Background: The ongoing epidemic of acute hepatitis C (AHC) infection among MSM highlights the need to identify factors allowing for optimal HCV treatment outcome. Here we evaluate the impact of added ribavirin on sustained virological response (SVR) rates in different HCV genotypes (GT).

Methods: 284 HIV-infected patients from 4 European countries with diagnosed acute HCV infection were treated early with pegylated interferon (pegIFN) and ribavirin (RBV) (n=254) or pegylated interferon alone (n=30). Fisher's exact test, chi-square test, binary logistic regression model were used for statistical analysis. Results: All patients were male, median age was 39 years. 68% were infected with HCV GT 1, 4.6% with GT 2, 10.6% with GT 3, 16.9% with GT 4. Median baseline HCV RNA was 939,249 IU/ml, median CD4 T cell count 471 cells/μl. 65% received HAART. By univariate analysis, there were no statistical differences at baseline for HCV or HIV characteristics between patients with GT 1/4 (group 1) and patients with GT 2/3 (group 2) infection. Overall SVR rate was 69.7% (198/284). Interestingly, SVR rates were significantly higher in group 2 receiving pegIFN and RBV (31/33) when compared with pegIFN mono-therapy (6/10) (94% vs. 60% respectively; p=0.02). In multivariate analysis, pegIFN/RBV combination therapy (p=0.037) and rapid virological response (RVR) (p<0.0001) were significantly associated with SVR in group 2. In group 1, only RVR (p<0.0001) was significantly associated with SVR. Conclusions: Ribavirin is important in the management of AHC in HIV-positive patients; for GT 2/3 infections almost all patients clear virus with combination therapy.