

*Viral Hepatitis: We can eliminate  
hepatitis C  
Update on the most recent  
AASLD recommendations*

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# Take Home Points

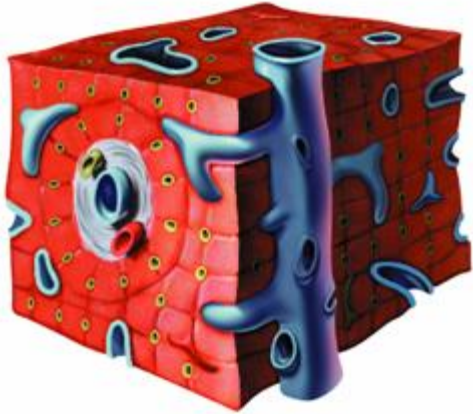
- Nearly all hepatitis C infected patients can now be cured with an oral regimen that has minimal side effects
- All genotypes have effective therapies
- Special patient groups can be cured
  - HIV co-infected
  - End stage renal disease (including dialysis)
  - End stage liver disease (pre and post transplant)

# Take Home Points (2)

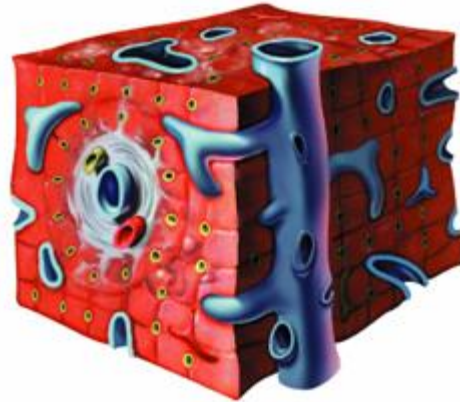
- Curing hepatitis C infection reduces or eliminates the risk of hepatic decompensation and liver cancer
- Several recent studies have demonstrated the economic value of HCV treatment and made it clear that HCV therapy is cost-effective

# HISTOLOGIC STAGING (METAVIR)

**STAGE 0**



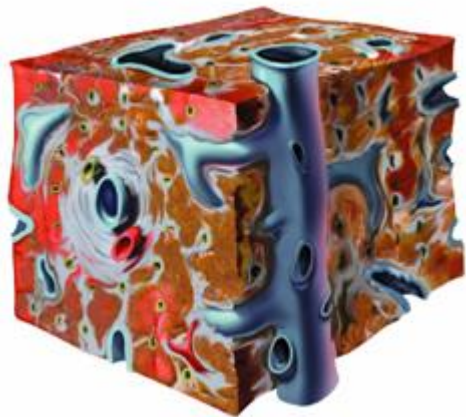
**STAGE 1**



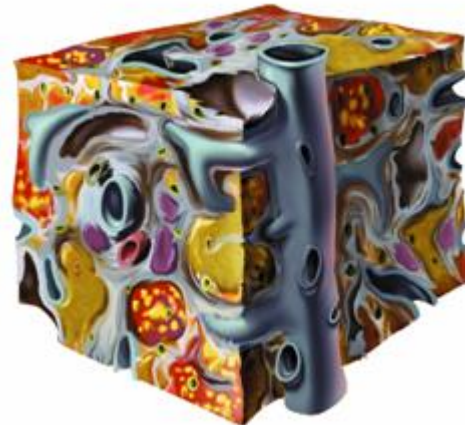
**STAGE 2**



**STAGE 3**



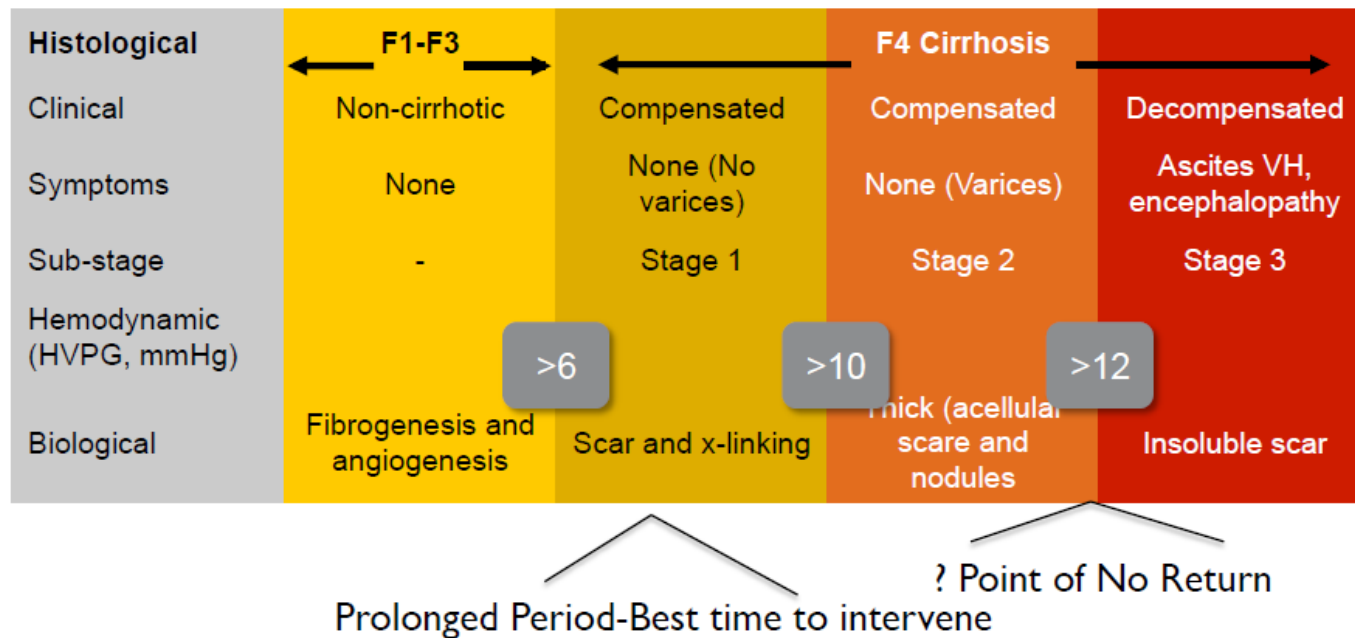
**STAGE 4**



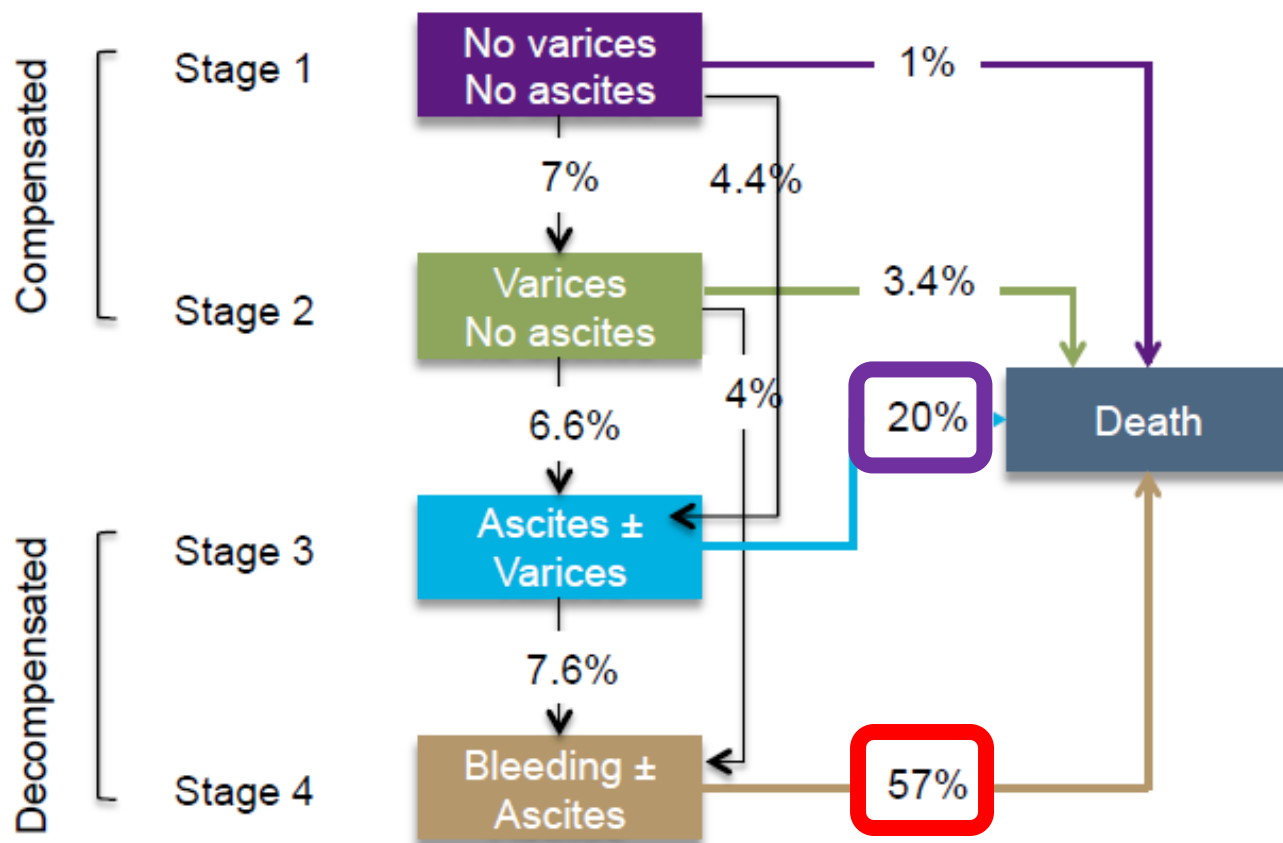
Cirrhosis

# When to Intervene is Clear...

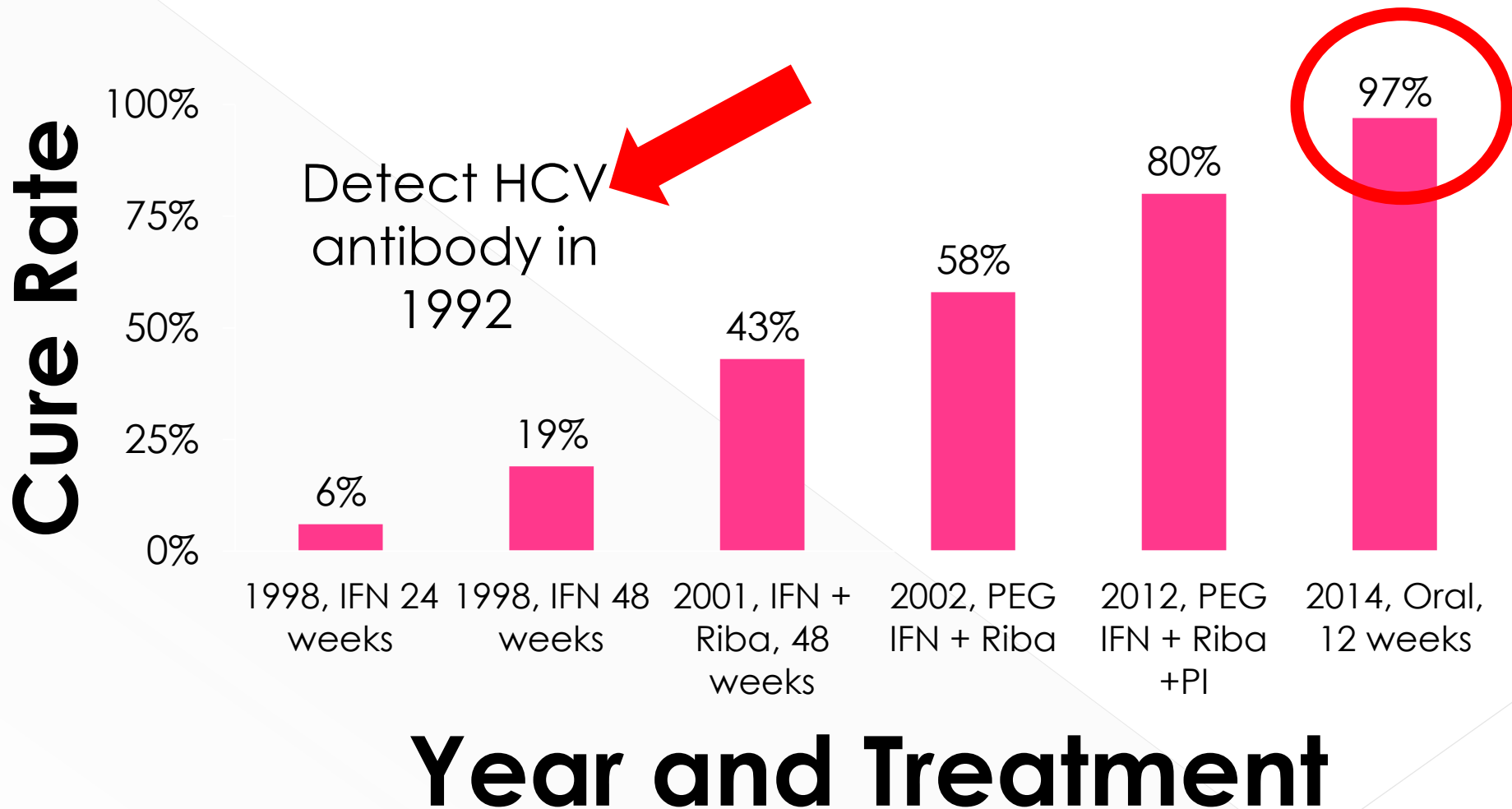
## Cirrhosis is More Than a Single Stage



# Clinical Course of Cirrhosis: 1-year Outcome Probabilities According To Clinical Stages



# Progress in Curing Hepatitis C



# What Are the Success Rates?

- Genotype 1a: 96-98%
- Genotype 1b: 99-100%
- Genotype 2: 95-98%
- Genotype 3: 90-97%
- Genotype 4: 91-100%:
- Genotype 5: 90-100%\*
- Genotype 6: 96-100%\*

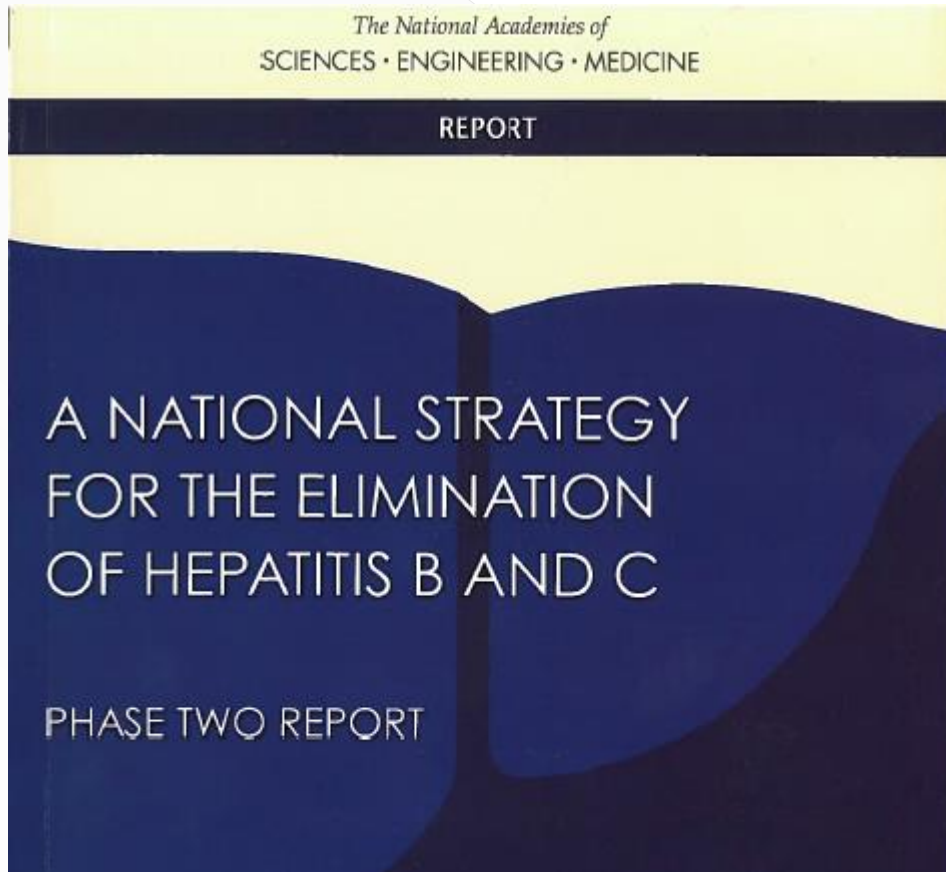


*Near  
uniform  
success*

\* Very small trials



# GOAL: Eliminate HCV



Published in 2017

Clearly recognizes that US can eliminate HCV

Suggests needed interventions

# Barriers

- Cost: 3.2 million infections @\$50,000 per treatment
- Provider access: only about 260,000 per year treated in last several years
- Knowledge of infection: up to 65% do not know they are infected
- PWID: Delaying treatment until later disease stage will substantially increase the risk of liver complications even when considering reinfection rates of up to 22% in 3 years.

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Author manuscript

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**Doing the math on hepatitis C virus treatment**

## **Prioritization of HCV treatment in the direct-acting antiviral era: An economic evaluation**

- Recent studies have also estimated the cost-effectiveness of HCV treatment in special populations, including:
  - Patients awaiting liver transplantation
  - HIV/HCV co-infected patients
  - patients with chronic kidney disease
  - persons who inject drugs
- All with favorable ICERs.
- At this time, it is reasonable to conclude that DAA regimens provide good value for the resources invested.

# Cost Effective?

- Multiple models have been used to assess cost effectiveness
- All suggest that it is beneficial to treat advanced disease
- Most suggest it is beneficial to treat moderate disease both for cost and for prevention of spreading HCV in the population

# Personal Experience

- I practice in an ID clinic even though I am a GI/transplant hepatologist.
- Many of my patients are co-infected with HIV HCV, acquired from blood products used to treat their hemophilia.
- The stigmata of HIV seems to have passed (Ryan White); the stigmata of HCV is still dominant.

# My Patient

Acquired HCV as a youth

Tried multiple interferon regimens but was never cured

Is fearful about liver cancer

Is afraid to play with his grandson

Has F2 disease (despite long standing HCV infection and HIV)



Treated with DAA but only after multiple hurdles: drug tests, repeat labs, a failed biopsy

Now cured

# Who Should Be Treated?

- AASLD/IDSA: “Treatment is recommended for all patients with chronic HCV infection, except those with short life expectancies that cannot be remediated by treating HCV...”
- EASL: All treatment naïve and experienced patient with compensated or decompensated chronic liver disease related to HCV..... should be considered for therapy.”

# Thank you for your attention

## Multi-centric HCC



## Esophageal Varices

