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# O1036 Significant long-term decrease of biomarkers of liver fibrosis in HIV/HCV co-infected patients treated by direct-acting antiviral agents: results from a cohort at the university hospital of Clermont-Ferrand, France

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**Background:**

The hepatitis C virus (HCV) revolution driven by the discovery of direct-acting antiviral agents (DAAs) was associated with a sustained virological response (SVR) > 95%. The benefit of HCV elimination remains unclear in HIV/HCV coinfected pts, in term of hepatic fibrosis regression. We report 3-years trends of hepatic fibrosis evolution over time in HIV/HCV coinfected pts treated by DAAs.

**Materials/methods:**

Epidemiological, clinical and virological data from patients included, after written consent, in the French National Hospital Cohort (DOMEVIH), with a chronic HIV/HCV coinfection treated by DAAs were collected for the study. Two scores of hepatic fibrosis, *APRI* and *FIB-4,* were assessed before, after, 12 weeks after DAAs and beyond. A linear mixed model was analyzed for APRI's score and FIB4's score to explore the impact of DAAs on the evolution of hepatic fibrosis over time. Log-rang Wilcoxon

**Results:**

58 HIV/HCV coinfected pts (43M, 15F) ; median age: 48y, viral transmission (38 IDUs, 17 HSH, 3 blood recipients,) were treated by DAAs, all but 2 pts received sofosbuvir-based combinations for a 12 weeks goal period. HCV genotypes were 1a(32), 3a(10), 4(8),1b(6), 2a(1), 6a(1). Before DAAs treatment, 30(52%) pts had a F0-F2 Metavir score, 28(48%) had a F3-F4 Metavir score including 6 pts with a decompensated liver disease (5 biological hepatic failure, 5 thrombopenia, 1 history of cured HCC. Median HCV virus load (VL) was 6.1 log10-UI/mL. All treated pts achieved SVR without relapse, 2 HCV reinfections occurred. No liver event occurred during the 3 year-follow-up. There was a statistically significant reduction of the APRI score > 1.5 (from 15 to 0 pts; $p < 0.0001$) and of FIB-4 score > 3.25 (from 11 to 1 pt; $p<0.0001$) in the two groups F3-F4 and F0-F2. A negative HCV VL was longer to obtain in F3-F4 pts than in F0-F2 pts ($p=0.0026$).

**Conclusions:**

The elimination of HCV (a long term negative qualitative PCR) was associated with a significant regression of hepatic cirrhosis in F3/F4 pts and with a significant regression of hepatic fibrosis in F0-F2 pts. It implies an active screening and a test and treat approach for HCV infection in PLWHIV.