

Response to anti-HCV treatment in HIV-infected patients chronically infected with Hepatitis C.

The NVHB-SHM Hepatitis working group:

Colette Smit¹; Jan van der Meer²; Ineke van der Ende³; Joop Arends⁴; Marc van der Valk²; Kees Brinkman⁵; Emile Schippers⁶; Frank de Wolf¹; Martin Schutten³; Janke Schinkel²; Dorine de Vries-Sluijs³; Andy Hoepelman⁴; Clemens Richter⁷.

¹Stichting HIV Monitoring, Amsterdam. ²AMC, Amsterdam. ³EMC, Rotterdam ⁴UMCU, Utrecht. ⁵OLVG, Amsterdam. ⁶Hagaziekenhuis, Den Haag. ⁷Rijnstate ziekenhuis, Arnhem.

Abstract

We aimed to evaluate the response to anti-HCV treatment in HIV-infected patients with a chronic hepatitis C (HCV) infection.

461 HIV/HCV chronically infected patients received anti-HCV treatment. Endpoint of the study is a sustained virologic response (SVR), defined as undetectable HCV RNA levels 24 weeks after treatment was ended.

40% of the patients achieved a SVR. Although non statistically significant, SVR rates were higher in patients infected with HCV genotypes 2&3 compared to those infected with 1&4.

Although SVR is higher than reported by other, still a substantial number of patients remain untreated. Newly introduced HCV protease inhibitors may provide higher SVR.

Monitoring of virologic response and long term side effects will remain important in the future.

Background

- Hepatitis C infection (HCV) is common in HIV-infected patients.
- When untreated HCV-infection will progress to chronic liver disease.
- A combination of pegylated interferon-alfa (peg-IFN) and ribavirine (RBV) is the first choice of therapy for HCV.

Aim

To evaluate the response to anti-HCV treatment in HIV-infected patients chronically infected with HCV.

Methods

- 461 HIV-infected patients with a chronic HCV-infection received anti-HCV treatment.
- Patients were defined as chronically infected with HCV when anti-HCV treatment was started at least 12 months after the first HCV RNA positive test result.
- Patients with an acute HCV infection were excluded.
- Patients were treated between 1998 and 2011.
- The efficacy endpoint was a sustained virologic response (SVR)
- SVR is defined as a negative or undetectable plasma HCV RNA (<50 IU/ml) 24 weeks after the end of treatment.

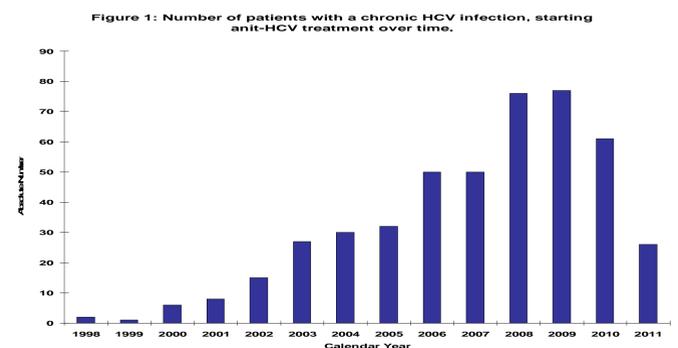
Table 1. Demographic and clinical characteristics

	Number (n,%)
Age (median, interquartile range)	42 ((37-48))
Route of HIV transmission:	
Homosexual contact	274 (59%)
Heterosexual contact	44 (10%)
Injecting drug use	87 (19%)
other	56 (12%)
Region of origin:	
Netherlands	319 (69%)
European (excl NL)	65 (14%)
Other	77 (17%)
HCV genotype:	
1	283 (61%)
2	23 (5%)
3	63 (14%)
4	66 (14%)
unknown	26 (6%)
Duration of HCV treatment in weeks (median, IQR)	
Overall	30 (21-48)
Genotype 1&4	35 (21-48)
Genotype 2&3	25 (22-37)

Results

Table 1 represents the demographic and clinical characteristics of patient with a chronic HCV infection who started anti-HCV treatment between 1998 and 2011.

The number of patients with a chronic HCV infection starting anti-HCV treatment increased over time (**Figure 1**).



Results continued

78 (16%) patients ended anti-HCV treatment within 14 weeks, 32 (7%) of these patients stopped in the first 4 weeks, which did not differ between genotypes.

For those with a known stop reason (n=20, most common stop reasons were toxicity (n=9) and virologic non-response (n=8)

During treatment, 36% of the patients had an undetectable HCV RNA at week 4, 62% at week 12, 40% reached a SVR (**Figure 2**).

Although not statistically significant, SVR varied between genotypes (**Figure 3**).

Figure 2: Response to anti-HCV treatment over time.

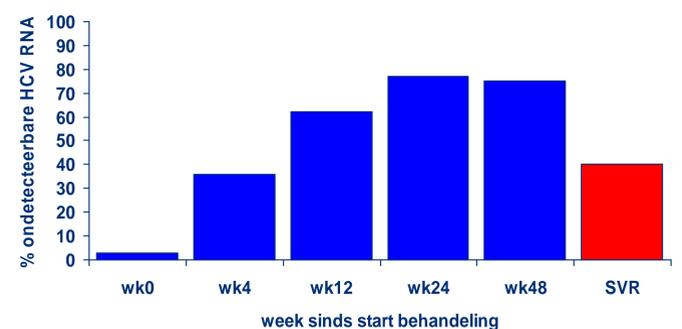
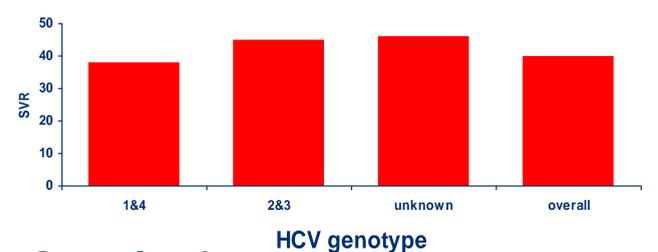


Figure 3: SVR stratified by HCV genotype.



Conclusions

- HCV is cleared in less than half of the patients with a chronic HCV infection treated with a combination of peg-IFN and RBV.
- SVR is higher compared to earlier reports.
- A substantial number of patients remain unsuccessfully treated.
- Additional anti-HCV drugs are now being developed. Newly introduced HCV protease inhibitors may provide higher SVR rates.
- Monitoring the virologic response, as well as the long term side effects and toxicity of these new anti-HCV drugs and the interaction with antiviral agents will remain a challenge for the future.

Contact

Colette Smit
Stichting HIV Monitoring
E: Colette.Smit@amc.uva.nl
T: 0031 20 566 6472
www.hiv-monitoring.nl