Patients with Chronic Hepatitis C could be treated with Sofosbuvir/Velpatasvir for 12 weeks by non-specialists: final analysis of HELIOS-3

Poster #1884-A

HELIOS-3

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Conclusions

The final analysis of HELIOS-3 demonstrates the effectiveness of Sofosbuvir/Velpatasvir in real life using a Test and Treat approach, independently of the prescriber and patient's profile : 98.3% of SVR12, 30 days median time to treatment after PCR.

No difference was observed between specialists and non-specialists in safety and adherence data showing that treatment with Sofosbuvir/Velpatasvir for 12 weeks is well tolerated.

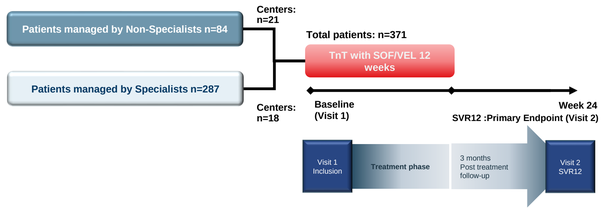
This study suggests that HCV care pathway could be more optimized regarding fibrosis assessment or genotyping.

Together, those results support the prescription expansion of Sofosbuvir/Velpatasvir to non-specialists in other countries and can be considered as a tool to reach WHO HCV elimination goals.

Methods

- Included patients were adults (18+ years) with HCV RNA above the lower limit of quantification in France following SOF/VEL-based regimens prescribed by primary care physicians and specialists. Patients signed informed consent form (ICF) prior to treatment initiation.
- Data collected from available information in medical records included patient characteristics, number of days between positive PCR/fibrosis assessment and start of therapy, and proportion of patients with sustained virologic response (SVR) 12 weeks after treatment completion.
- Qualitative variables are described as number and percentage (%); quantitative measures as mean (standard deviation; SD) or median (range) as indicated.

Study design



► Primary objective : Effectiveness of SOF/VEL as measured by SVR12

► Secondary objectives :

- Time between positive PCR and start of therapy
- Safety and tolerability of SOF/VEL under TnT real-world conditions of use

Background

- HELIOS-3 (HEpatitis C real-LIfe study for patients On Sofosbuvir) is a descriptive, multicenter, prospective phase 4 study. This final analysis aims to evaluate the effectiveness and safety of Sofosbuvir / Velpatasvir (SOF/VEL), a curative treatment for hepatitis C virus (HCV) infection, in real-life practice settings for 12 weeks.
- Patient management includes a Test and Treat (TnT) approach to expedite treatment initiation and a pathway for severe patients followed-up by hepatologists. TnT consists of checking the HCV RNA and the fibrosis score in order to treat HCV patients without comorbidities as soon as possible independently of all genotypes.
- In France, prescribing rights were extended in May 2019 to all physicians including those working in prisons, addiction centers, and psychiatric hospitals. In this study, hepatologists were defined as specialists and all other physicians were defined as non-specialists.

Table 1. Baseline Demographics Characteristics

		Specialists N=287 (77.4%)	Non-Specialists N=84 (22.6%)	Total N=371
Mean Age (years)		54.8 (19.8 ; 90.2)	47.4 (24.2; 77.6)	53.1 (19.8; 90.2)
Sex at Birth	Female	114 (39.7%)	17 (20.2%)	131 (35.3%)
	Male	173 (60.3%)	67 (79.8%)	240 (64.7%)
HCV Genotypes		n=237	n=77	n=314
	Genotype 1	89 (37.6%)	22 (28.6%)	111 (35.4%)
	Genotype 2	10 (4.2%)	5 (6.5%)	15 (4.8%)
	Genotype 3	41 (17.3%)	11 (14.3%)	52 (16.6%)
	Genotype 4	21 (8.9%)	6 (7.8%)	27 (8.6%)
	Genotype 5	2 (0.8%)	0 (0.0%)	2 (0.6%)
	Unknown	74 (31.2%)	33 (42.9%)	107 (34.1%)
HIV Coinfection		8 (2.8%)	12 (14.3%)	20 (5.4%)
Advanced fibrosis ≥10	Fibroscan	60 (26.3%)	7 (18.4%)	67 (25.2%)
	FIB-4 >3.25	46 (18.2%)	6 (9.1%)	52 (16.3%)
Cirrhosis*		48 (18.5%)	8 (11.4%)	56 (17.0%)
Evidence of Hepatocellular Carcinoma		15 (8.2%)	1 (3.0%)	9 (5.3%)

Percentages were calculated from available data, not from the total population
* fibrosis stage F4 (i.e Fibroscan ≥ 13 kPa or Fibrotest ≥ 0.75 or Fibrometer ≥ 0.95)
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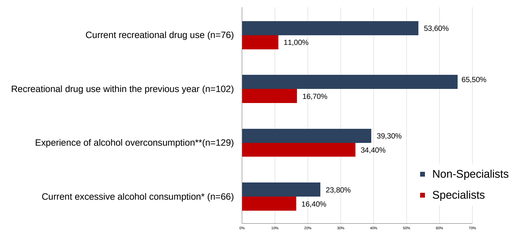
Figure 2. Consumption of Alcohol and Drug Use



*Response to: "What is the patient's Current Alcohol Consumption?": Excessive = 3 or more units/days.
** Response to "Has the patient ever experienced Alcohol Overconsumption": Yes/No

Results

Disposition of patients

A total of 371 patients, recruited across 39 sites, met the eligibility criteria and received at least one dose of SOF/VEL: 287 patients (77.4%) were treated by specialists, and 84 patients (22.6%) were treated by non-specialists. Median age was 53.9 years, 64.7% were male and 25.2% had advanced fibrosis **(Table 1)**.

Fibrosis severity was assessed by Fibroscan (n=266), Fibrotest (n=90), Fibrometer (n=44) and FIB-4 was retrospectively calculated for 319 patients. More patients were identified with advanced fibrosis in the specialist group than in the non-specialist group **(Figure 1)** :

- Fibroscan : 60/228 (26.3%) vs 7/38 (18.4%)
- Fibrotest and Fibrometer : 20/59 (33.9%) vs 9/31 (29.0%) and 8/37 (21.6%) vs 0/7 (0%) respectively.
- FIB-4 (3.25 threshold⁺) : 46/253 (18.2%) vs 6/66 (9.1%).

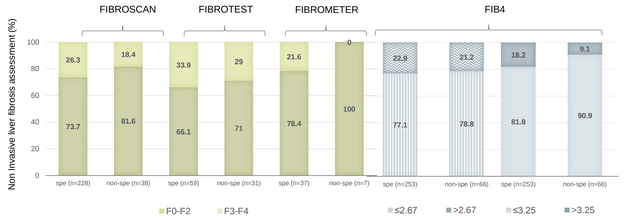
⁺using exploratory 2.67 threshold for FIB-4, the difference was smaller (58/253 (22.9%) vs 14/66 (21.2%)).

The specialist group had more patients with comorbidities** (30.0% vs 8.3%), whereas the non-specialist group had more patients reporting previous or current excessive alcohol consumption (respectively 39.3% vs 34.4% and 23.8% vs 16.4%) and drug use (53.6% vs 11.0%) **(Figure 2)**.

IV drug use was the most frequent mode of HCV infection (44.0%), and most patients were treatment-naïve at inclusion (91.1%).

** arterial hypertension (19.7%), diabetes (10.2%) and renal insufficiency (3.0%) were the most frequent comorbidities reported

Figure 1. Non-invasive liver fibrosis assessment*



spe : specialists, non-spe : non-specialists ; *Some patients had more than one type of test.

Safety and adherence to treatment

Adherence to treatment was high overall (100% adherence for 88.2% of patients) irrespective of study group (specialist group, 89.5%; non-specialist group, 84.0%).

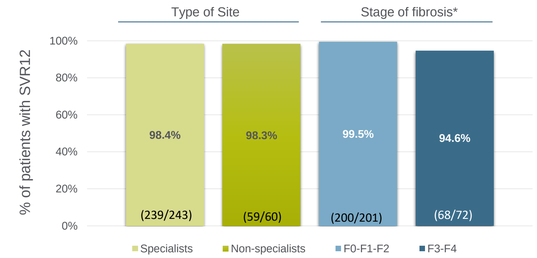
Overall, 24 adverse events considered related to SOF/VEL occurred in 16 patients (4.3%) (7 patients in specialist group and 9 patients in non-specialist group). All were of mild or moderate intensity and in line with previous studies. Only one adverse event related to treatment in the non-specialist group led to treatment discontinuation (abdominal pain).

Effectiveness of SOF/VEL in real-life settings

Among patients eligible for SVR12 analysis (303 patients), overall SVR12 rate was 98.3% (95%CI, 96.20-99.29). Only 5 patients did not achieve virological response. SVR12 rates were the same between the specialist group (98.4% (95%CI: 95.84 - 99.36) and the non-specialist group 98.3% (95%CI: 91.14-99.7). SVR12 rates were high regardless of the genotypes, fibrosis scores, and type of prescribers. Sub-group analysis demonstrated a range of SVR12 rates from 88% to 100%, with a slightly lower response rate for patients with advanced fibrosis **(Figure 3)**.

Median time between a positive PCR test and treatment initiation was 30 days in both groups. The median time between fibroscan and treatment initiation was longer in the non-specialist group than in the specialist group (24 days vs 13 days) **(Table 2)**.

Figure 3. SVR12 Results



* All baseline non-invasive tests combined (fibroscan, fibrotest, fibrometer)

Table 2. Delays between Fibrosis/PCR Assessment and Treatment Initiation

	Specialists N=287	Non-Specialists N=84	Total N=371
Time between PCR and SOF/VEL initiation (days); Median (Q1;Q3)	30 (12;73) **n=282**	30 (15;60) **n=81**	30 (12;65) **n=363**
Time between PCR and SOF/VEL initiation (days); Mean ± SD	75.81 ± 273.08 n=282	55.19 ± 73.34 n=81	71.21 ± 243.41 n=363
Time between Fibroscan and SOF/VEL initiation (days); Median (Q1;Q3)	13 (2;36) **n=225**	24 (7;56) **n=38**	15 (2;37) **n=263**
Time between Fibroscan and SOF/VEL initiation (days); Mean ± SD	79.29 ± 449.38 n=225	35.16 ± 35.92 n=38	72.92 ± 416.03 n=263

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Disclosures: Nathalie Renaud, Laura E. Telep, Teri Chew, Christophe Hézode, Nicolas J-P Martin are employees of Gilead Sciences, Inc., and may own stock in Gilead Sciences, Inc..

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