

Disease burden in Hungary:
chronic viral hepatitis and liver disease in Hungary

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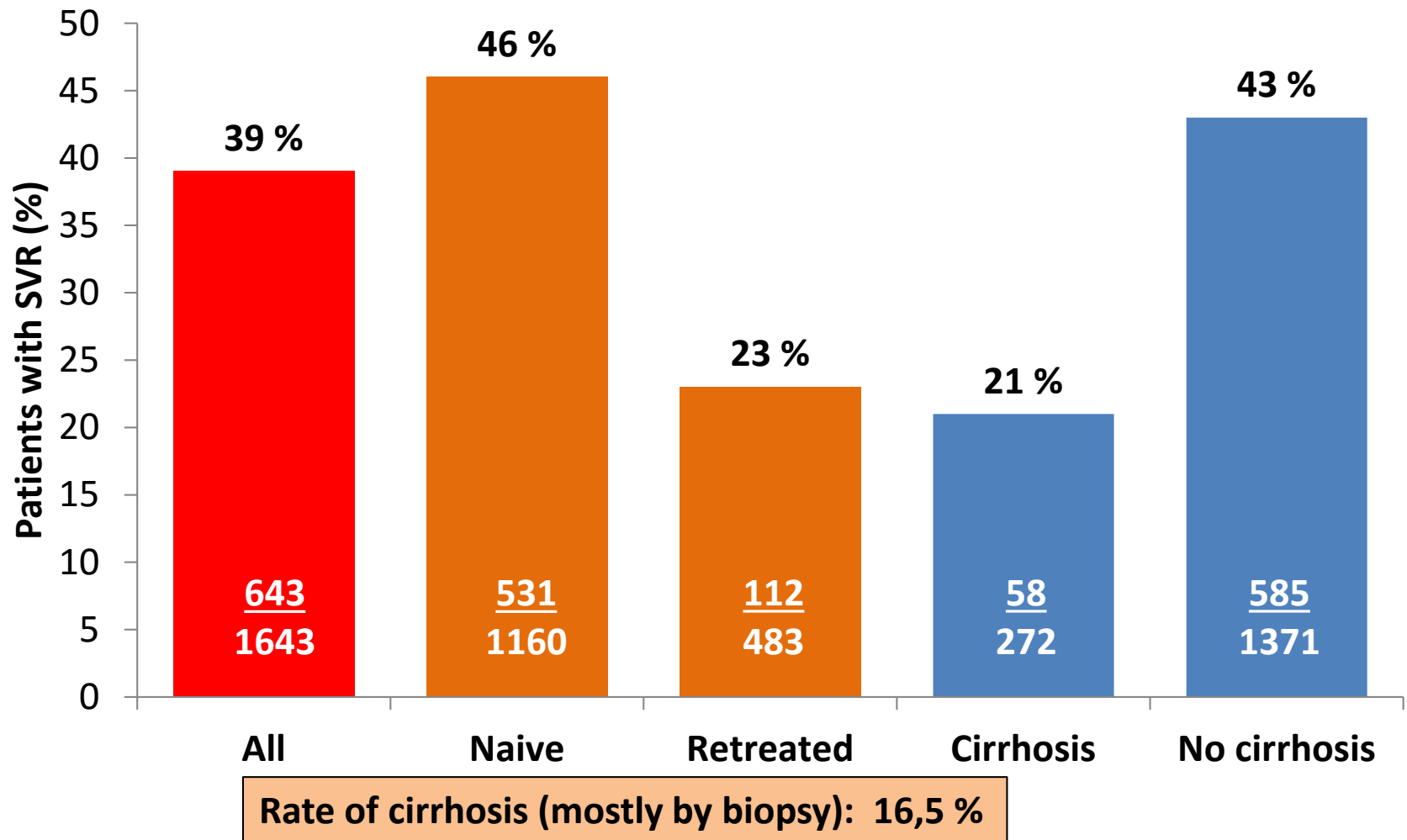
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Topics today

- HCV infected patients' characteristics during the IFN and IFN-free era
- Patients with chronic kidney disease and HCV
- Patients with bleeding diathesis and HCV
- Retrospective analysis of patients diagnosed with HCC at our university
- Malignant disorders in HCV infected patients achieving sustained virological response (SVR): outcome after IFN vs. DAA treatment

IFN-based treatment of patients with HCV infection (GT1) in Eastern-Hungary, between 2004 and 2009 (Retrospective analysis)



Prospective trials for treatment of chronic C hepatitis (Treatment naive genotype 1 patients)

Prophesys (2007-2011)

international phase IV trial

Number of patients	645
Age	49 (18-79) y
Fibrosis	
F3-4	110/345 (31,9%)
F0-2	235/345 (68,1 %)
Not assessed	310
SVR	300/654 (45,9%)
Relapse rate	111/405 (27,4%)

Ribadose (2009-2012)

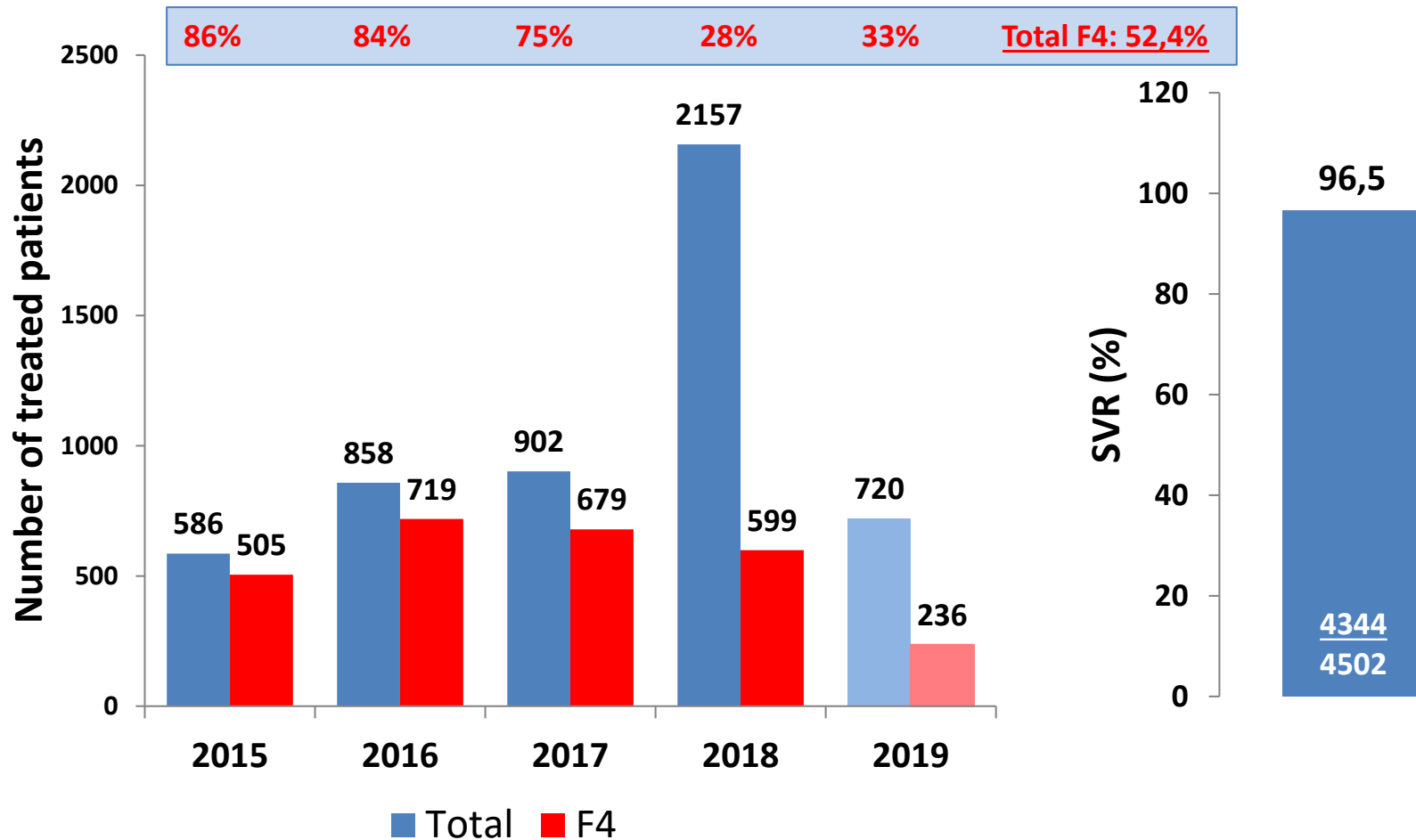
Hungarian phase IV trial

Number of patients	693
Age	52 (18-80) y
Fibrosis	
F3-4	96/398 (24,2%)
F0-2	302/398 (75,8%)
Not assessed	295
SVR	295/693 (42,6%)
Relapse rate	121/446 (27,1%)

Rate of cirrhosis (where assessed): 27,7%

Patients treated with DAAs (2015-2019)

The rate of cirrhosis and the SVR



The number and the rate of patients with cirrhosis are decreasing

Chronic kidney disease (CKD st. IV-V) at our center

The past: Interferon-based treatment between 1995-2014

Number of patients	22
Basic disorder, origin of infection	
HCV induced glomerulonephritis	13
HCV infection during HD or kidney Tx	9
Age (year)	45 (21-62)
Previous kidney transplantation	10
Therapy	
Standard IFN+ribavirin 48 weeks	
PegIFN+ ribavirin 48 weeks	
Outcome (SVR)	50% (11/22)
Kidney tx following SVR	1

Chronic kidney disease (CKD st. IV-V) at our center

The present: interferon-free treatments after 2014

Patients on haemodialysis

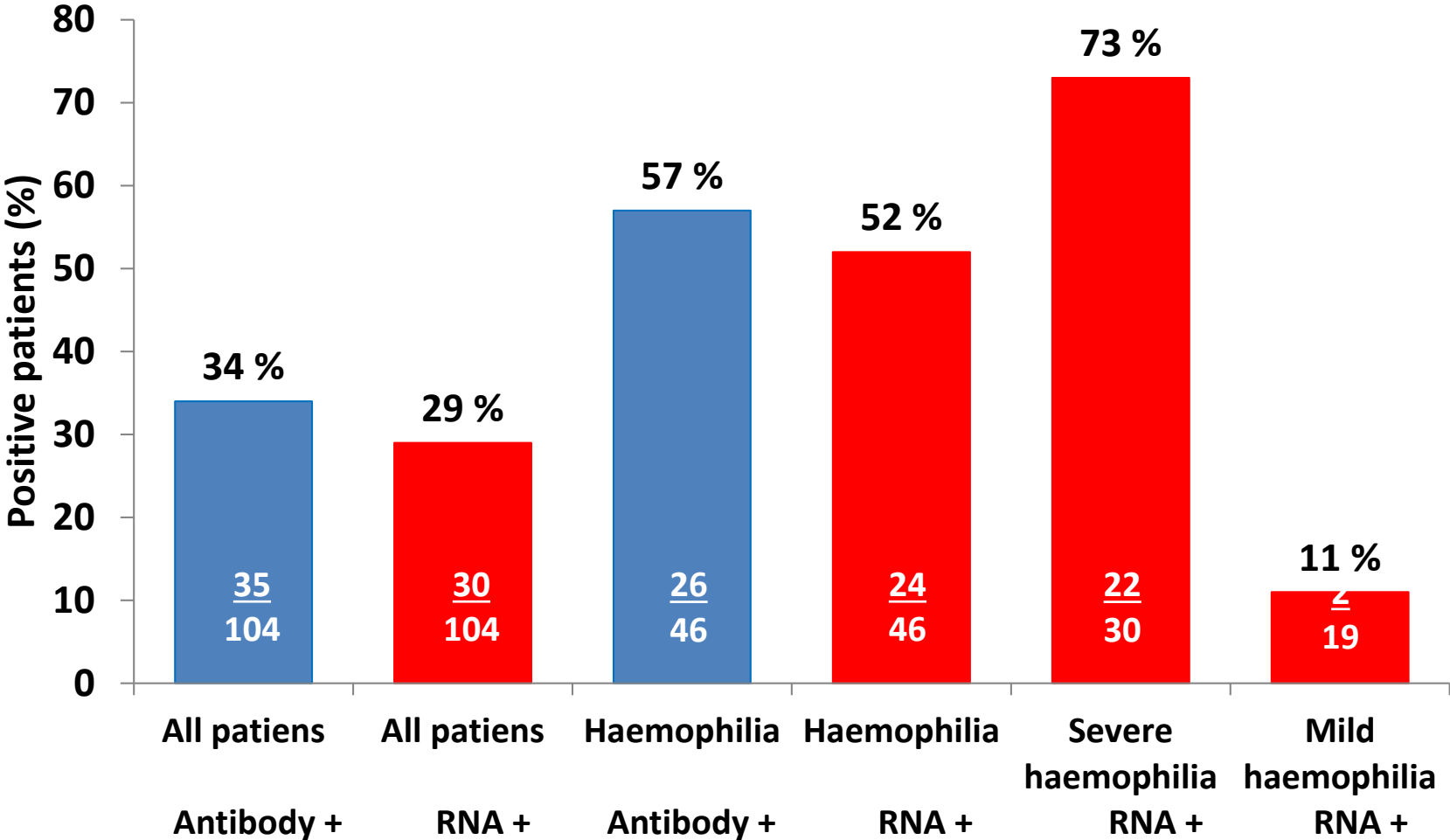
Number of patients	17
Time on HD (y-range)	15 (1-34)
Previous kidney tx	9 patients (1-2x)
Age at therapy	53 (28-74)
Fibrosis	
F3-4	8
F0-2	9
Outcome (SVR)	17/17 (100%)

Patients after kidney tx

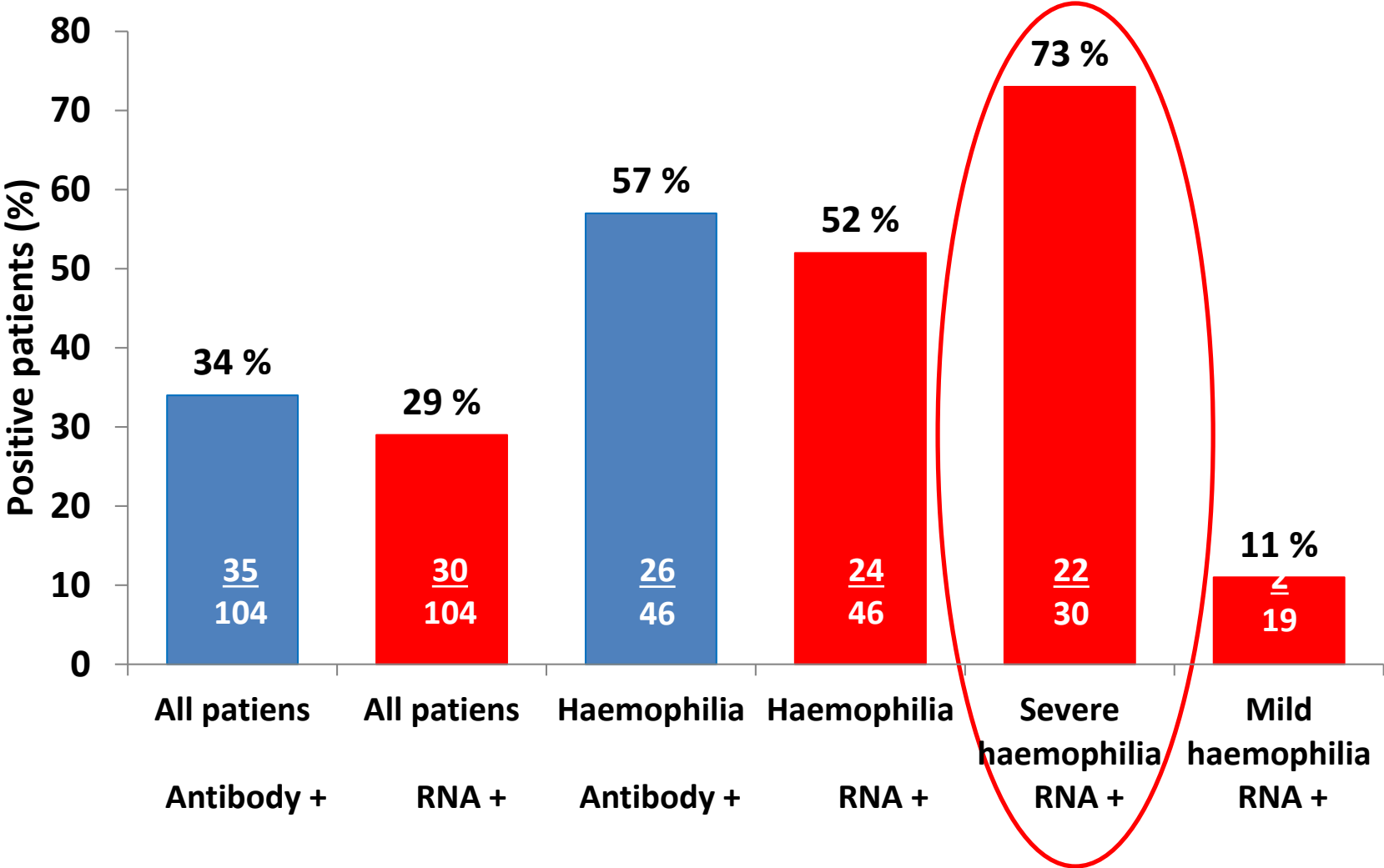
Number of patients	5
Time with tx (year-range)	11 (7-16)
Previous kidney tx	1 patient
Age at therapy	47 (31-68)
Fibrosis	
F3-4	1
F0-2	4
Outcome (SVR)	4/5 (80%)

All HCV infected patients with CKD (st. IV-V) have been cured at our center!

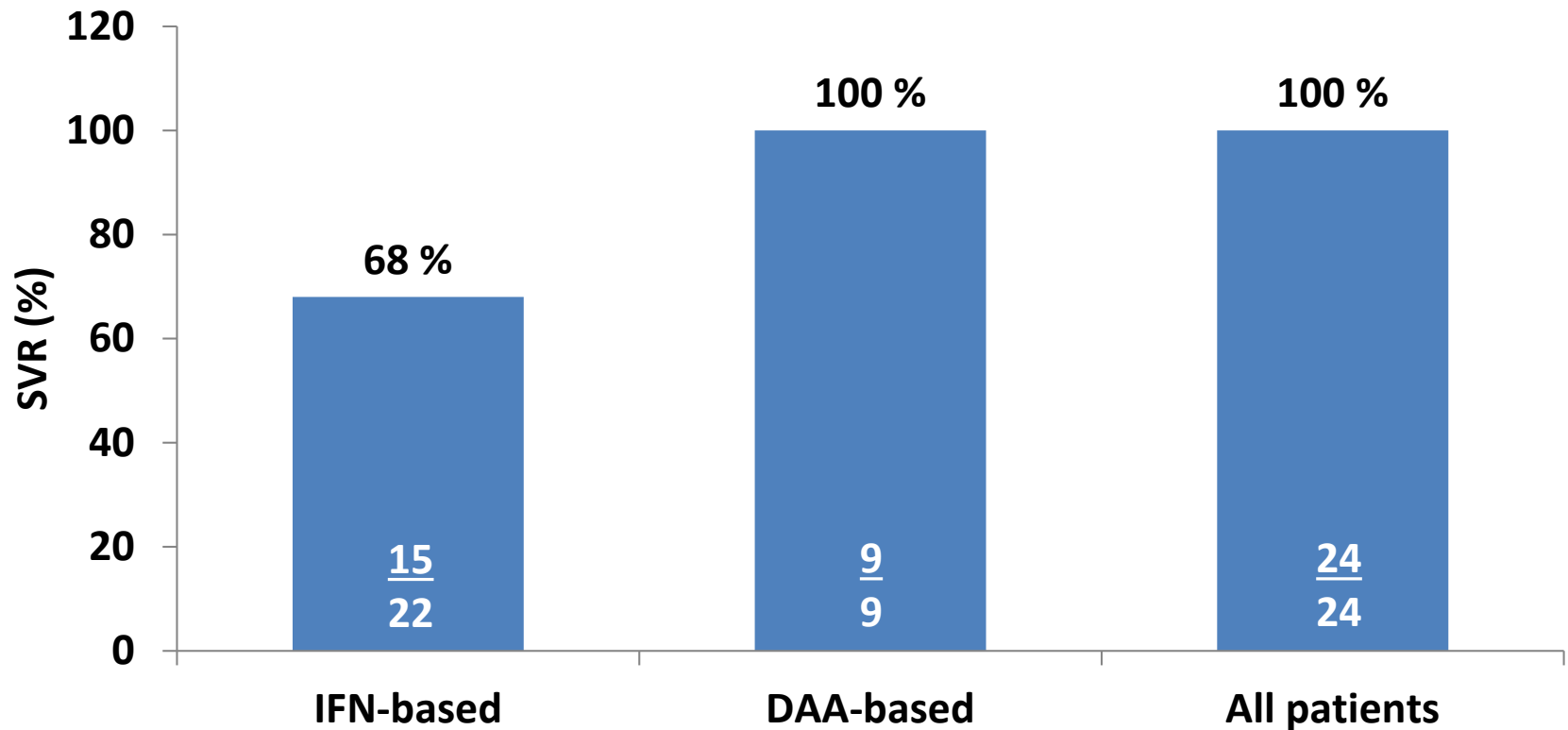
HCV positivity among patients with bleeding disorders at our center



HCV positivity among patients with bleeding disorders at our center



Treatment outcome of patients with bleeding diathesis and HCV infection



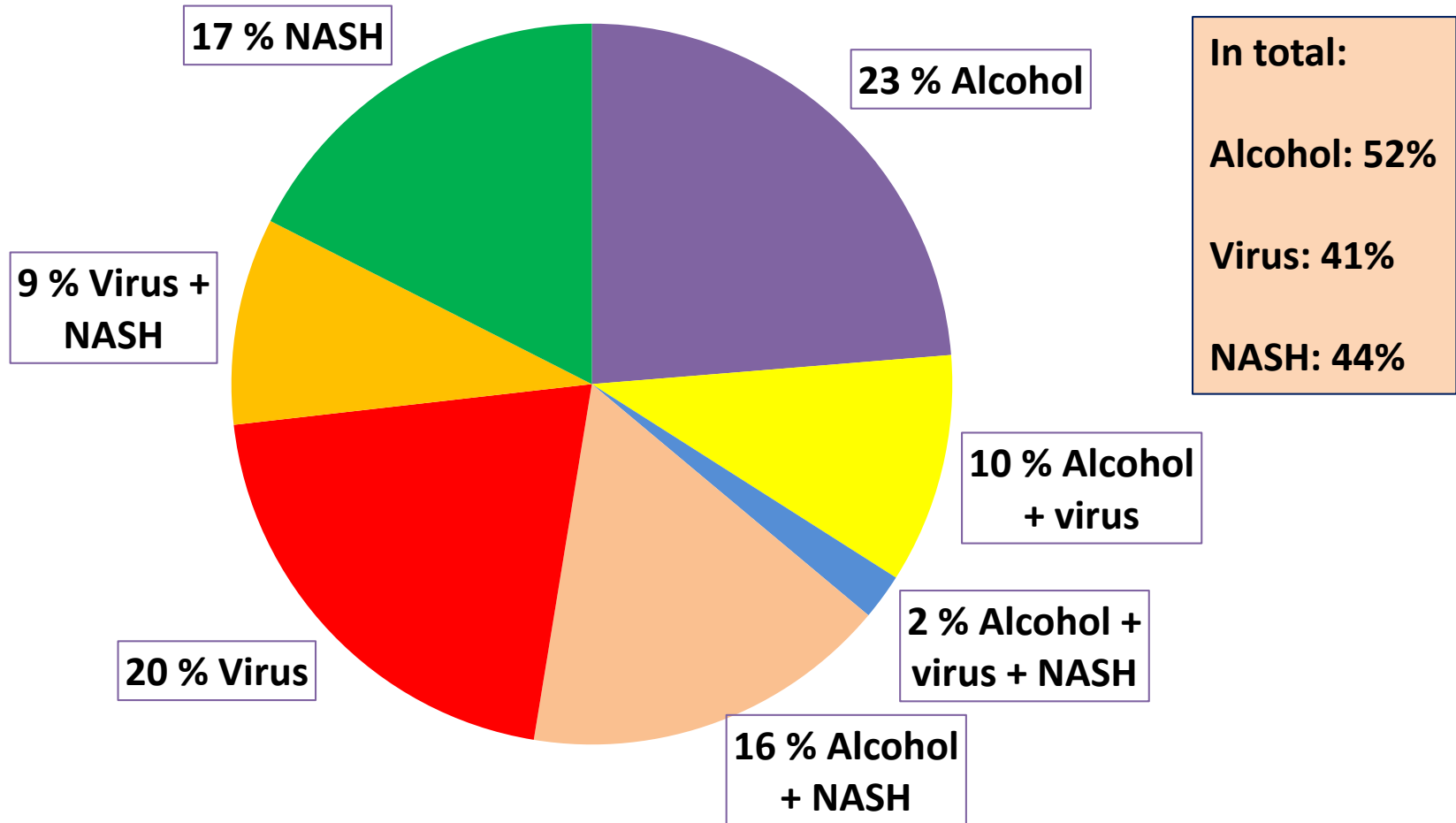
All regularly controlled patients have been cured !

Retrospective analysis of patients diagnosed with HCC at the University of Debrecen

- Time: 2009-2014 - 5 years
- All patients with histologically confirmed HCC
- Etiology of HCC (if available)
- Stage of HCC and liver disease (cirrhosis vs. no cirrhosis)
- Therapy (according to Barcelona guideline?)
- Survival

Etiology of HCC

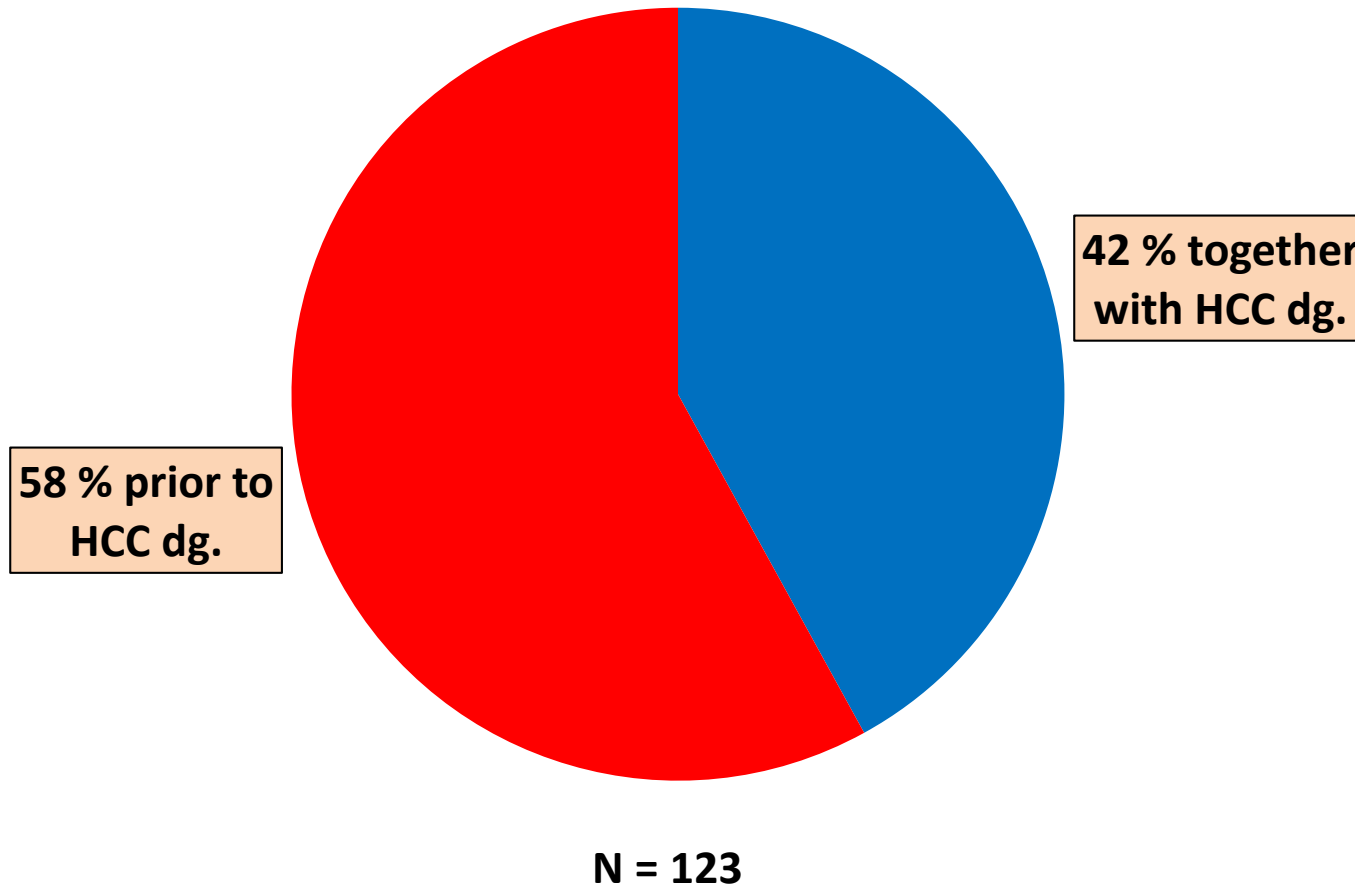
(Known in 149/187 patients – 80%)



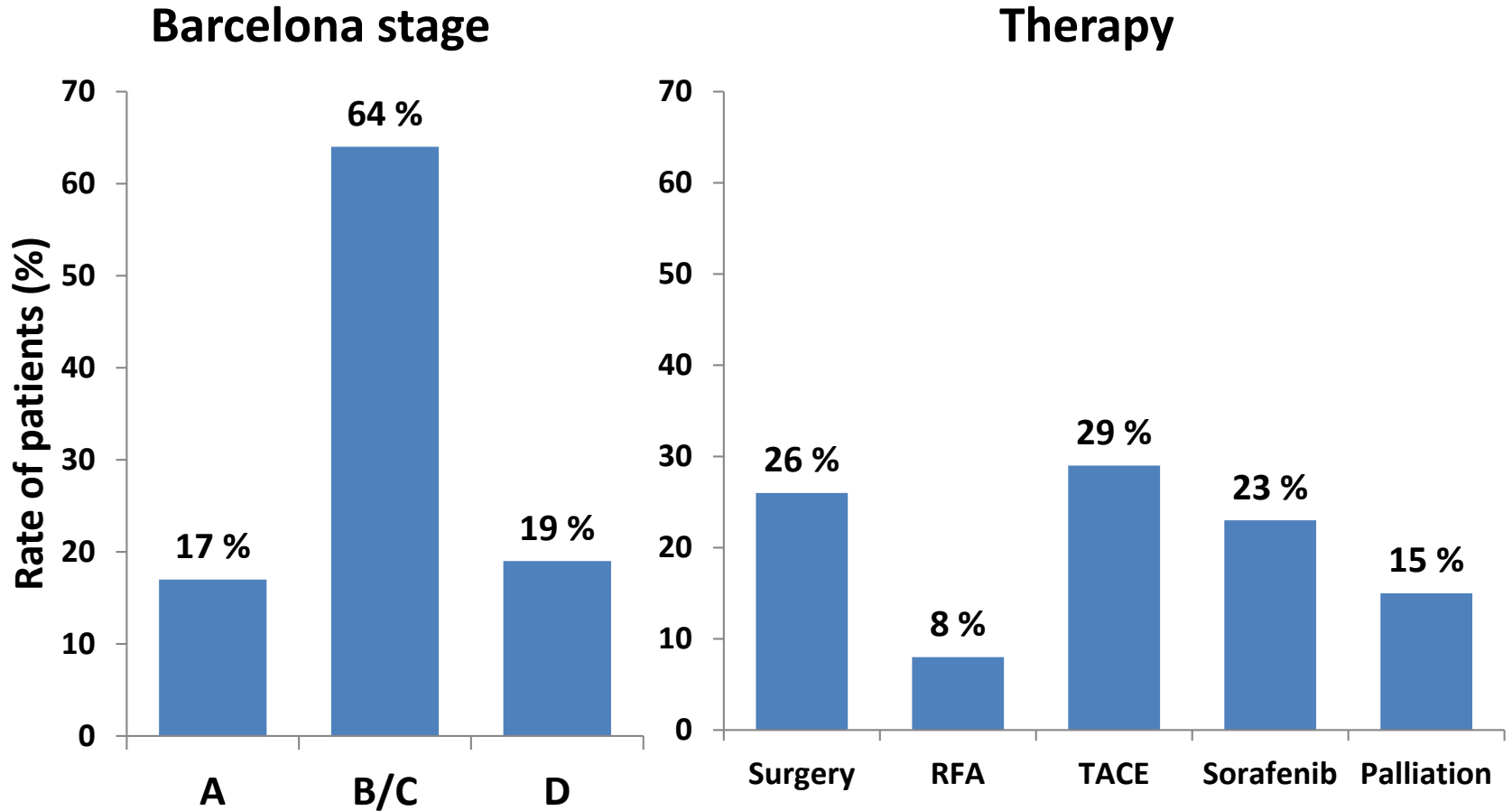
Stage of liver disease in patients with HCC

Total number of patients: n (%)	187 (100%)
Cirrhosis: n (%)	123/187 (66%)
No cirrhosis: n (%)	15/187 (8%)
No data: n (%)	49/187 (26%)

The diagnosis of HCC and cirrhosis was established at the same time in 42% of patients!

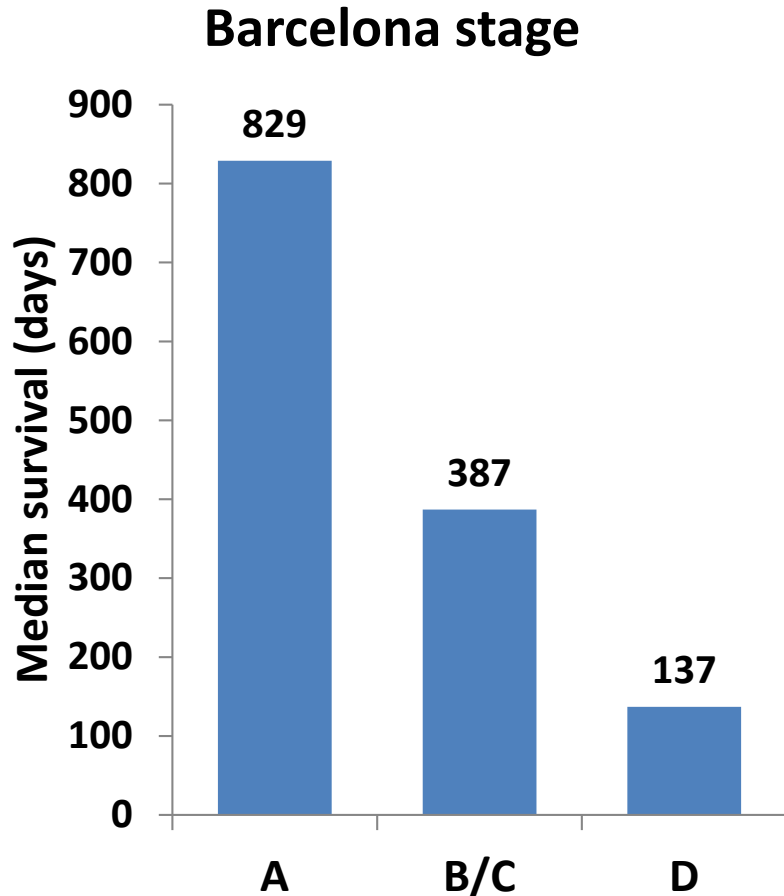


Stage of HCC at diagnosis and the therapy



RFA: radio frequency ablation
TACE: transarterial chemoembolisation

Median survival according to stage of HCC



- The median survival time was associated with the stage of HCC.
- Survival was not associated with etiology of HCC.

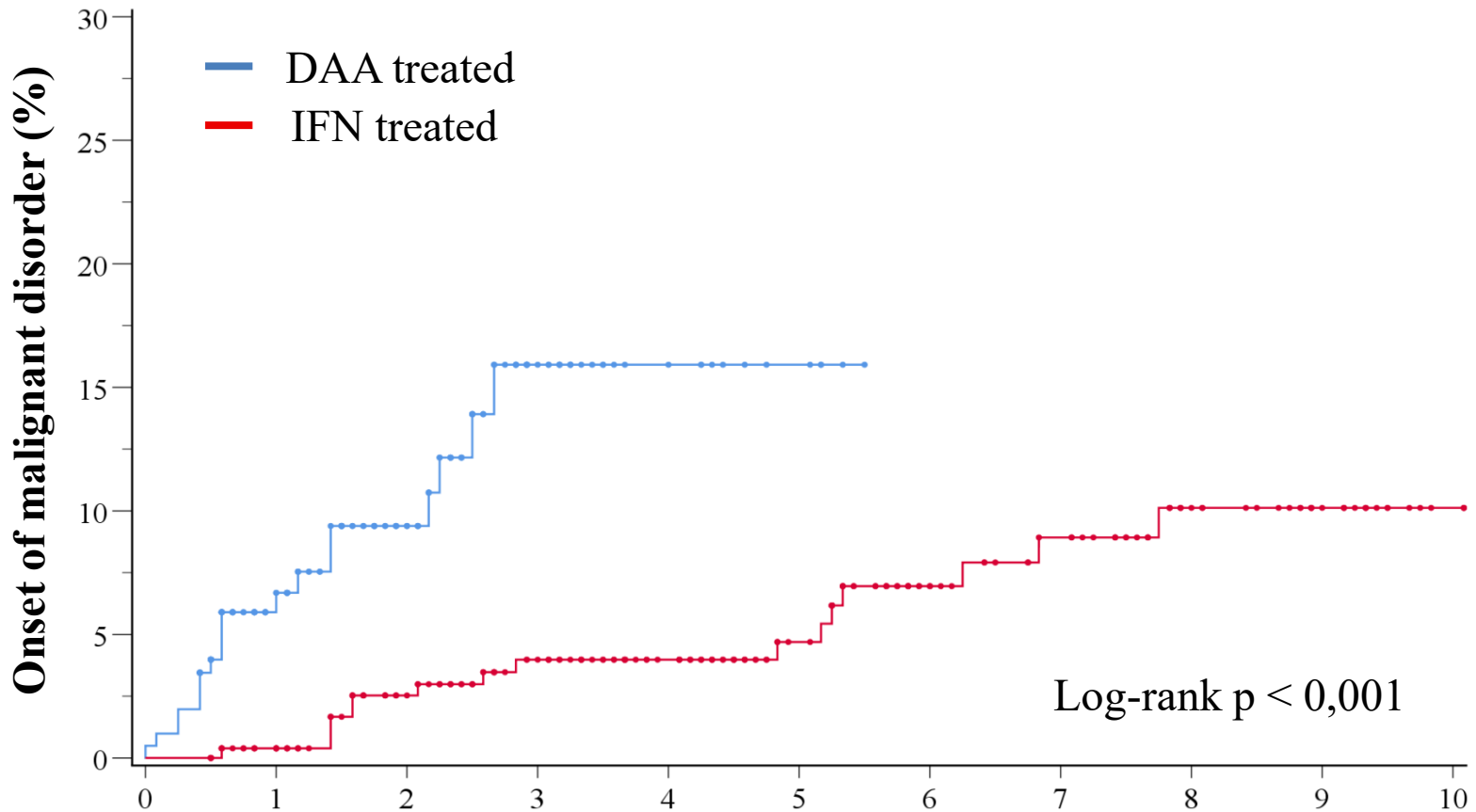
Conclusions

- To find patients in earlier stage in order to increase survival, regular screening of patients with advanced liver disease is mandatory.

Onset of malignant diseases following SVR (IFN-based vs. DAA regimen)

		IFN-based N=265	DAA N=203	P value
Patients (M/F)		143/122	96/107	0,152
Previous peg-IFN treatment		68 (27,1%)	106 (52,2%)	<0,001
Fibrosis	F0-2	120 (52,7%)	65 (32%)	<0,001
	F3	49 (21,1%)	29 (14,3%)	
	F4	63 (27,2%)	109 (53,7%)	
Age at SVR: year (median, IQR)		50 (42-58)	58 (53-65)	<0,001
Follow-up time: months (median, IQR)		58 (31-99)	16 (6-29)	<0,001

Onset of malignant diseases following SVR

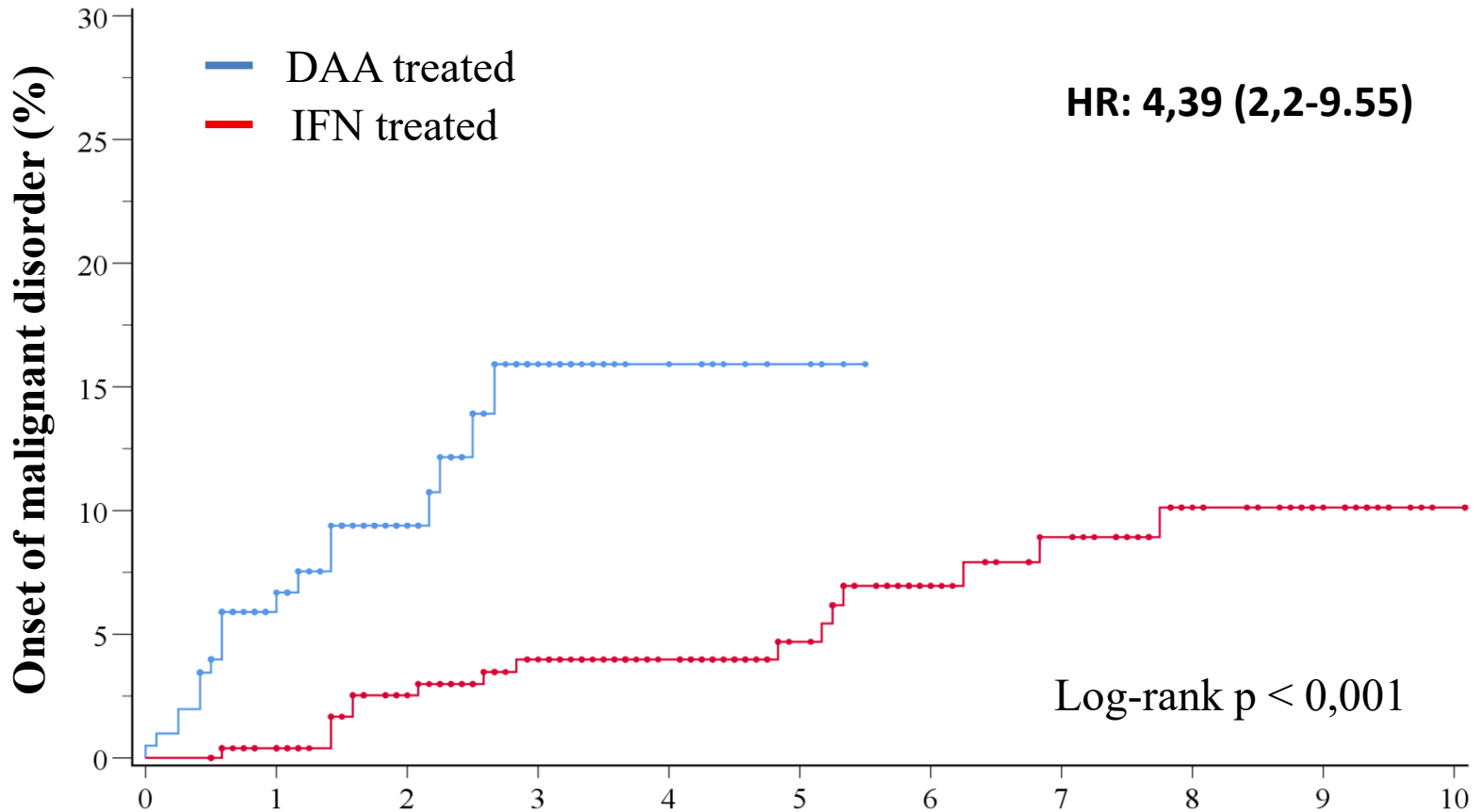


Number of patients

Years

—	221	120	74	29	12	5					
—	268	246	215	188	160	130	101	89	69	56	42

Onset of malignant diseases following SVR



Number of patients

Years

—	221	120	74	29	12	5					
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Tumor types

	IFN	DAA
HCC/CCC	4	7/1
NHL		4
Gastric	2	1
Pancreas	2	1
Brest	2	2
Gynecology	1	1
Lung	3	1
Urinary tract	1	1
Colon	1	
Total: n (%)	16 (6%)	19 (9.4%)
Onset after SVR	33 (18-64) months	7 (5-17) months

Statistical analysis

Cox regression

	HR	95% CI	p-value
Advanced age	1,04	1,01 - 1,09	0,025
Cirrhosis at treatment	2,49	1,12 - 5,53	0,026
Previous unsuccessful IFN-based treatment	1,73	0,85 - 3,55	0,133
DAA vs. IFN treatment	1,92	0,83 - 4,45	0,127

Conclusion

- In patients with cirrhosis achieving SVR a thorough monitoring is needed following antiviral therapy.

Final conclusion

We need to increase the screening activity in order to

- find the still hidden patients with HCV
- find them at early stage
- prevent complications of advanced liver disease

Thank you for your attention!