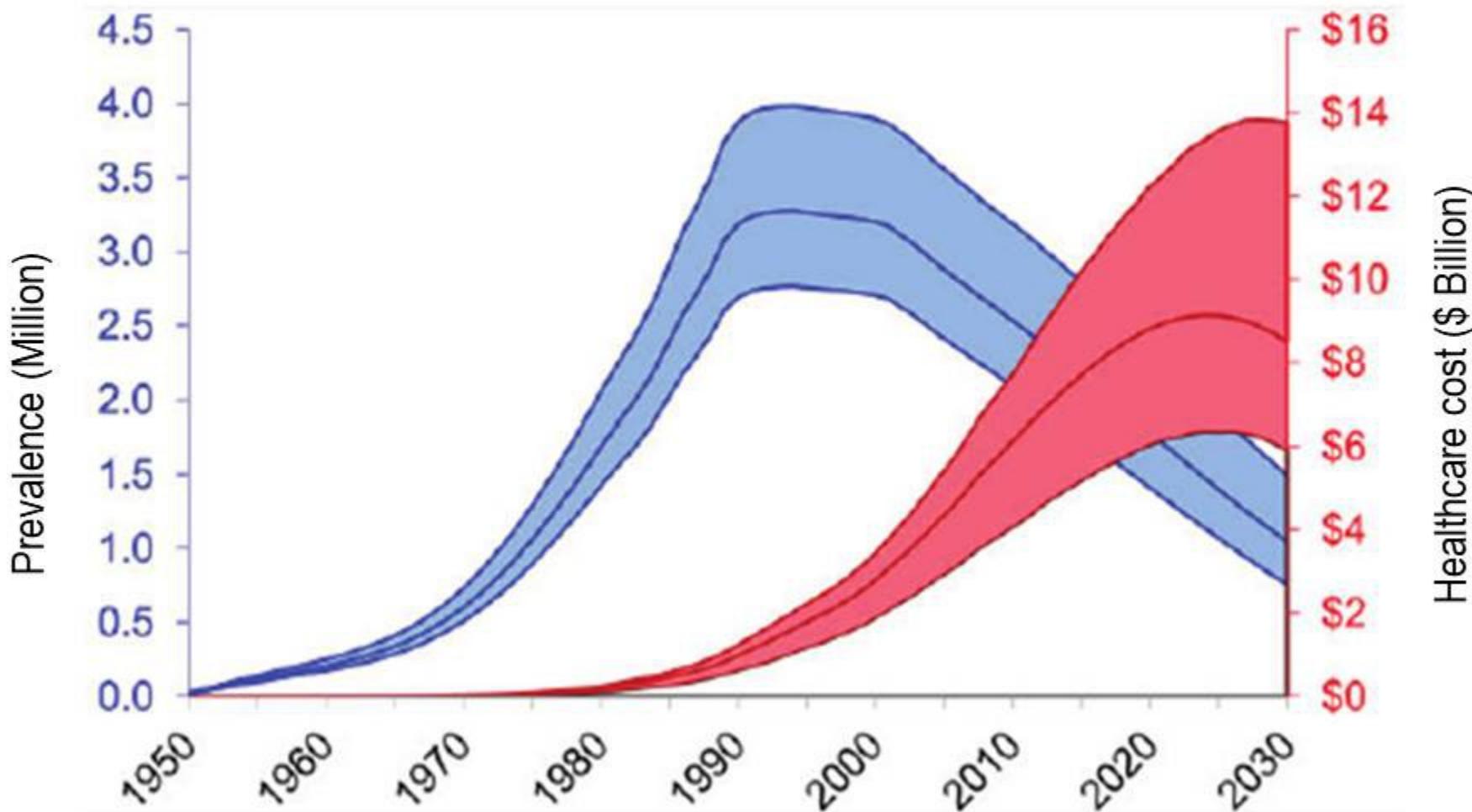
There are no data for the global cost.

Data from US:

- HBV: \$9 billion
- HCV: \$10,6 billion (before DAAs)
- ALD: \$24,5 billion
- NAFLD: \$103 billion
- Annual cost/patient with end-stage HCV CLD: \$60,000
- 3-year cost/patient with LT: \$539,955

Total prevalence and healthcare cost in the US

95%Cis

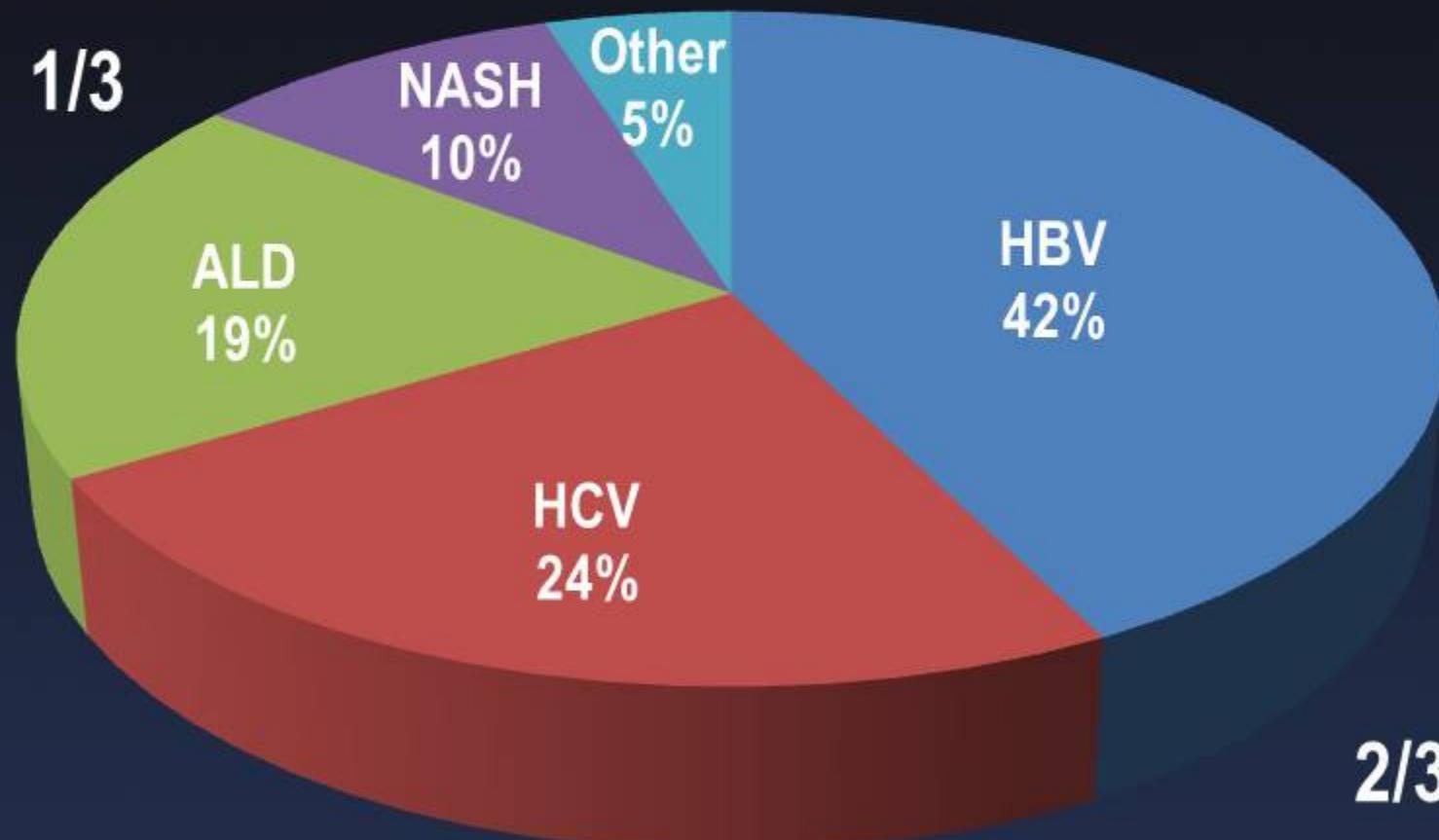


CLDs

A Changing Pattern

Chronic liver diseases: today

Non Viral CLDs



Chronic liver diseases: the future (10 years)

Non Viral CLDs

1/2

NASH
25%

ALD
25%

HBV
35%

HCV
15%

1/2

Viral CLDs

Decrease of viral CLDs

Increase of non viral CLDs

The Future of Hepatology

- HCV: good job!
- HBV: back to the major global CLD!
- NASH: « Emerging » CLD. What is the real issue?
- ALD: still a neglected major problem...

CLDs

How to Improve the Public Health Problem

Urgent Actions

- Awareness of:
 - Public Health authorities
- Awareness & education of:
 - Physicians
 - Public
- Research on
 - ALD and NASH: need drugs
 - HBV: prevention and drugs
 - Fibrogenesis and INFLAMMATION

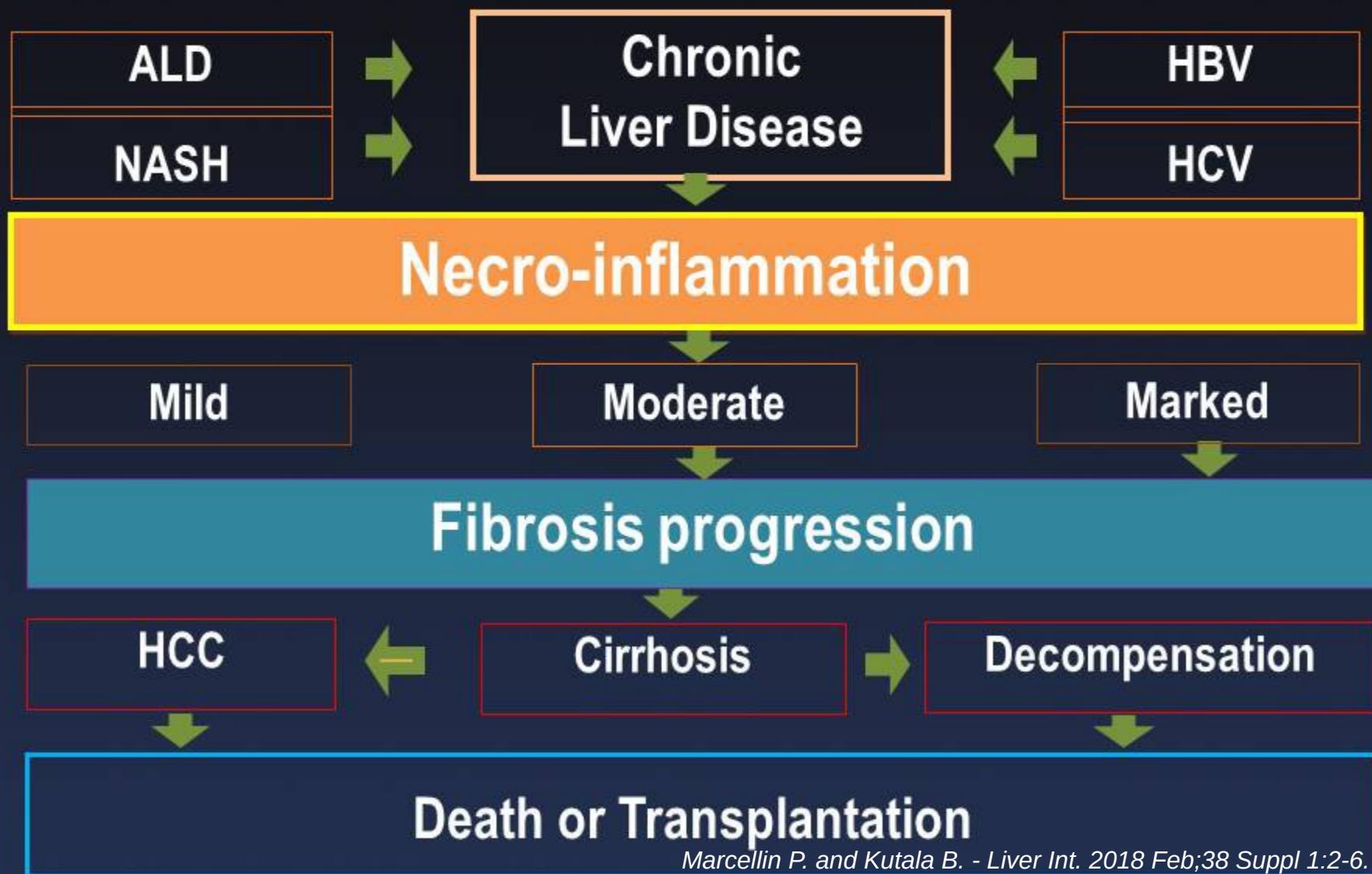
CLDs

Screening as the First Crucial Step

CLDs meet all criteria for universal screening

- Silent diseases
- High prevalence and incidence
- High morbidity and mortality
- High cost of ESLDs and HCC
- CLDs can be prevented, controlled, improved or cured
- Early diagnosis can prevent cirrhosis and HCC
- Screening cost/effective (HCV)

Liver inflammation: The key mechanism for the progression of CLD



ALT

Reflect of Liver Necro-Inflammation
as The best Screening Test

Transaminases meet all criteria (WHO) for validation of a universal test

- ✓ The test must be simple, reliable, fast and inexpensive
- ✓ The test must have good sensitivity, specificity, positive and negative predictive values
- ✓ The test must have a sensitivity of at least 75%, a false-positive rate of < 10% and a rate of invalid results < 5%

Conclusion

Large scale screening of CLDs with ALT
is the first urgent and necessary step for
an active strategy against CLDs

The Future of Hepatology

Let's go back from Virology to
Hepatology and Internal Medicine !

We Won a Battle,
There are still many battles to come
But we will win the World War

Charles de Gaulle

Sources

- World Health Organization World Health Statistics 2010. Geneva, World Health Organization, 2010
- Hirschfield GM, et al. Liver disease in the UK. Lancet. 2015 Feb 7;385(9967):503.
- World Gastroenterology Organization Global Guidelines. Non-alcoholic Fatty Liver Disease and Non-alcoholic Steatopatitis: http://www.worldgastroenterology.org/assets/export/userfiles/2012_NASH%20and%20NAFLD_Final_long.pdf
- Colvin HM et al.: Hepatitis and Liver Cancer: A National Strategy for Prevention and Control of Hepatitis B and C. Washington, D.C: Institute of Medicine; 2010, 252.
- More than 300 publications screened