RELATIONSHIP BETWEEN ADHERENCE TO HEPATITIS C TREATMENT AND RAPID, EARLY AND SUSTAINED VIRAL RESPONSE (poster number: CP-079)

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BACKGROUND

Adherence to hepatitis C virus (HCV) therapy has demonstrated a direct relationship with response. High adherence throughout the initial 12 weeks of treatment is related to better virological outcomes.

PURPOSE

To assess HCV treatment adherence and to evaluate the relationship between adherence and rapid (RVR), early (EVR) and sustained virological response (SVR).

MATERIAL AND MÉTHODS

Retrospective observational study of HCV infected patients who ended antiviral treatment with pegylated interferon (peg-IFN) + ribavirin (RBV) ± protease inhibitor (PI) between January 2011-December 2013.

Demographic and clinical data recorded as covariates: age, sex, weight, HIV infection, HCV genotype; quantitative HCV RNA; peg-IFN, RBV and PI dosages, frequency and quantities dispensed; psychiatric disorders.

RESULTS

183 patients were included; 63.9% naive, 9.3% prior non-responders and 19.7% relapser patients. Baseline characteristics are shown in Table 1.

Parameter	No (%)
Sex	
Male	126 (68.9%)
Female	57 (31.1%)
Median weight	77 kg (95%CI 73.74-80.7)
HCV/HIV co-infection	26 (14.2%)
Liver transplantation	35 (19.1%)
Genotype	
1 / 2 / 3 / 4	71.2 / 5.8/ 16.3 / 6.7 %
IL-28B polymorphism	
CC vs CC/TT	13 (28%) vs. 33 (72%)

Table1. Demographic and Clinical Characteristics

20.2% of the patients received peg-INF+RBV+PI (Figure 1). 11.7% needed RBV or p-IFN dose reduction; and 3.3% required additional treatment with EPO or CSF.
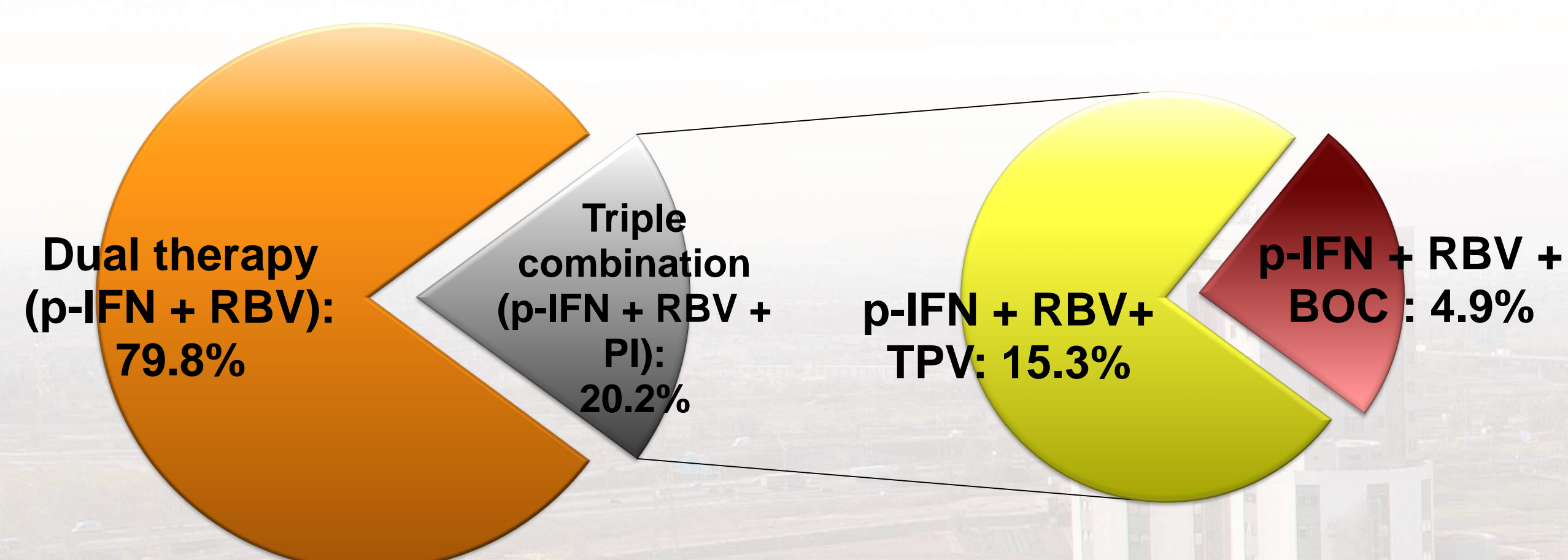

Figure 1. Treatment schedules. p-IFN: Pegylated interferon alpha 2a, RBV: Ribavirin, PI: Protease inhibitors; TPV: Telaprevir, BOC: Boceprevir

Patients who attained SVR (viral load (VL) <30): 57.9% (47.1% if genotype-1 vs. 73.8% the other genotypes; p=0.011). The cure rate among patients that received protease inhibitors was 72.2%. Response rates are shown in Figure 2.
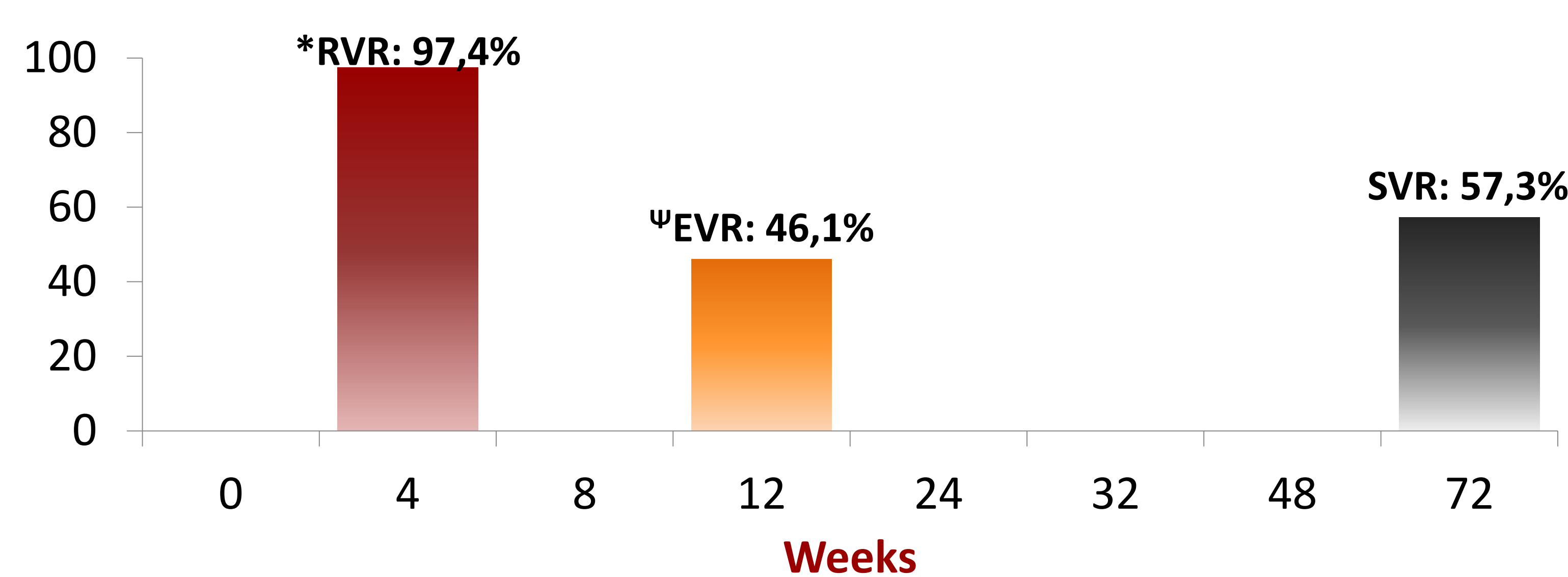

Figure 2. RVR : Rapid virological response (at week 4). EVR: Early virological response (at week 12). SVR: Sustained virological response (at week 72 (24 weeks after discontinuing the treatment)).
*> 1$\log_{10}$ IU/ml (mean: 1,91 log IU/mL (95%CI 1,86-1,97) descrease in HCV viral load)
Ψ ≥2$\log_{10}$IU/mL decrease in HCV viral load (mean: 1,98 log IU/mL (95%CI 1,95-2))

Overall adherence according to quantities dispensed and Morisky-Green test are shown in Table 2. There was no relation between adherence rate and sex, HIV co-infection or psychiatric disorders.

	Adherence				
	<80%	80-85%	85%-90%	>90%	Mean (95%CI)
Quantities dispensed (% of patients)	5.2%	1.9%	5.8%	87%	97.35% (95.05-99.64)*
Morisky-Green Test (% of patients)	0	0	0.6%	99.4%	99.56% (99.31-99.80)*

Table 2. *p=0.053

No relation between the HCV-RNA drop at week 4 and therapy adherence was found.
VL decreased more than 2log IU/ml at week 12 among patients with > 85% of adherence (11.1% vs. 48.3%; p=0.03). The likelihood of experiencing EVR was greater among these patients.

A greater proportion of patients achieve hepatitis cure in >80% adherence subgroup, comparing with those with a median adherence <80%. (SVR of 57.7% and 50%, respectively; p>0.05).

39.6% patients attained SVR with 80-99%. of adherence rate. Among patients with 100% of adherence, the SVR was 60.4% (P=0.076). No differences among cut-offs 85% and 90% adherence were observed.

CONCLUSIONS

- Adherence > 80% is associated with higher cure rates and adherence > 85% at 12 weeks is related with greater EVR.
- No relationship between HCV-RNA drop at 4 weeks and adherence was found.
- Neither psychiatric disorders nor HIV co-infection influenced on adherence.
- Although these treatment schemes are into abeyance, this study shows that adherence is essential to get a greater chance of cure.
- More studies among new anti-HCV drugs are required to know how adherence could influence in the SVR achievement.

BIBLIOGRAPHY

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