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Patients monitoring after SVR

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Circulation, metabolism, nutrition

Inserm

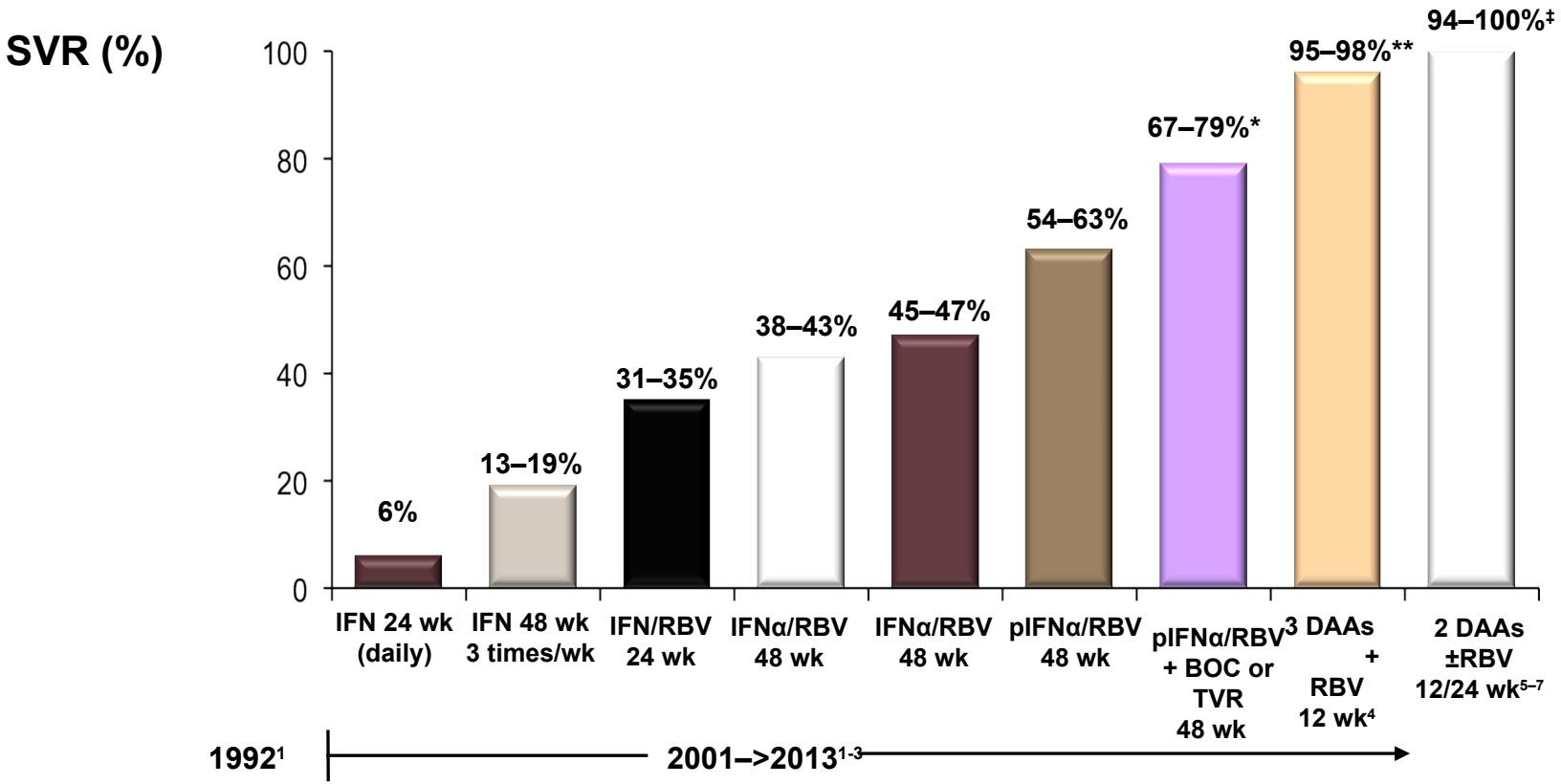
French Institute of Health and Medical Research

Disclosures

- Consulting, advisory committees or review panel
  - Abbvie, Bristol-Myers Squibb, Gilead, GlaxoSmithKline, Janssen, Merck Sharp & Dohme, Roche

- Speaking and teaching
  - Aptalis, Bristol-Myers Squibb, Gilead, Janssen, Merck Sharp & Dohme, Roche

New all-oral regimens are transforming the HCV treatment landscape



n patients with HCV genotype 1 only; ** In treatment-naïve patients; ‡Includes treatment-naïve and -experienced patients

BOC, boceprevir; IFN, interferon; RBV, ribavirin; SVR, sustained virologic response; TVR, telaprevir

1. Adapted from Manns MP, et al. *Gut* 2006;55:1350–9. 2. Tran TT. *Am J Manag Care* 2012;18(14 Suppl.):S340–9.
3. Goralczyk AD, et al. BMC *Gastroenterology* 2013;13:148. 4. Feld JJ, et al. *N Engl J Med.* 2014;370:1594-603.
5. Sulkowski M, et al. *N Engl J Med*. 2014;370(3):211-21. 6. Afdhal N, et al. *N Engl J Med.* 2014;370:1889–98.
7. Afdhal N, et al. *N Engl J Med.* 2014;370:1483-93.

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EASL guidelines

Post-treatment follow-up of patients who achieve an SVR

- Non-cirrhotic patients with SVR should be retested for ALT and HCV RNA at 48 weeks post-treatment, then discharged if ALT is normal and HCV RNA is negative*(B1)*….
- Patients with pre-existing cofactors for liver disease (notably, history of alcohol drinking and/or type 2 diabetes) should be carefully and periodically subjected to a thorough clinical assessment,……
- The exact duration of HCC surveillance in patients with advanced fibrosis or cirrhosis who achieve an SVR is unknown in the current state of knowledge, but is probably indefinite *(B1)*.

Plan

- Effect of SVR on survival and liver-related complications
- Long term fibrosis outcome in SVR patients
- The role of comorbidities in non cirrhotic patients
- Monitoring of SVR patients: the value of non invasive tests
- The risk of reinfection

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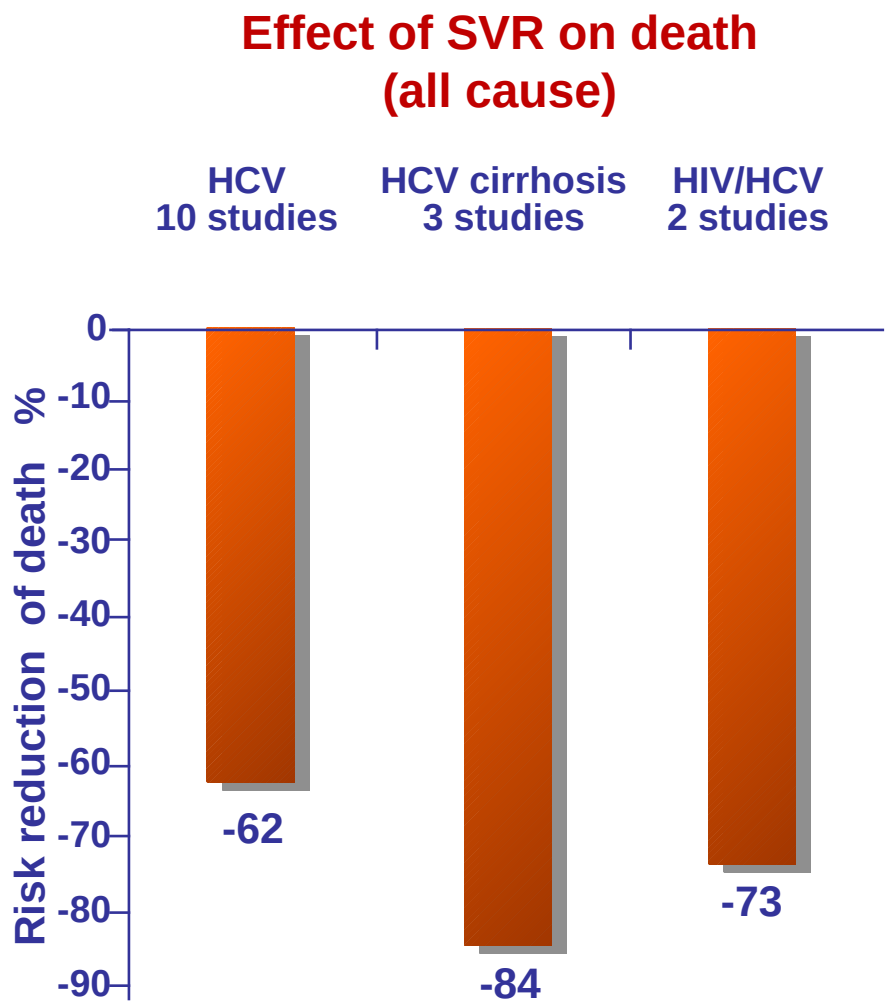
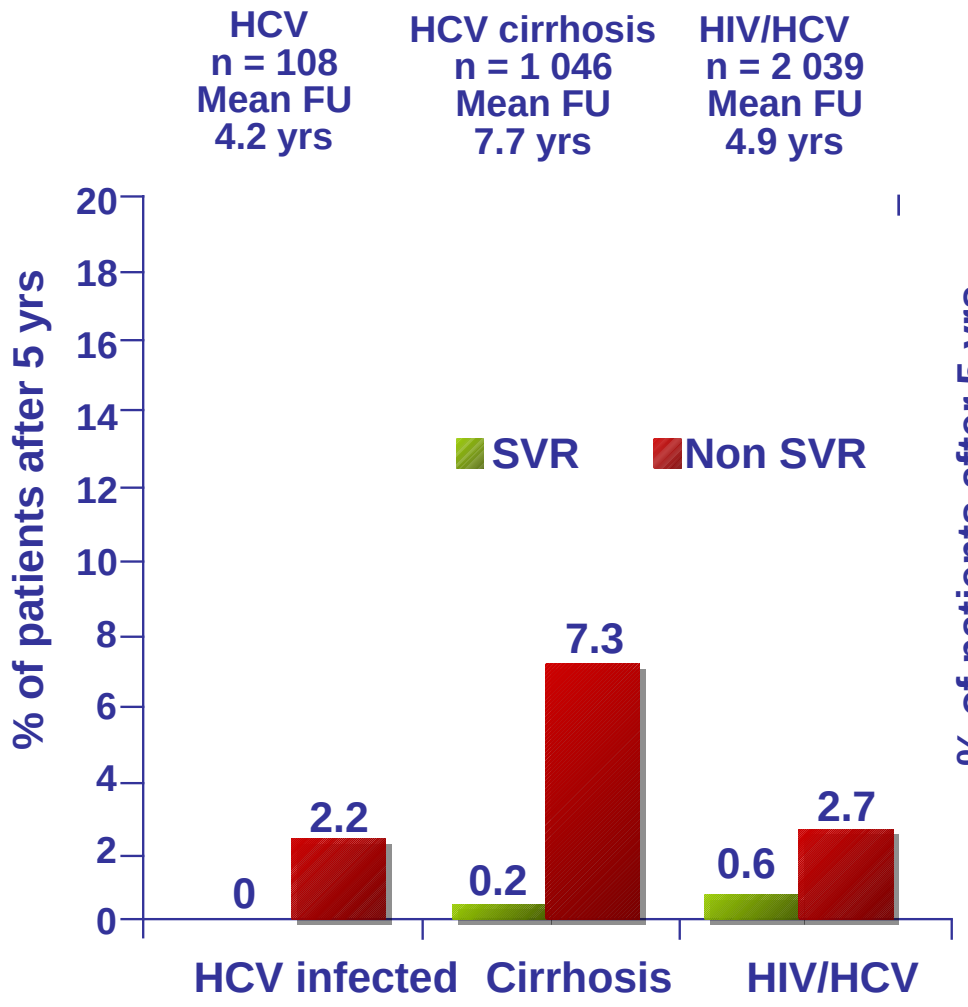
SVR is associated with improvement of survival *(méta-analysis n=34 563)*



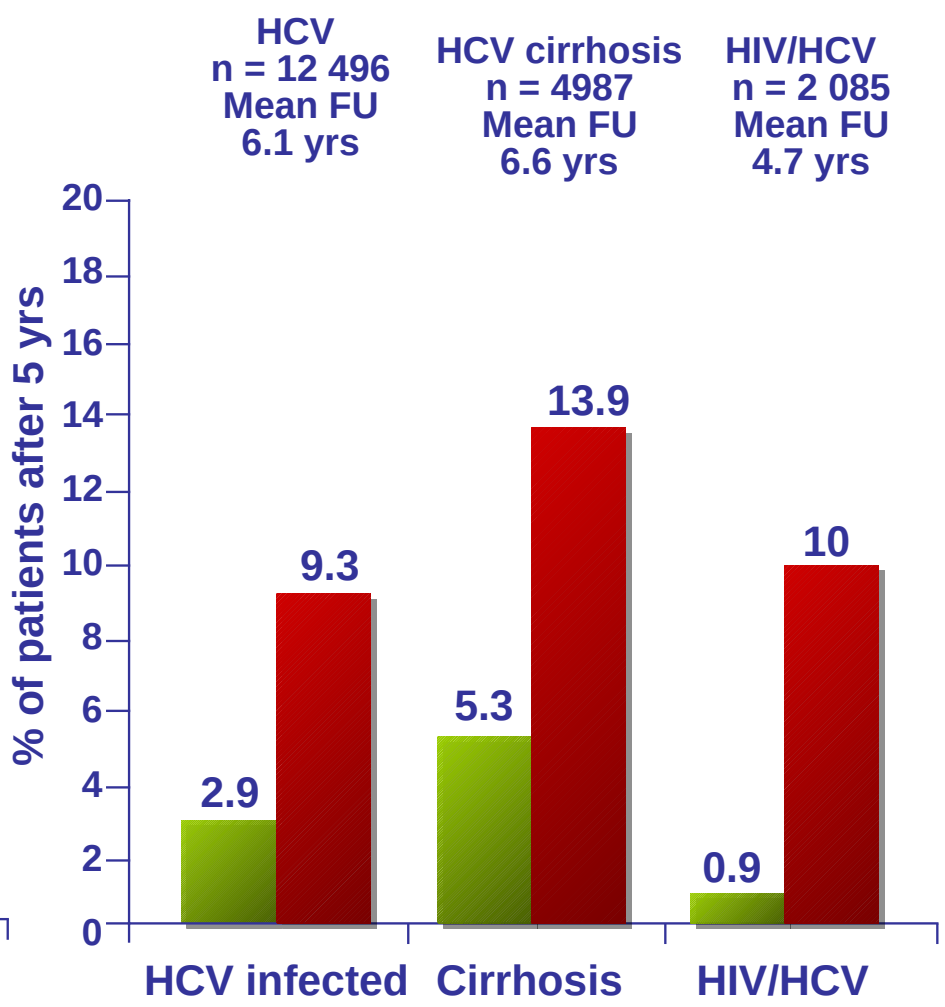
Hill AM, AASLD 2014

…and decreased risk of liver transplantation or HCC *(méta-analysis n=34 563)*

Liver transplantation risk at 5 yrs



HCC risk at 5 yrs



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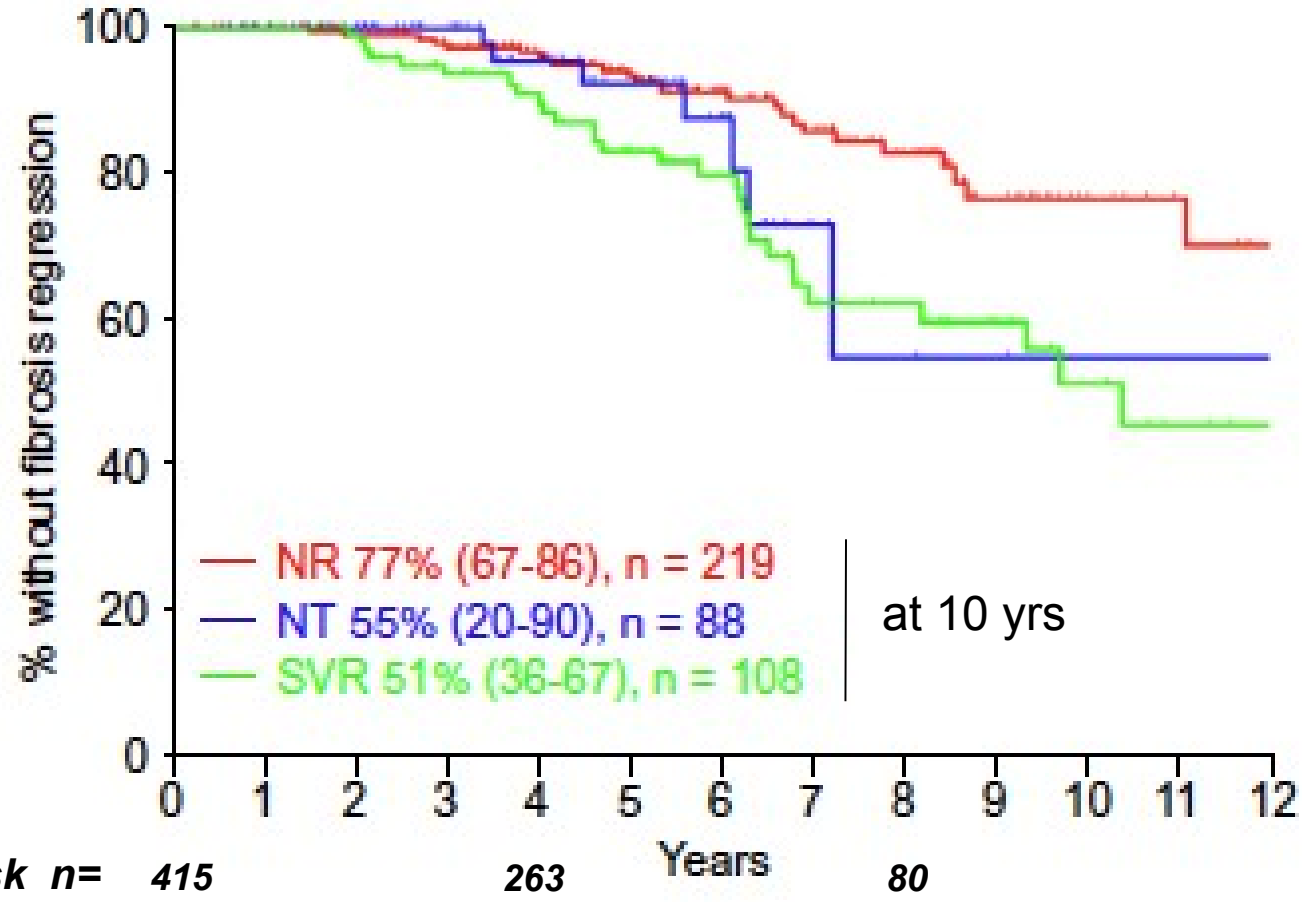
Long term fibrosis outcomes in SVR patients: slow regression

933 HCV patients with paired Fibrotest™, median FU 5.3 yrs

↓

415 patients with advanced fibrosis

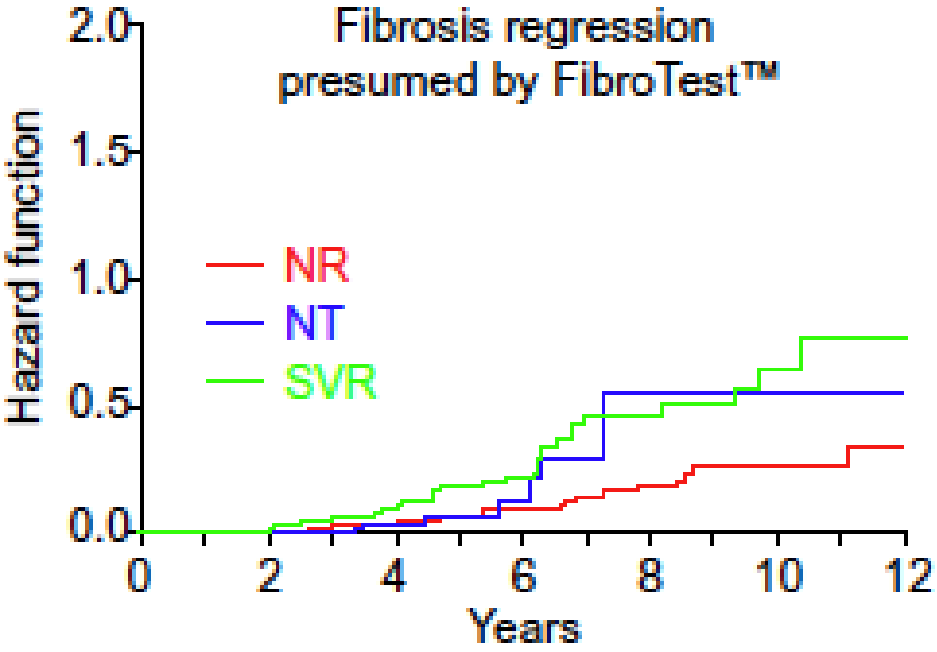


Poynard T et al, J Hepatol 2013

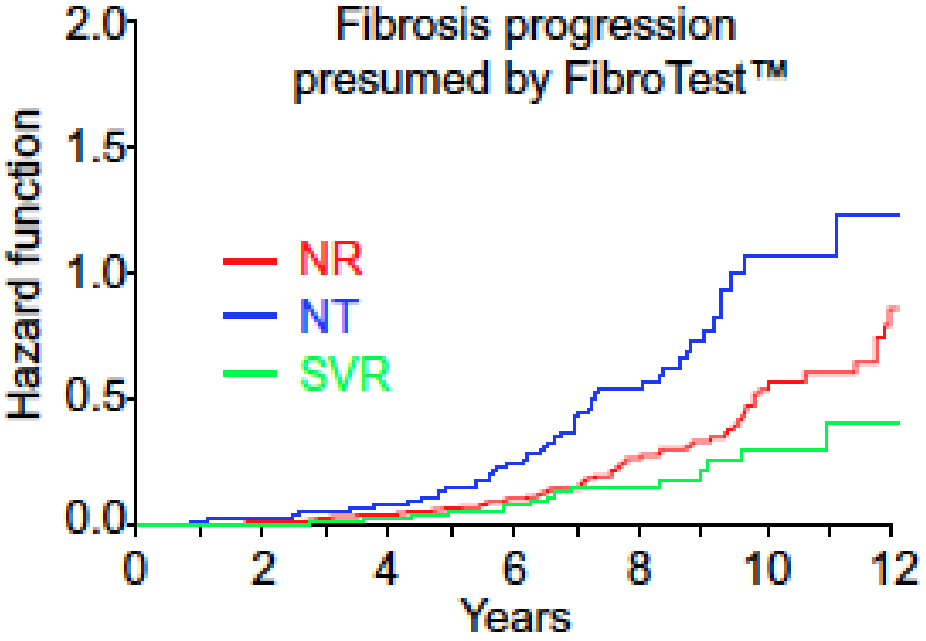
Long term fibrosis outcomes in SVR patients

933 HCV patients with paired Fibrotest™, median FU 5.3 yrs

Slow fibrosis regression in SVR patients with advanced fibrosis



Fibrosis progression in SVR patients with mild fibrosis



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Poynard T et al, J Hepatol 2013

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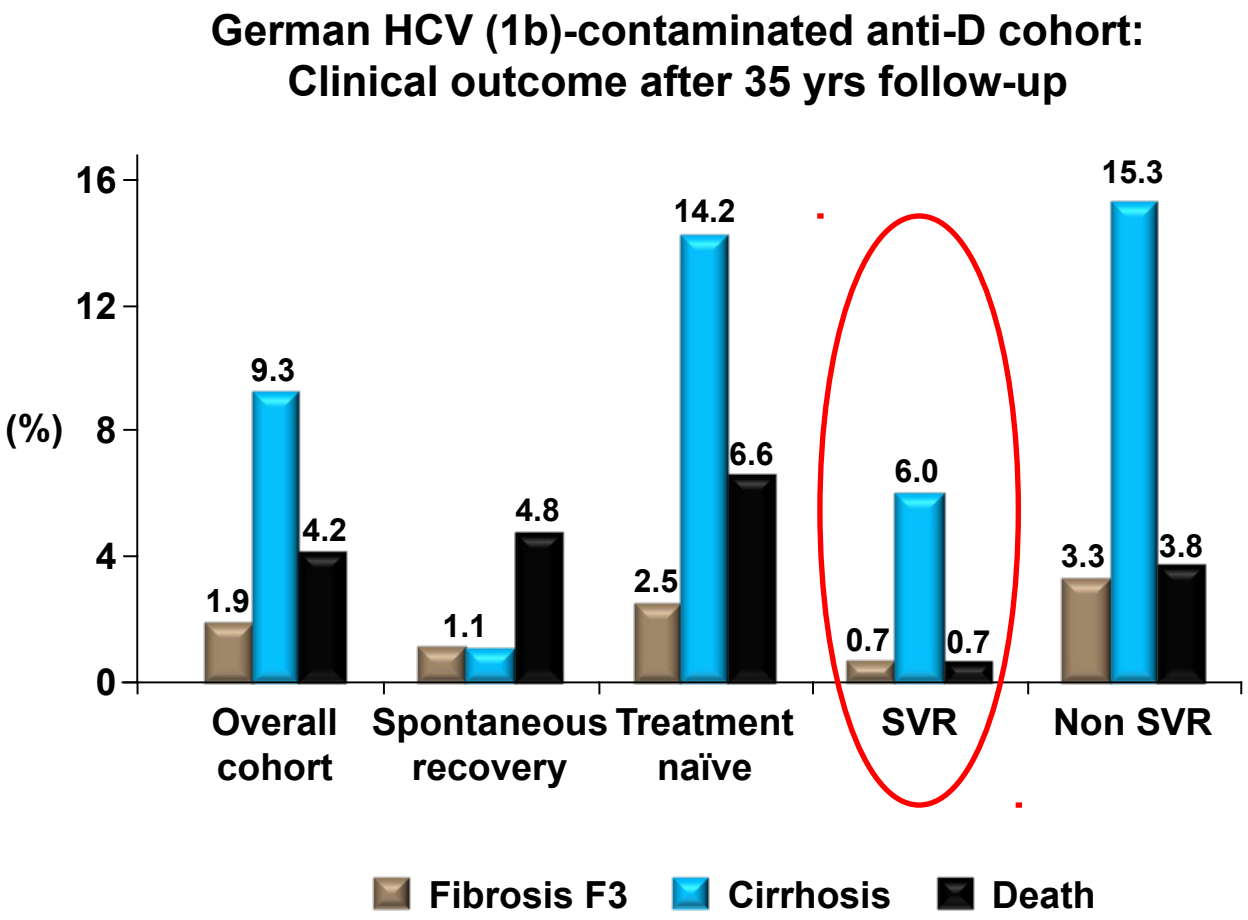
Clinical outcome in a real life cohort

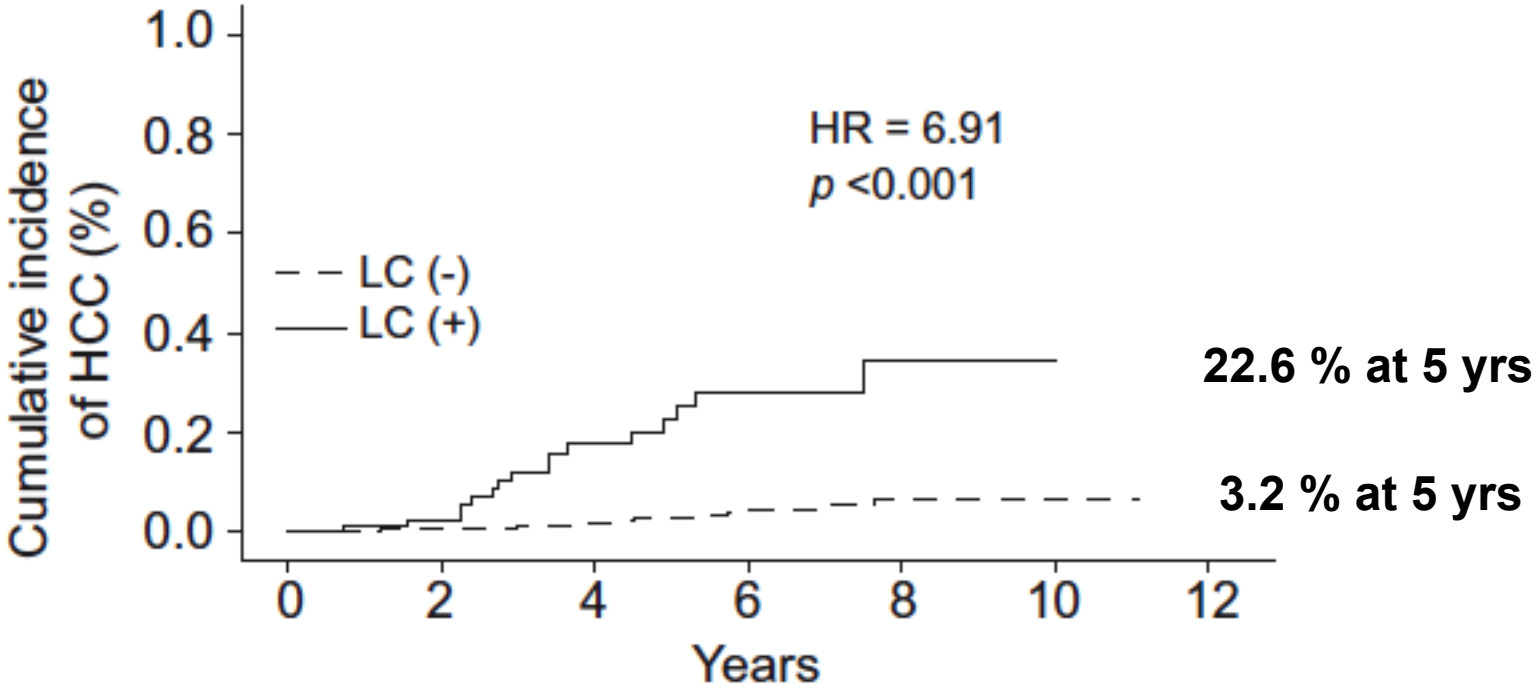


- Overall survival was significantly enhanced after SVR, compared to treatment-naïve patients or non-SVR (p=0.027)
- Independent factors associated with cirrhosis
  - No response to treatment
  - No spontaneous recovery
  - BMI >25 kg/m^2 (RR: 1.125)

Wiese M et al, Hepatology 2014 ;59:49–57.

Risk of HCC in non cirrhotic patients following HCV eradication

642 SVR patients followed 53 mo: 86 cirrhotics, 556 non-cirrhotics

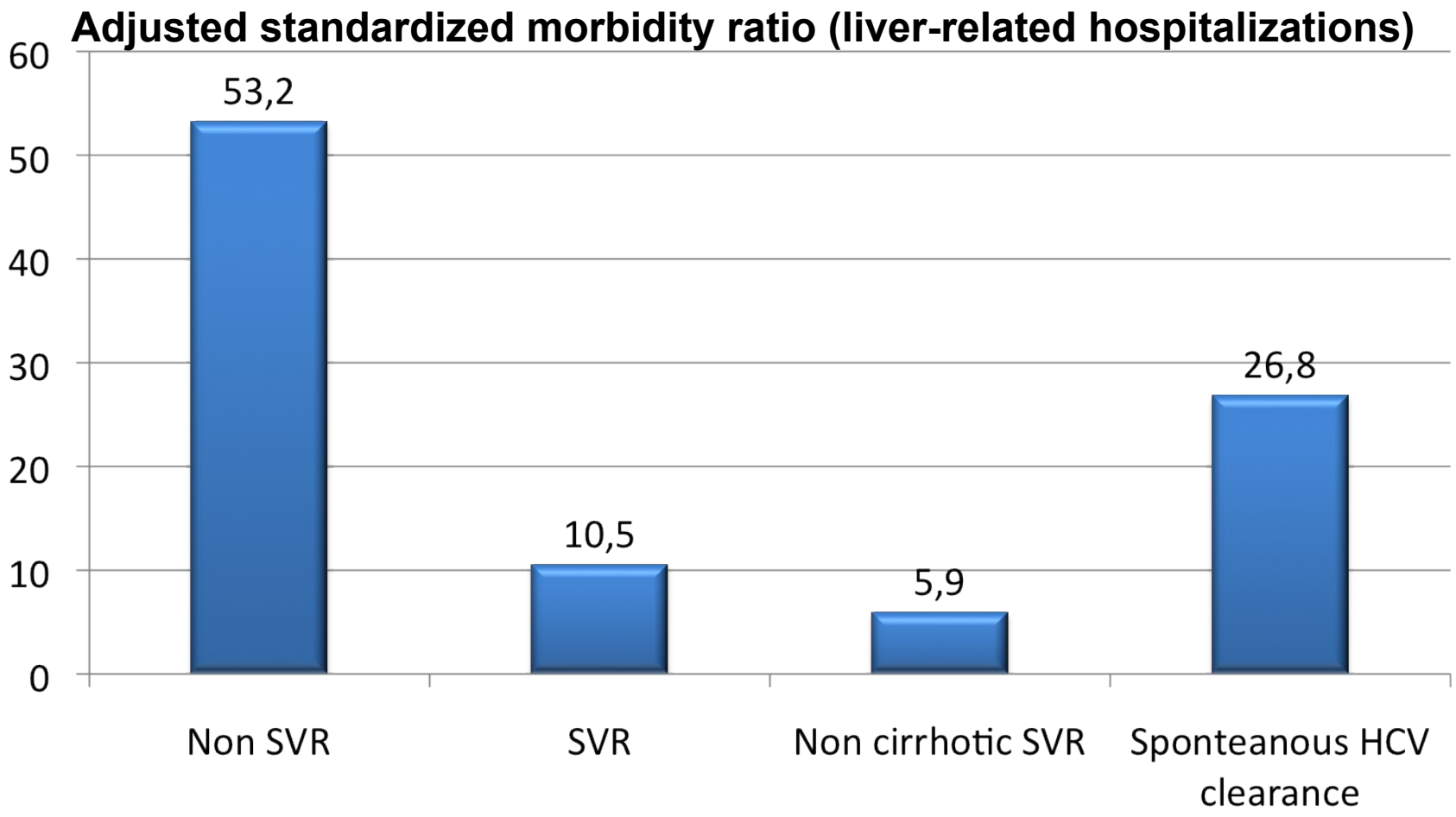


Predictive factors of HCC in non cirrhotics: age, type 2 diabetes, GGT and APRI

Huang CF et al. J Hepatol 2014

discharge of SVR patients: the role of comorbidities ?

1215 HCV patients treated between 1996-2007, follow-up 5.3 yrs



Innes HA et al, Hepatology 2011

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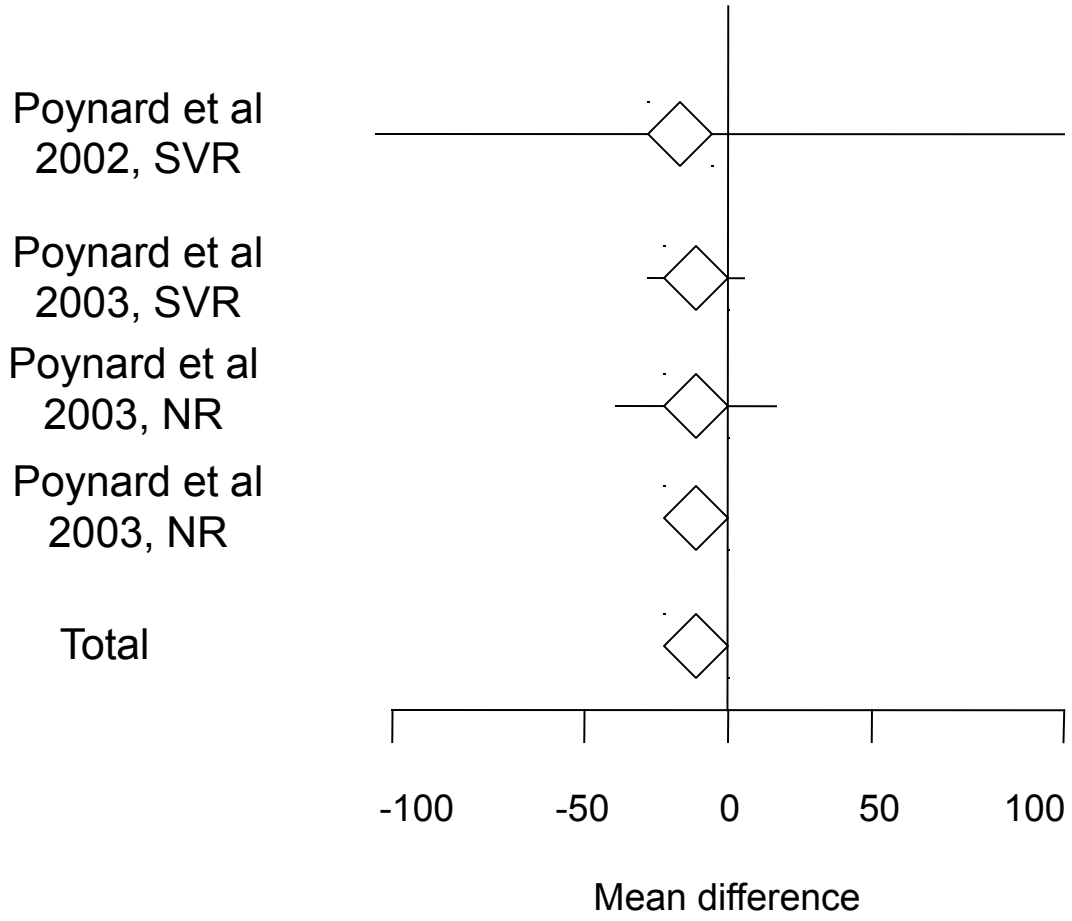
Difference between biopsy and FibroTest® estimates of fibrosis progression in treated patients

134 patients treated with IFN and 352 treated with IFN+RBV



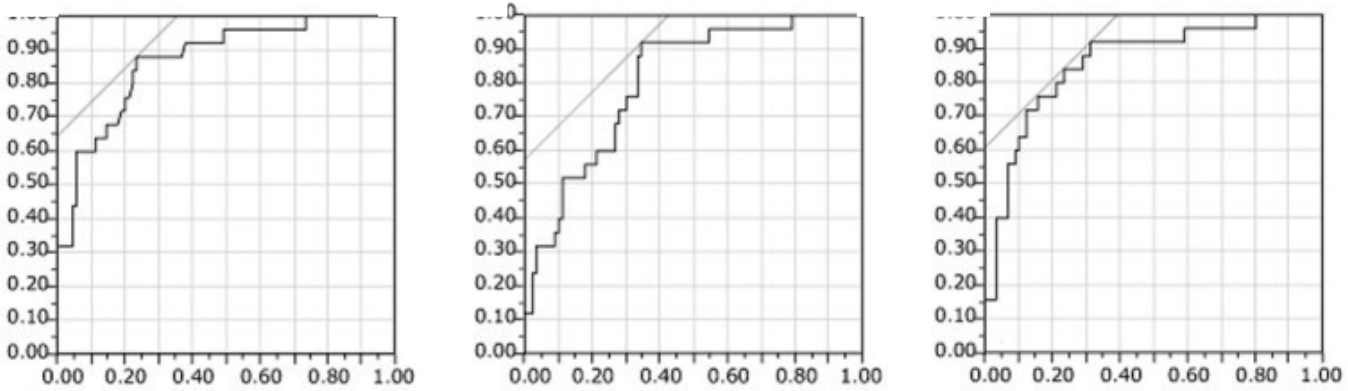
Poynard T et al, Antivir Ther 2010

Accuracy of APRI, FIB-4 and Forns index at post-SVR for predicting fibrosis of the liver in the second liver biopsy

115 SVR patients with control liver biopsy at 5 yrs

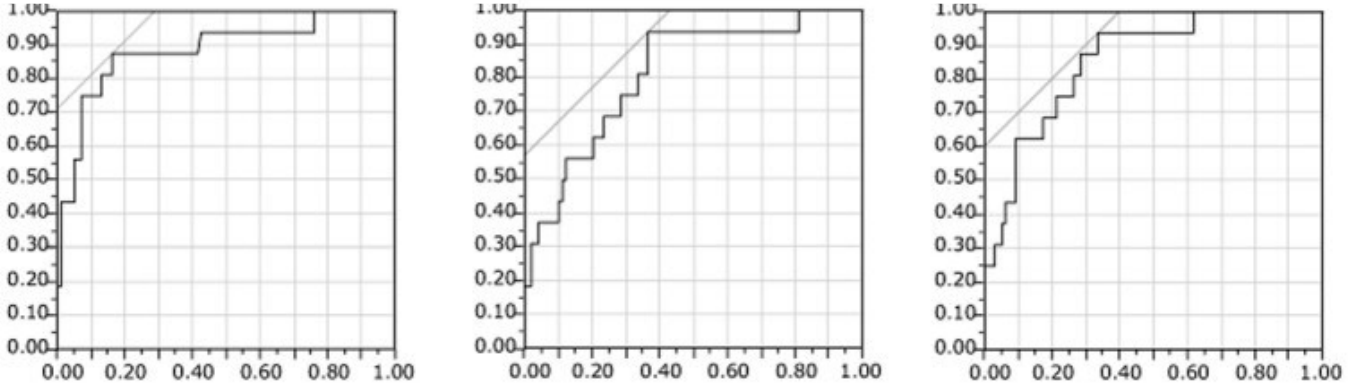
Differentiation of moderate to advanced fibrosis (F2–4) from mild fibrosis (F0-1)

APRI FIB-4 Forns



Differentiation of advanced fibrosis (F3–4) from mild to moderate fibrosis (F0-2)

APRI FIB-4 Forns



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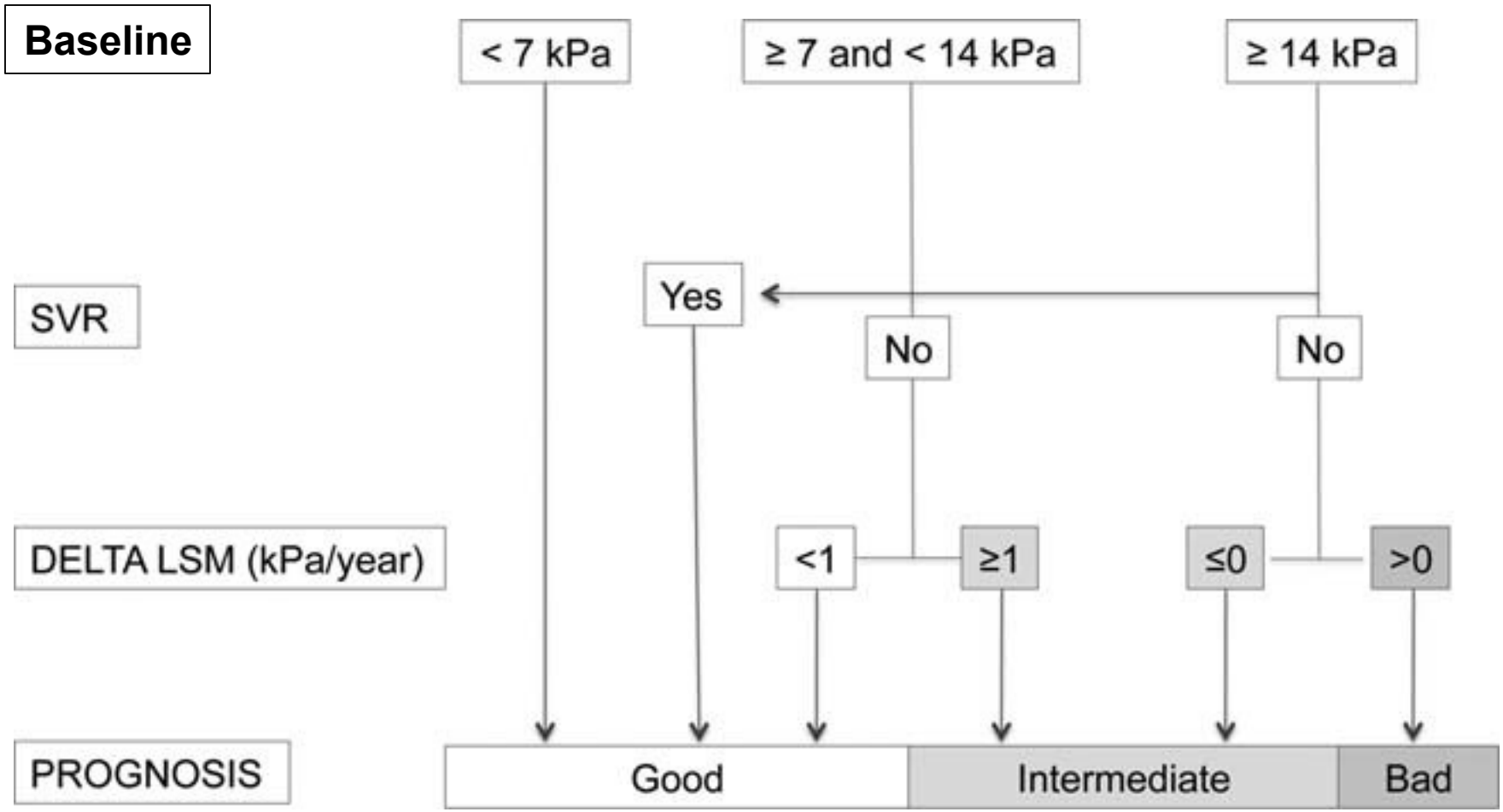
Tachi Y et al, PloS One 2015

Course of liver siffness and survival in HCV patients



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Vergniol J et al, HEPATOLOGY 2014;60:65-76

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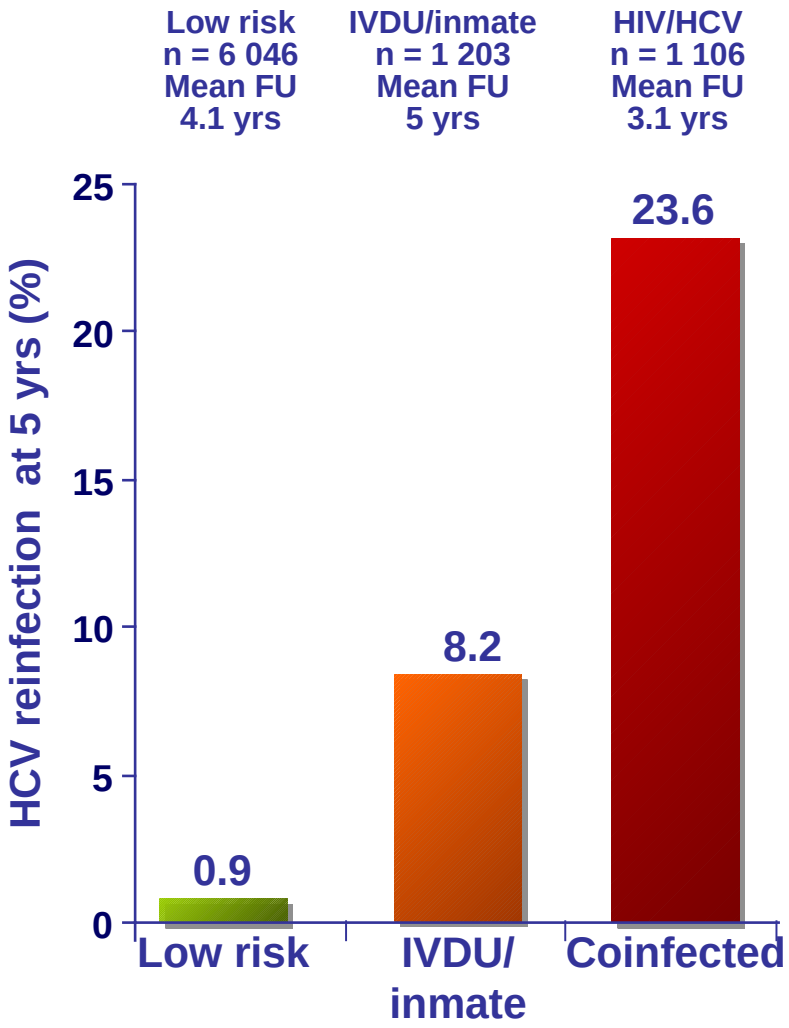
Risk of reinfection following SVR *(méta-analysis n=34 563)*

5 yrs risk of reinfection post SVR



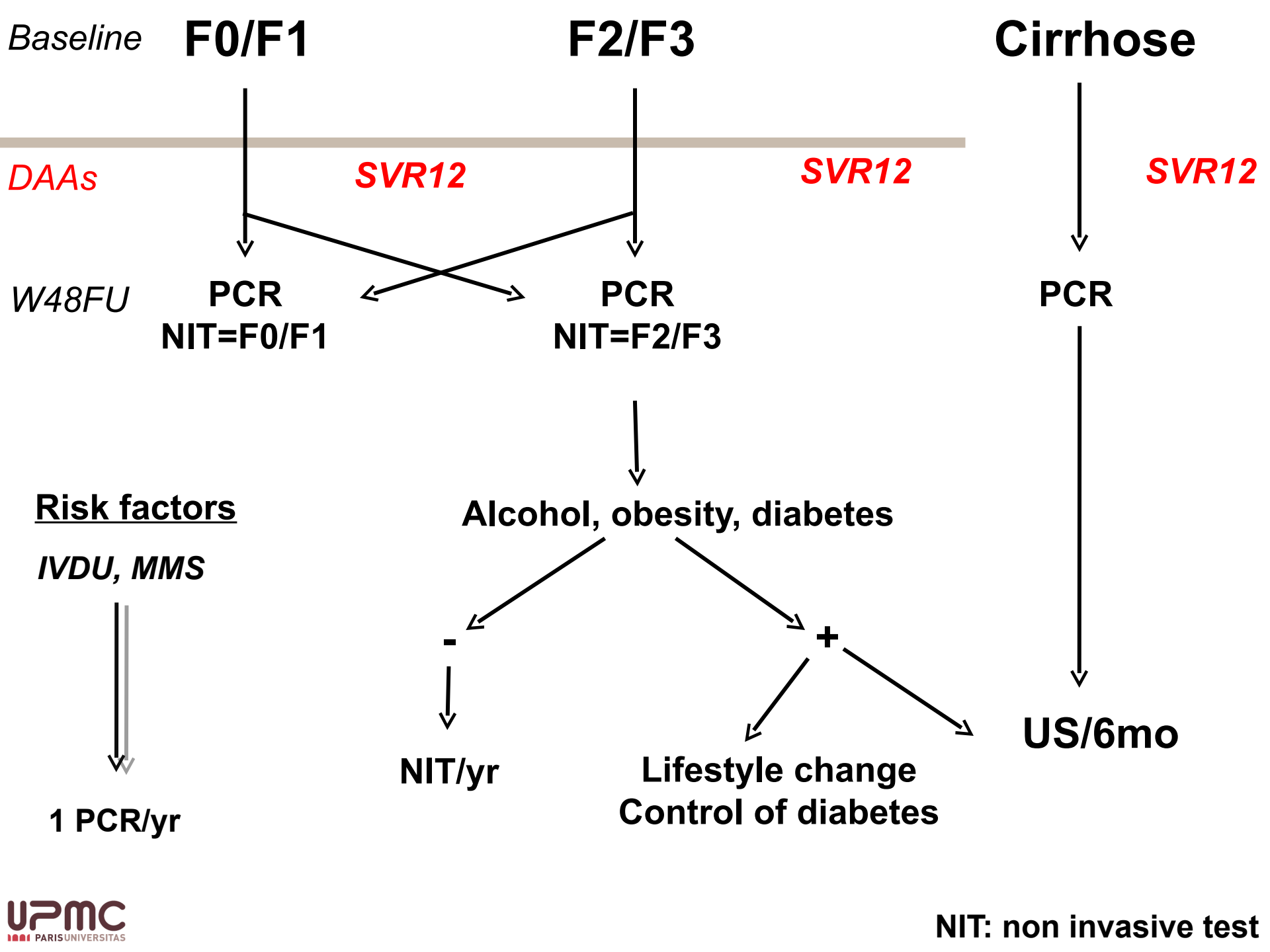
EASL guidelines

Following SVR, monitoring for HCV reinfection through annual HCV RNA assessment should be undertaken in people who inject drugs or men who have sex with men with on-going risk behaviour (B2)

Hill AM, AASLD 2014

Take-Home Message

- In HCV patients with SVR, regression of fibrosis is slow and variable.
- In cirrhotic, and non cirrhotic patients with comorbidities (alcohol intake, obesity, diabetes) , the risk of liver-related complications persists despite SVR.
- Non invasive tests (blood test) could be usefull for assessing fibrosis outcome in SVR patients.
- In HIV coinfected patients, the risk of reinfection is high.



NIT: non invasive test