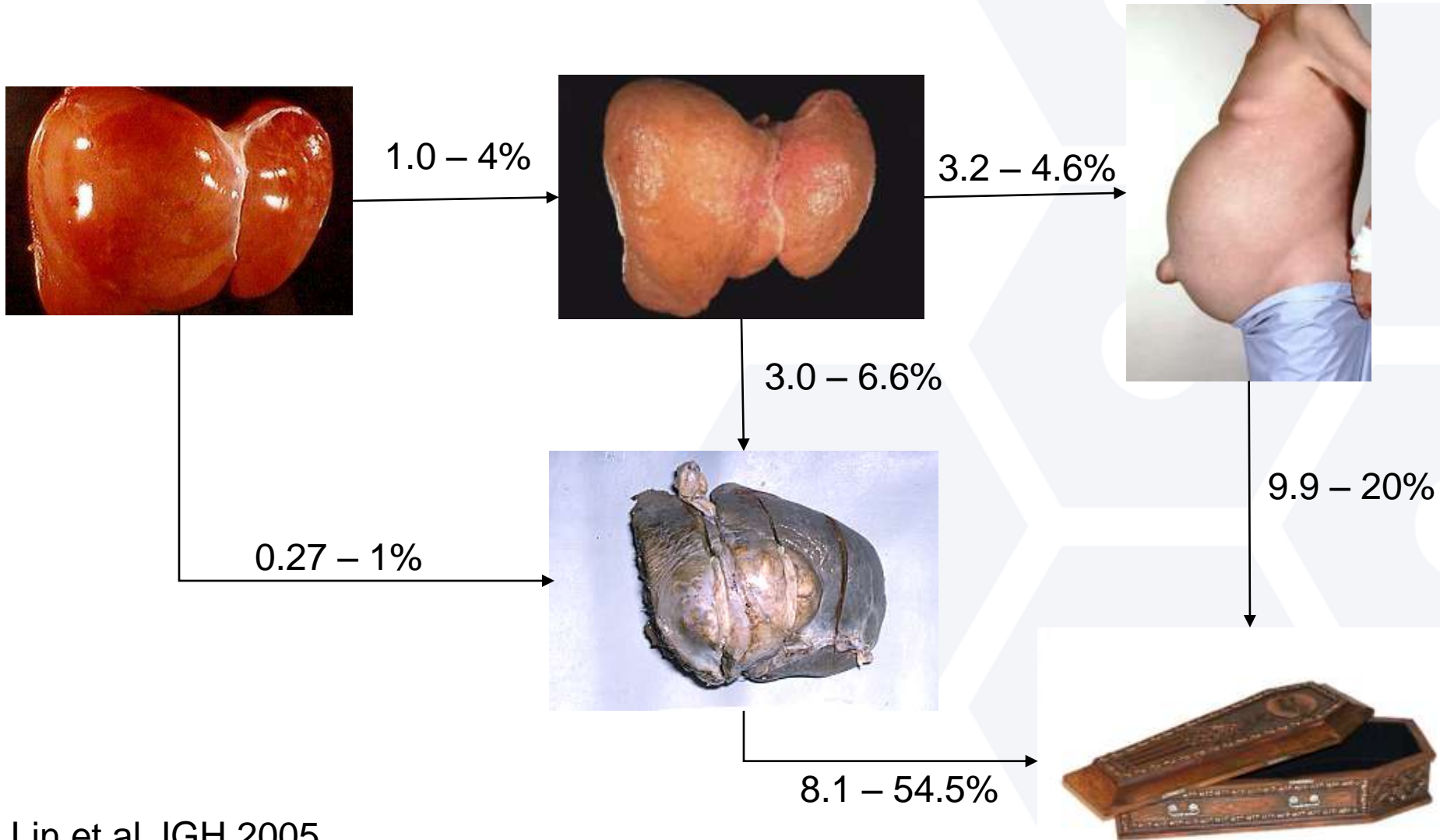


# Summit Conference Hepatitis B & C

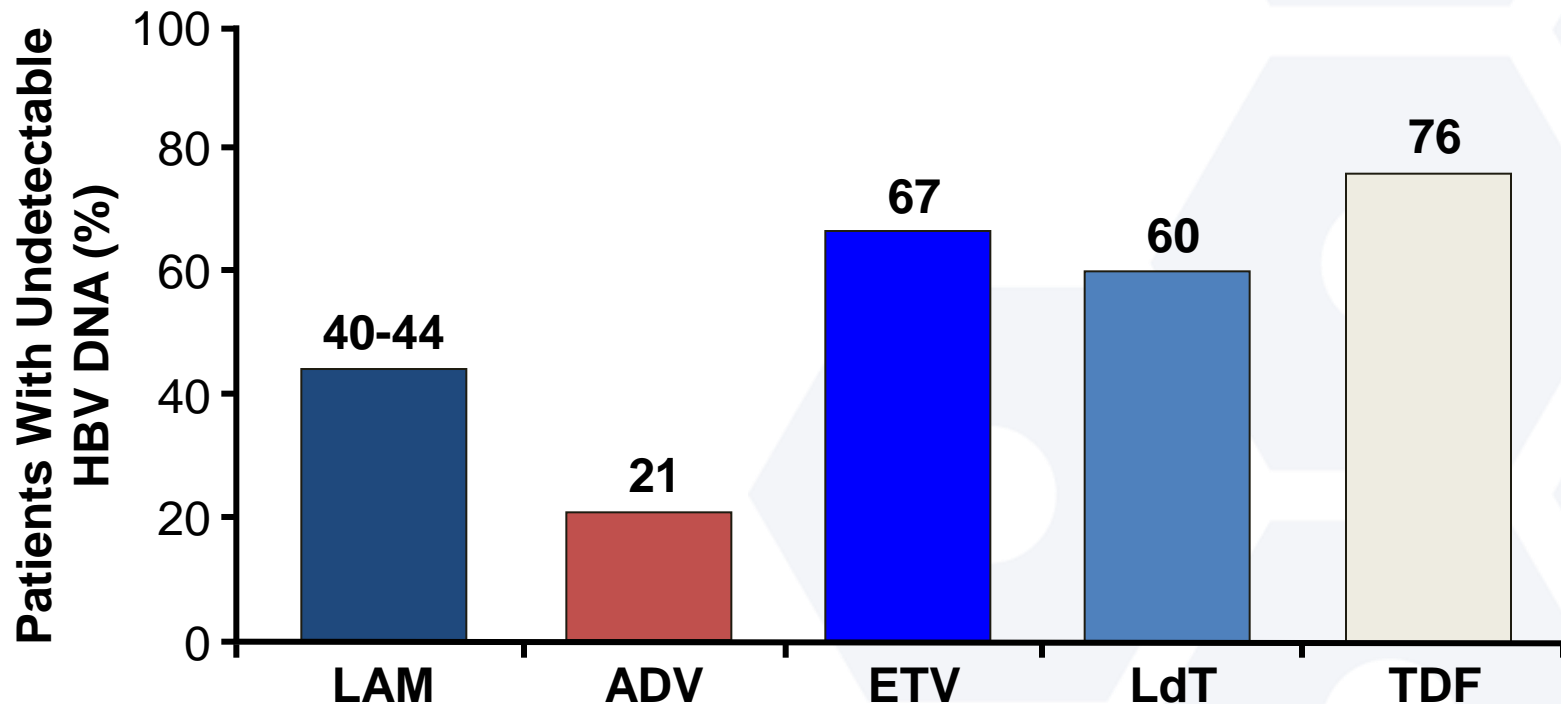
## Advanced Liver Diseases Are Treatable

Mark Thursz  
Vice-Secretary EASL

# Progression of Disease in HBV

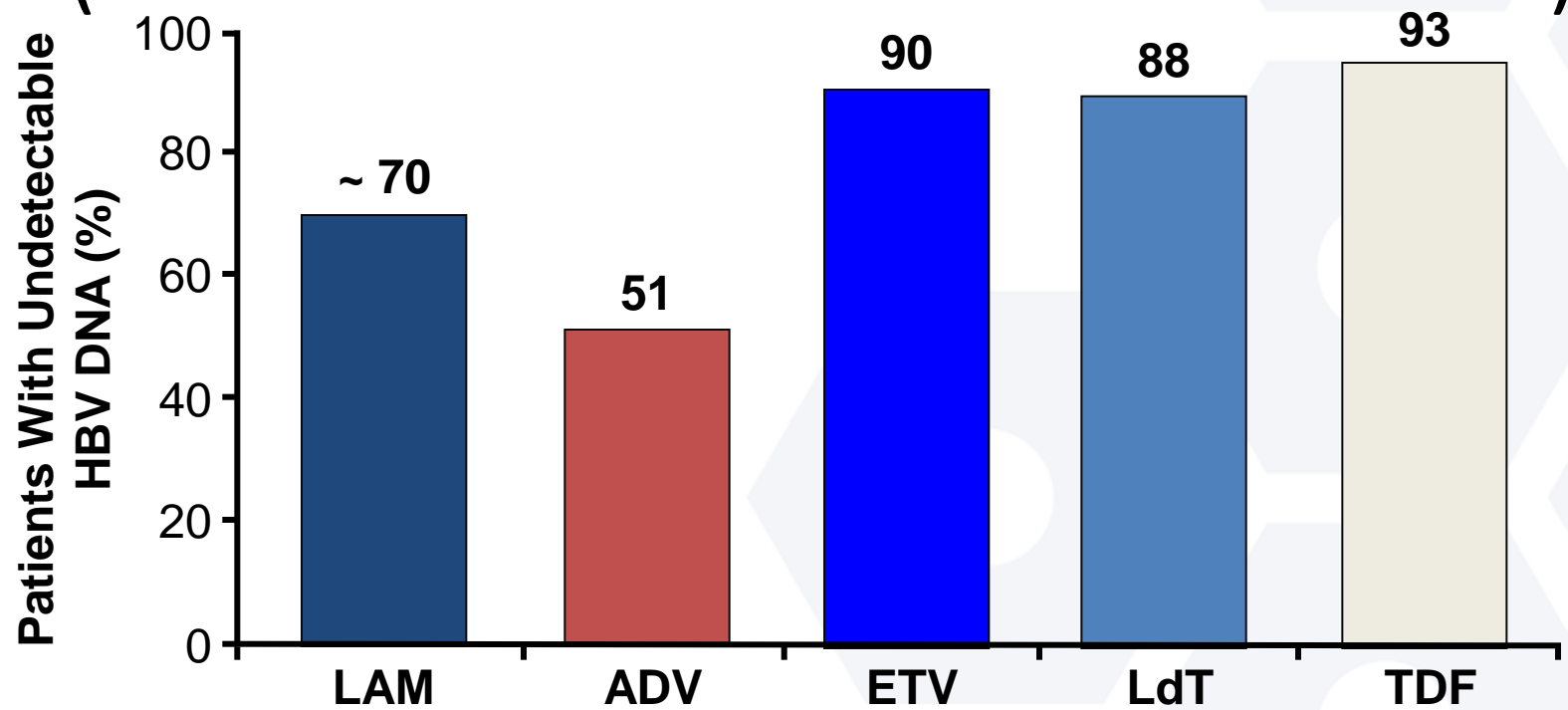


# Virologic Response in HBeAg+ Patients (Undetectable HBV DNA at Wk 48-52)



Adapted from Lok AS, et al. Hepatology. 2007;45:507-539.  
Heathcote EJ, et al. AASLD 2007. Abstract LB6.

# Virologic Response in HBeAg- Patients (Undetectable\* HBV DNA at Wk 48-52)

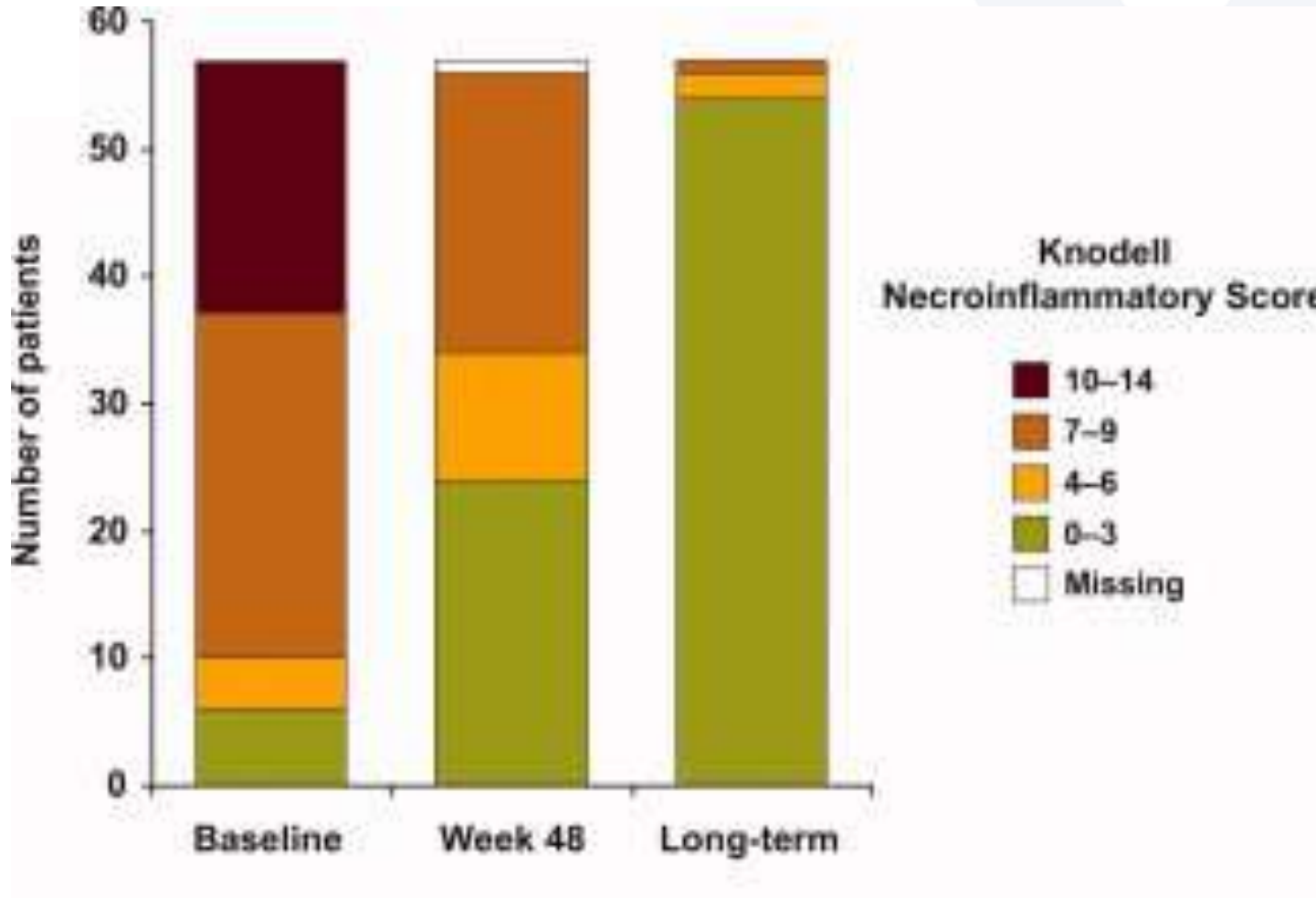


Adapted from Lok AS, et al. Hepatology 2007;45:507-539.  
Marcellin P, et al. AASLD 2007. Abstract LB2.

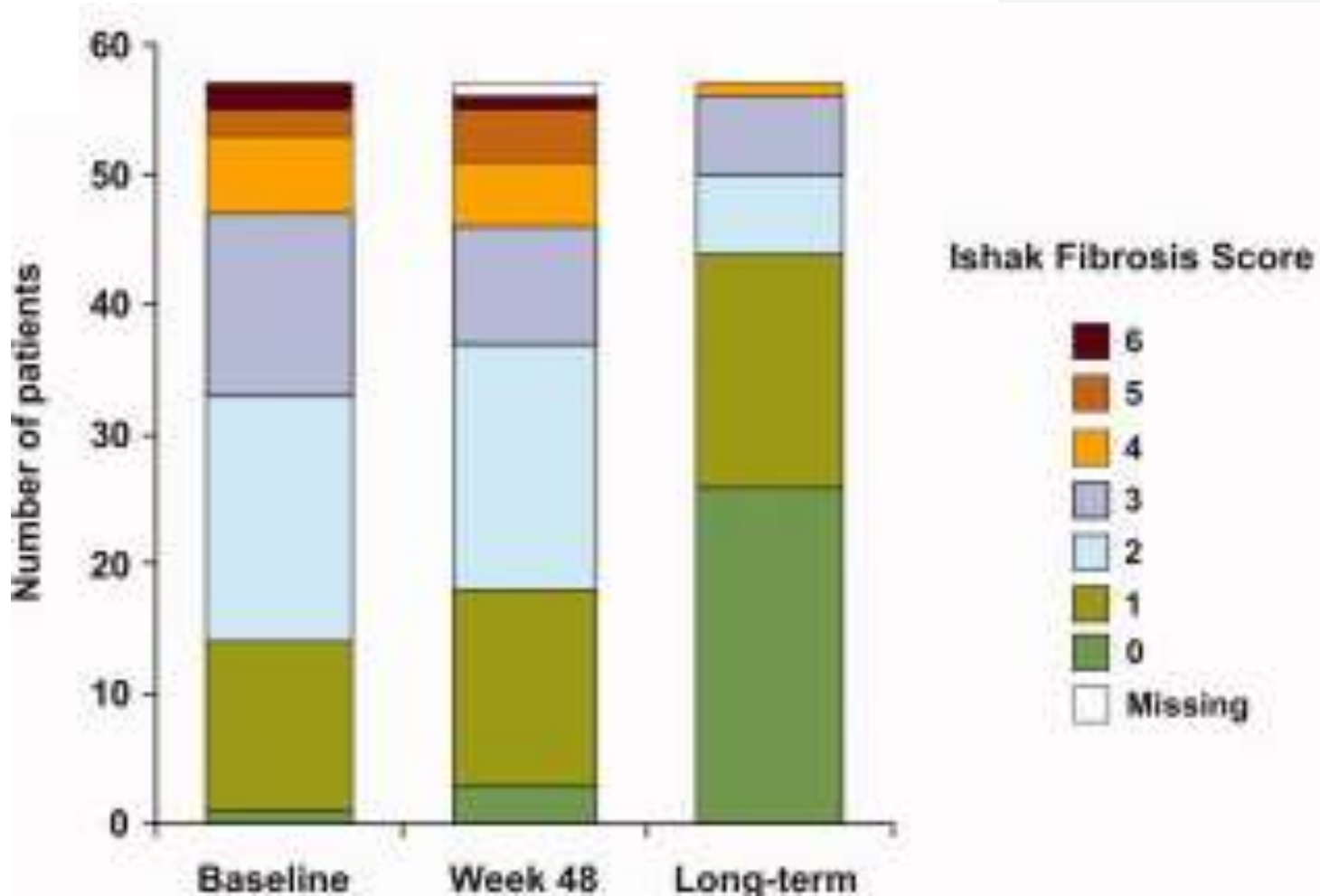
# Key questions

- Does treatment improve the liver histologically?
- Does treatment reverse the progression of liver disease?
- Does treatment prevent progression of cirrhosis to decompensation?
- Does treatment prevent progression of cirrhosis to cancer?
- Does treatment prolong life?

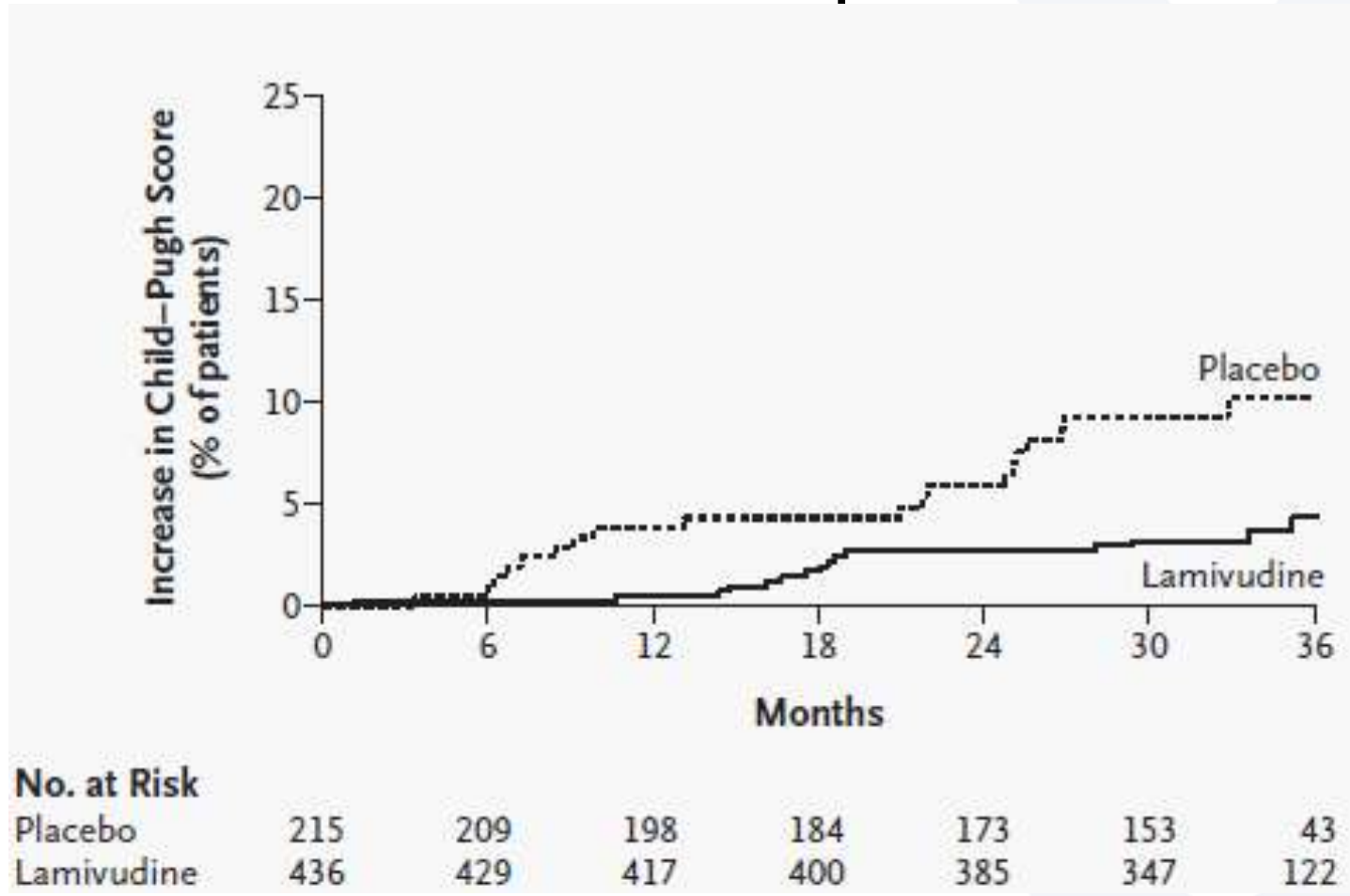
# Impact of Treatment on Histology Inflammation



# Impact of treatment on Histology Fibrosis

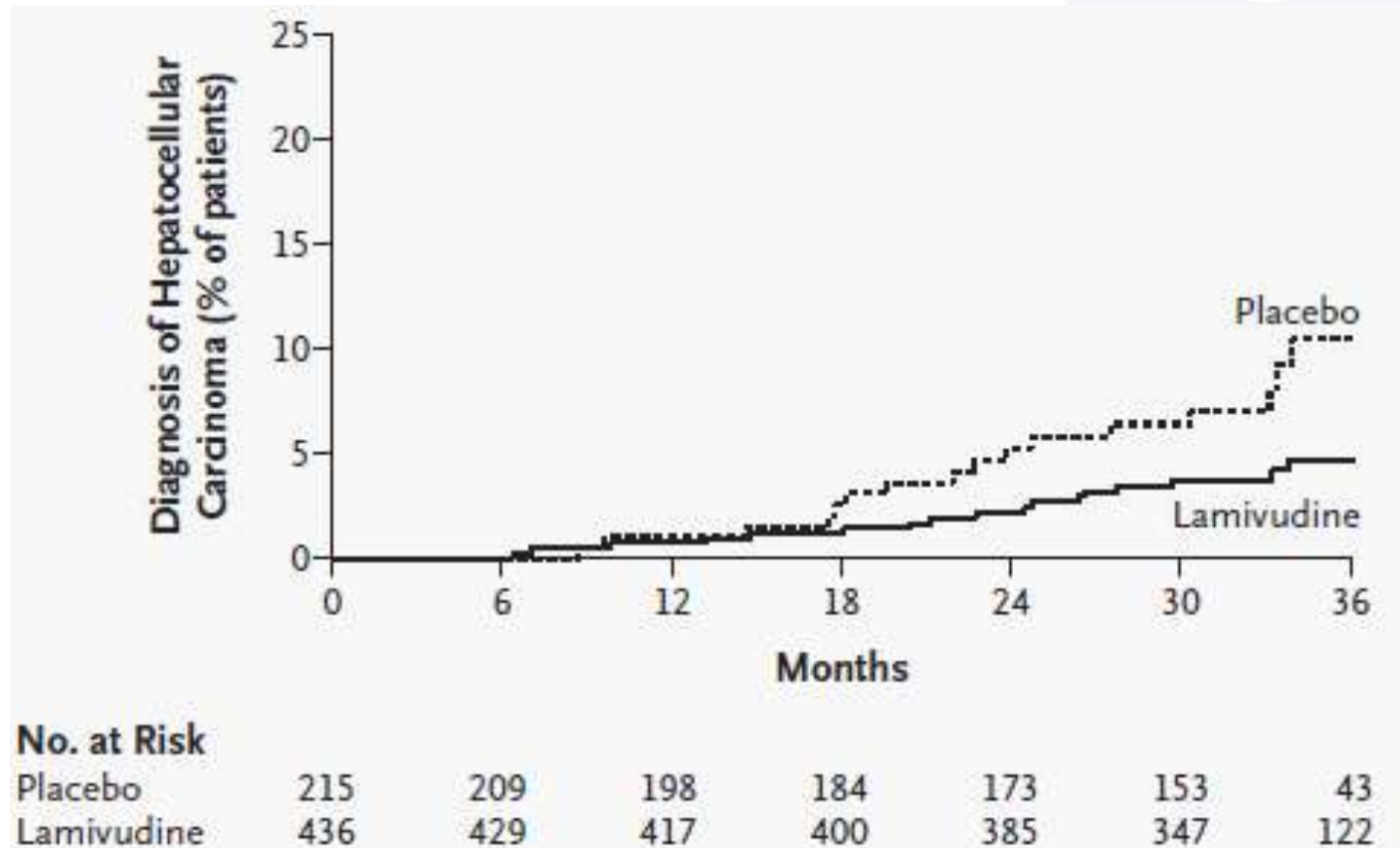


# Impact of Treatment on Progression Cirrhosis - Decompensation

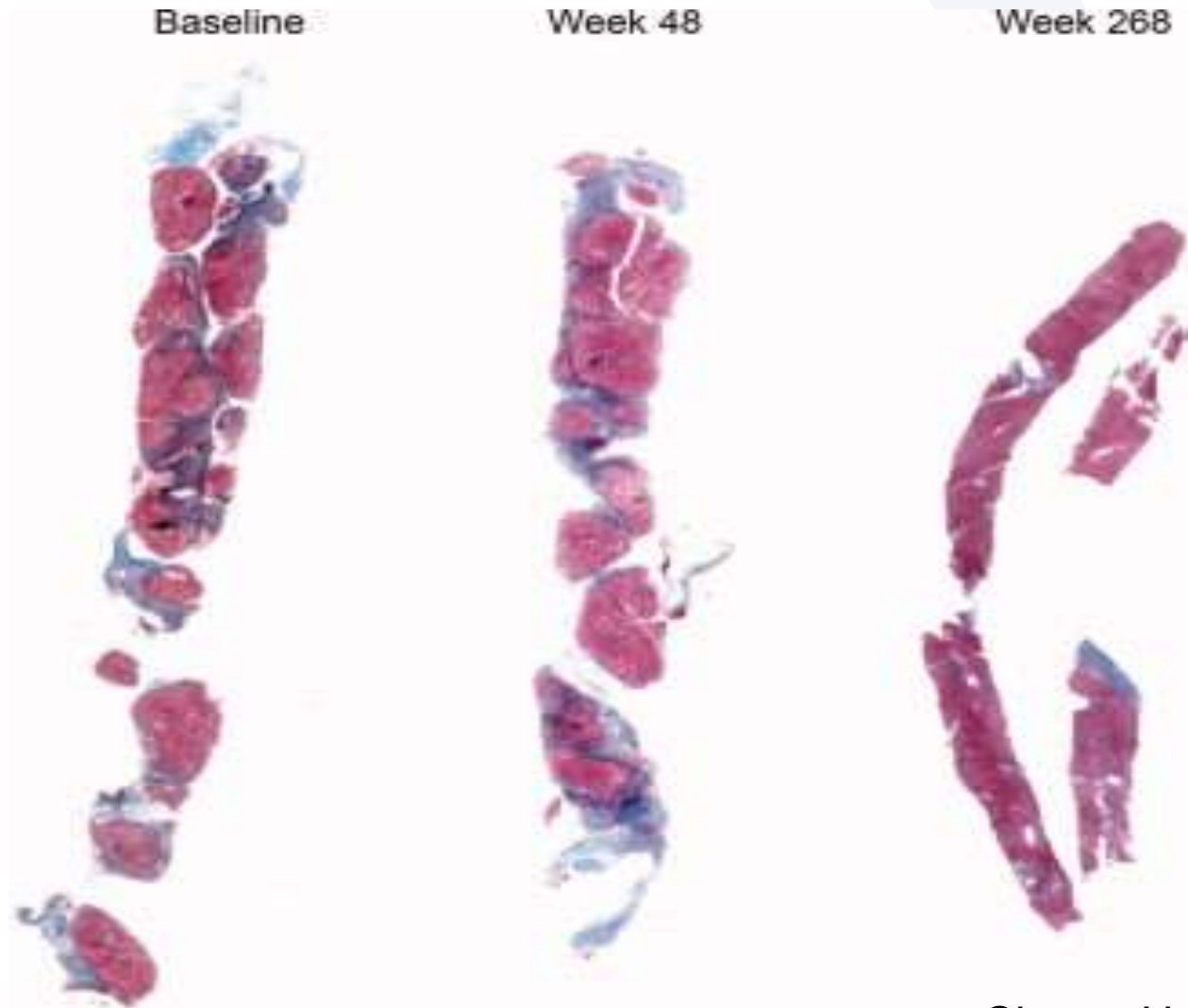




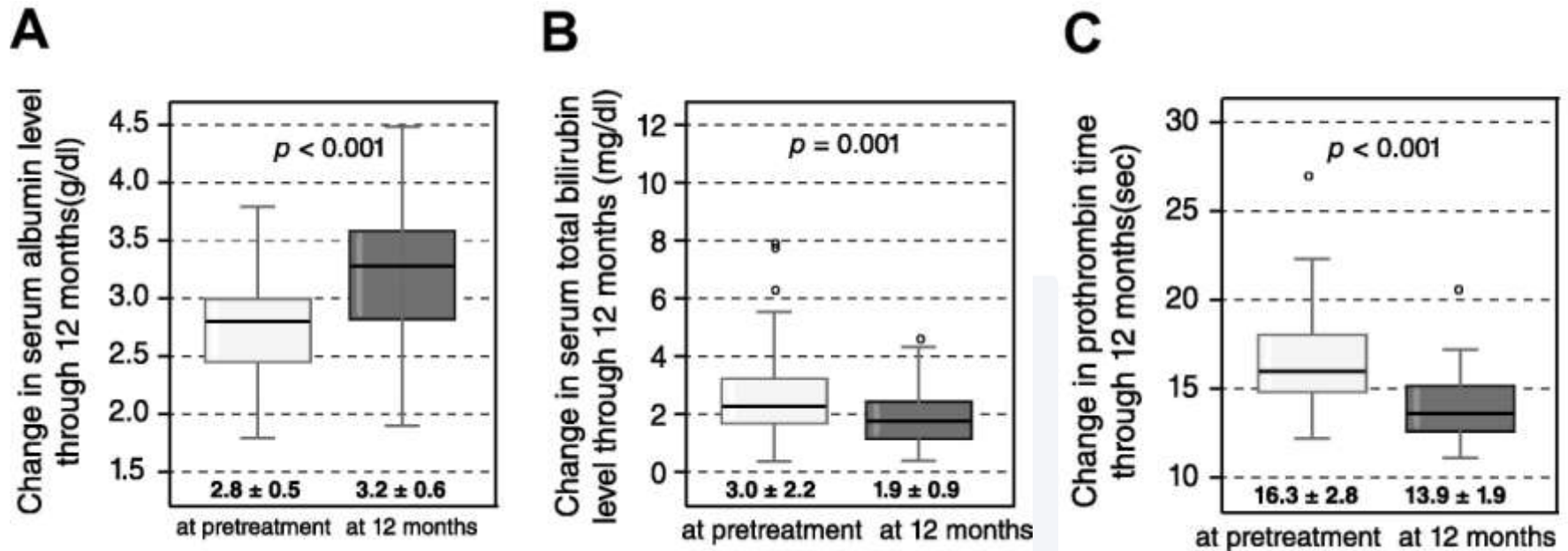
# Impact of Treatment on Progression Cirrhosis - Cancer



# Reversal of Cirrhosis

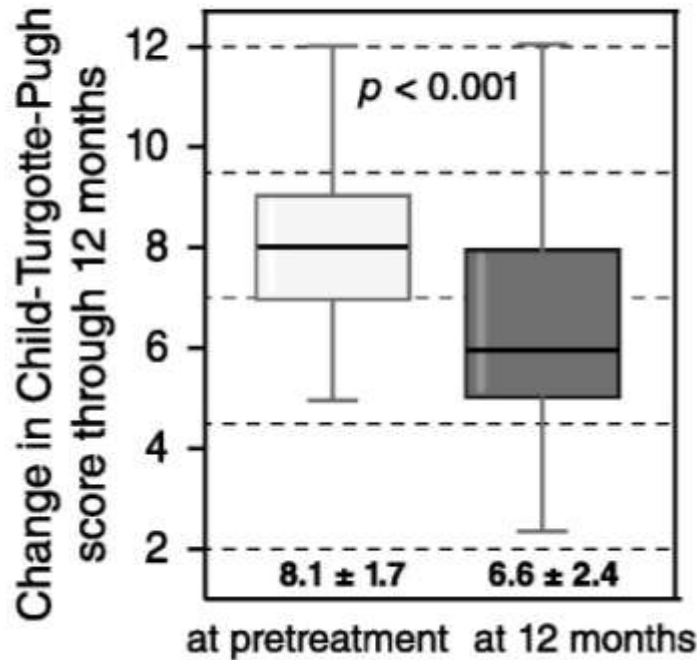


# Treatment of Decompensated HBV

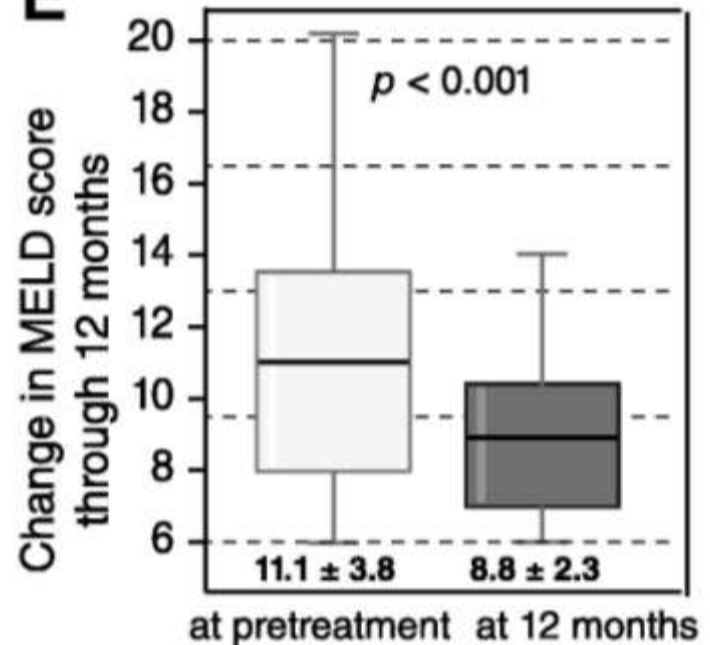


# Treatment of Decompensated HBV

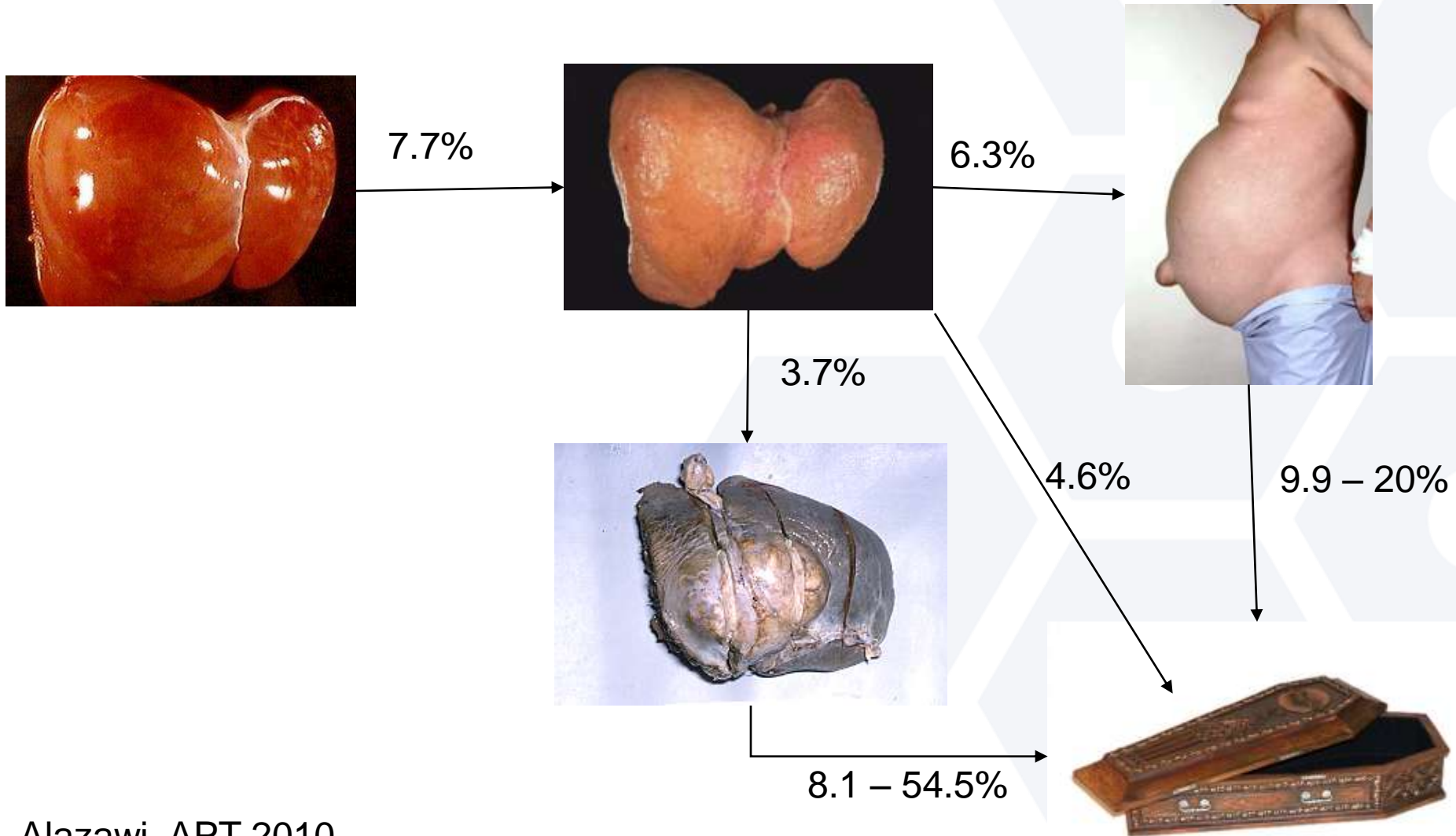
**D**



**E**



# Progression of Disease in HCV



# Progression to HCC in Patients with HCV Infection

Clinical Setting	Geographic Area	No Studies	No Patients	Mean follow up (years)	HCC incidence (%)	95% CI
Chronic hepatitis	Europe	1	329	4.2	0	
	Japan	6	1451	6.2	1.8	1.5 – 2.05
Cirrhosis	Europe & US	13	1284	4.5	3.7	3.2-4.17
	Japan	7	626	5.8	7.1	6.19 – 7.96

# Key questions

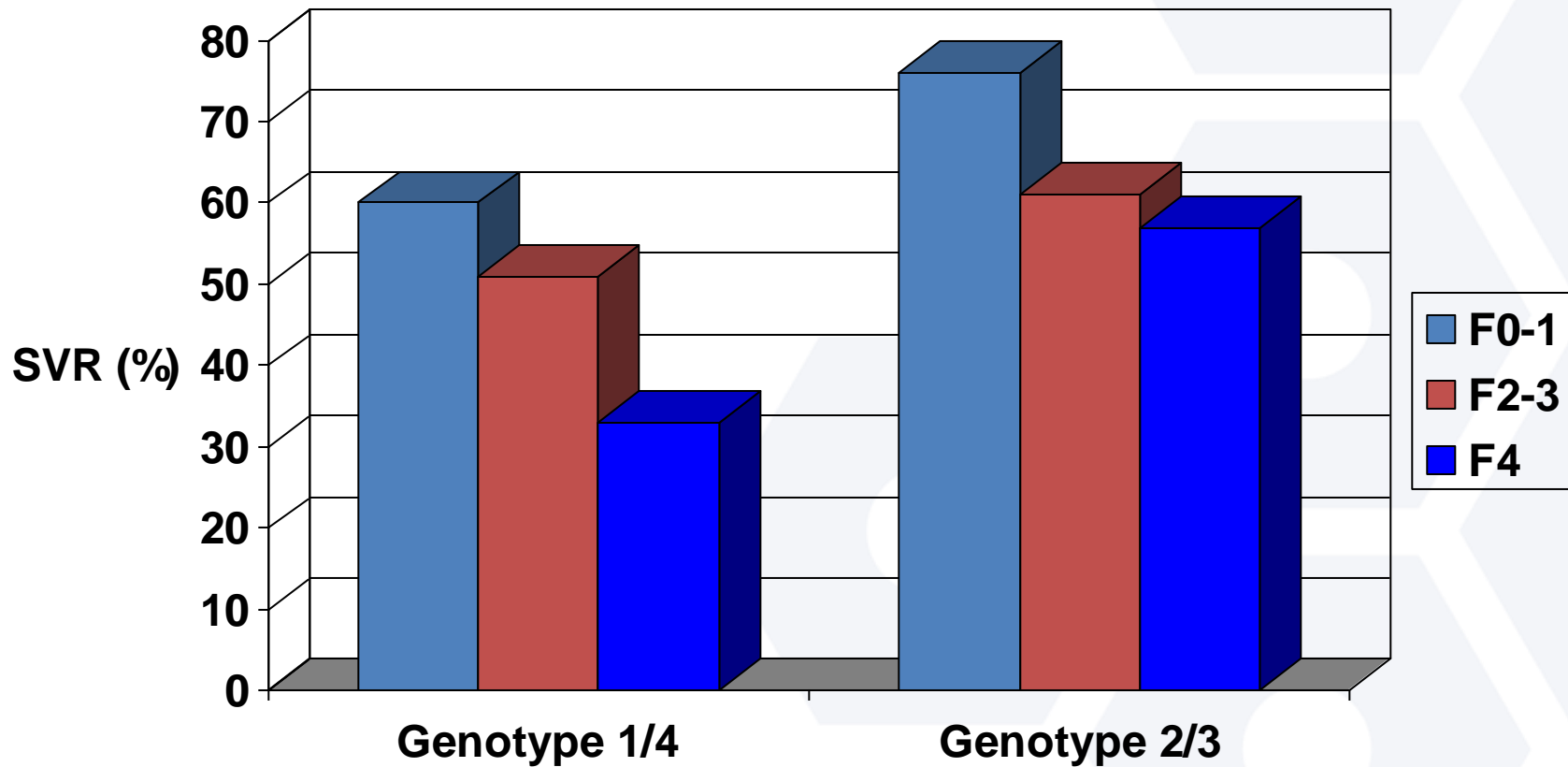
- Does treatment improve the liver histologically?
- Does treatment reverse the progression of liver disease?
- Does treatment prevent progression of cirrhosis to decompensation?
- Does treatment prevent progression of cirrhosis to cancer?
- Does treatment prolong life?

# Cirrhosis – can it be treated?

- Risks
  - Decompensation
  - Neutropaenia
  - Thrombocytopaenia



# Treatment Outcome According to Histological Severity



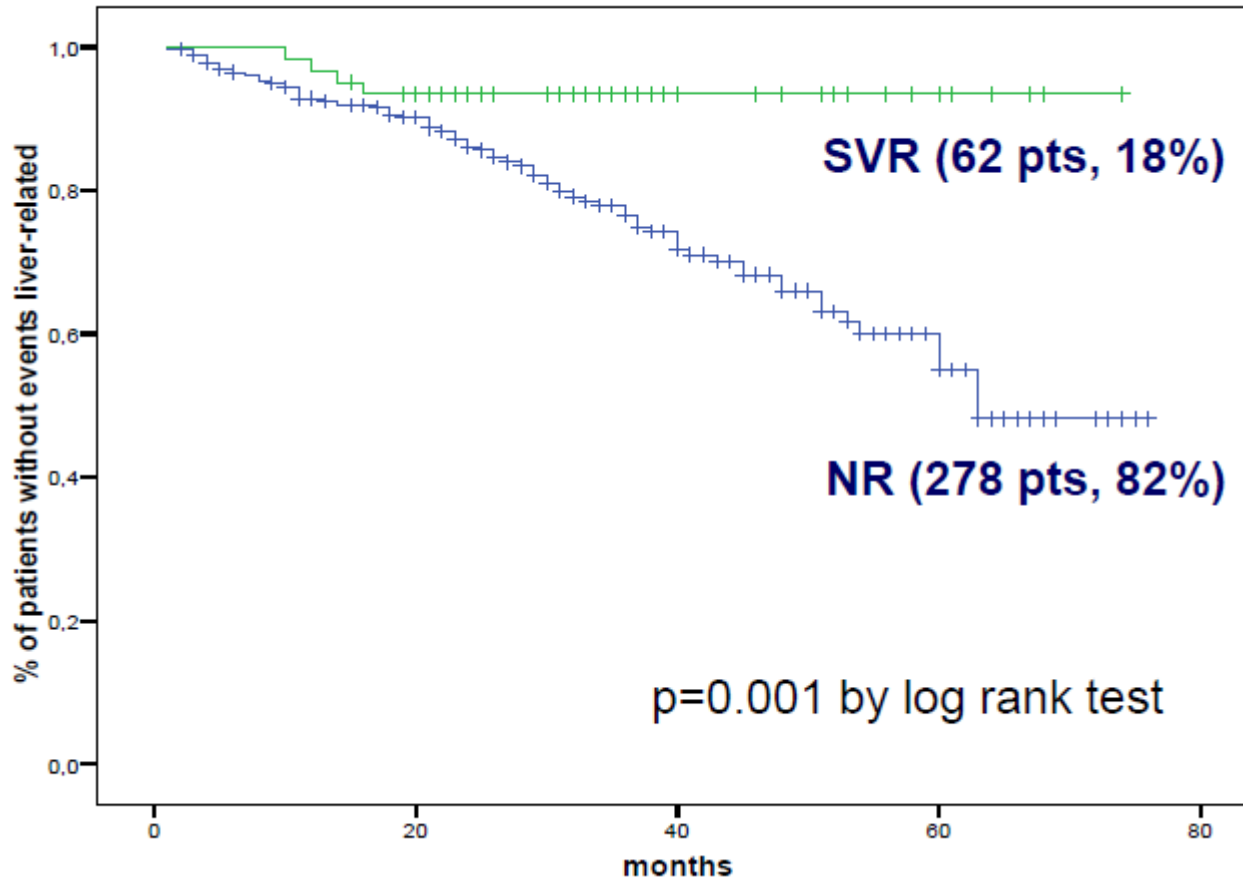
# Progression to Cirrhosis According to Treatment Outcome

Author	Year	Follow up (Years)	Rate of cirrhosis in SVR	Rate of cirrhosis in non-SVR
Sata	1997	0.6 – 3.8	0 / 25	9 / 38
Lau	1998	10 – 13	0 / 5	2 / 5
Camma	1998	0.7 – 9	0 / 62	5 / 360
Ajello	1999	10	1 / 10	0 / 21
Morisco	1999	4	0 / 39	12 / 115
Gianni	2001	1 – 6	0 / 15	3 / 21
Shindo	2001	8 – 11	0 / 67	62 / 183
Gallego	2000	4	0 / 11	33 / 87
Swain	2004	8	0 / 989	8 / 997
Vedt	2004	1.6	6 / 110	3 / 15
Cianco	2006	7	0 / 83	3 / 86
Chavalidhamrong	2006	3	0 / 171	27 / 171
			<b>0.43%</b>	<b>7.7%</b>

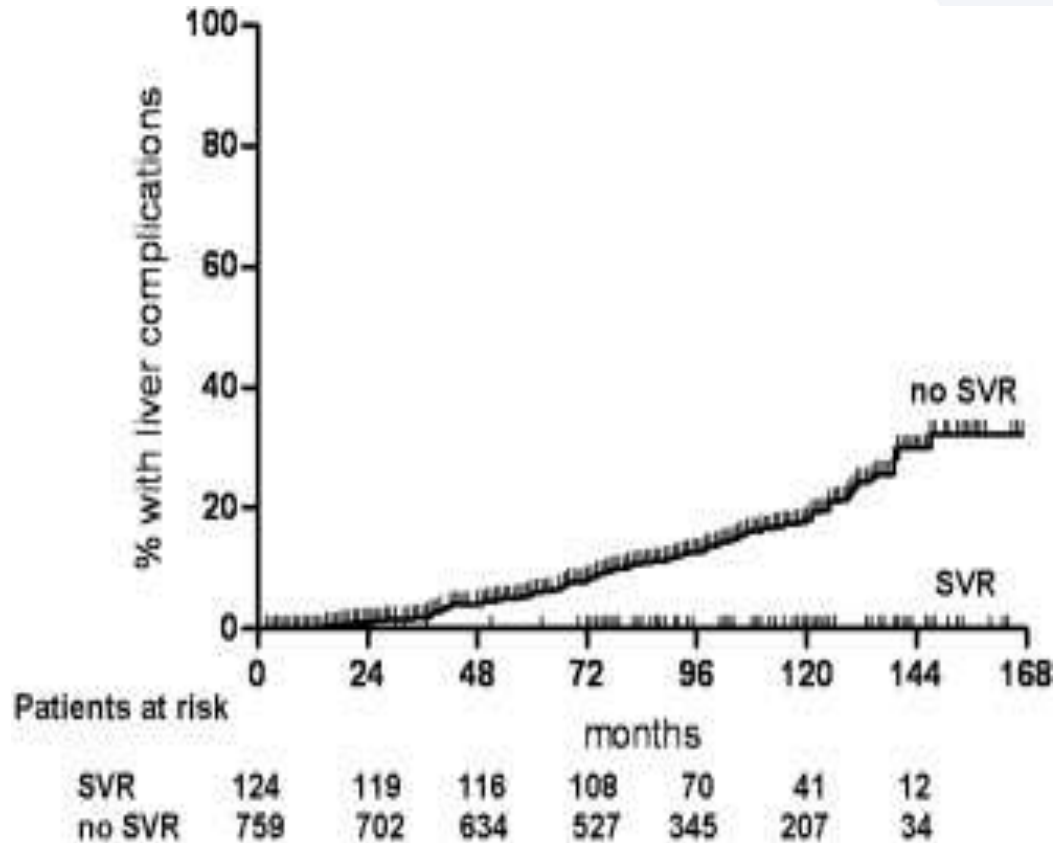
# Effect of Treatment on Liver Related Death

Factor	OR	P
Age	1.05	P < 0.005
Treatment	0.54	P = 0.02
SVR vs Untreated	0.05	P < 0.003
No SVR vs Untreated	0.72	P = NS

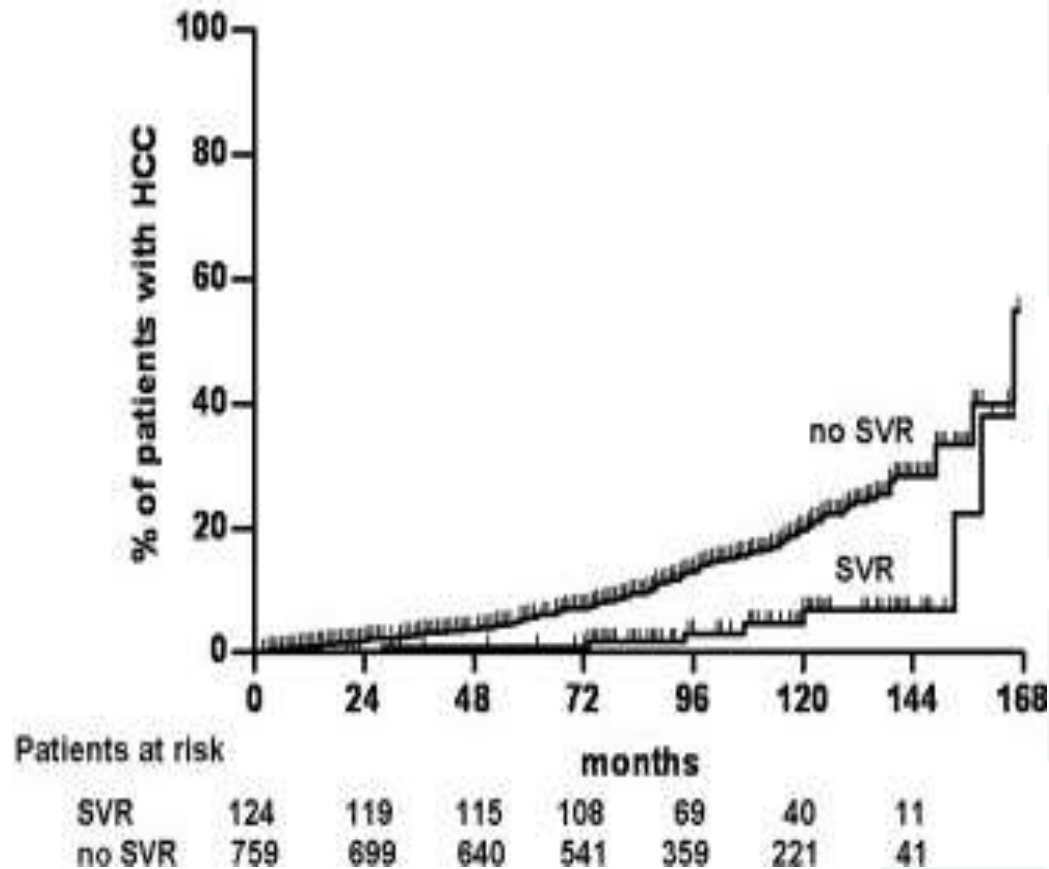
# Impact of Viral Elimination on Progression Cirrhosis - Decompensation



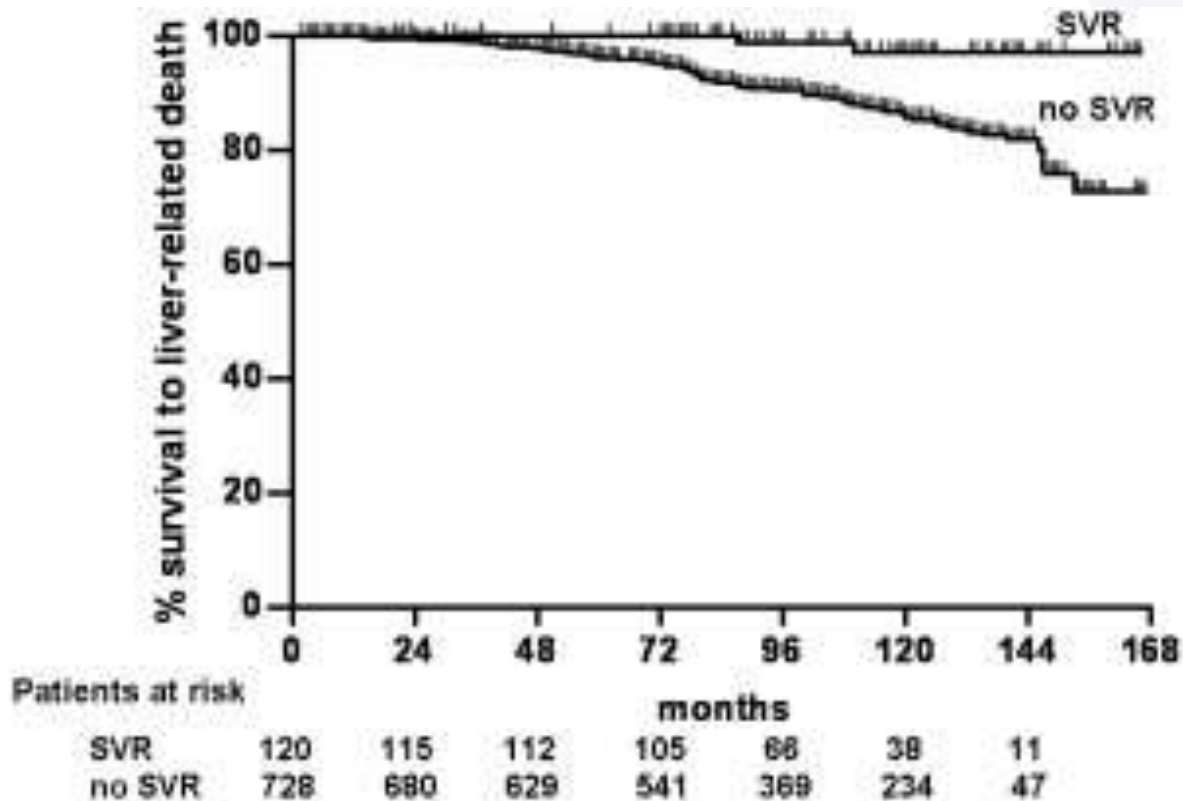
# Impact of Viral Elimination on Progression Cirrhosis - Decompensation



# Impact of Viral Elimination on Progression Cirrhosis - Cancer



# Viral Elimination Reduces Mortality



# Summary

- HBV in cirrhotics can be controlled
- Suppression of HBV reduces the risk of disease progression
- Decompensated HBV cirrhosis can be reversed
- HCV in cirrhotics can be cured
- Elimination of HCV reduces the risk of HCC / Liver related death
- Cirrhosis may be reversible