EFFICACY AND COST OF DIRECT ACTING ANTIVIRALS FOR THE TREATMENT OF HCV INFECTION AMONG HCV MONOINFECTED AND HIV/HCV COINFECTED PATIENTS IN REAL LIFE SETTING

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Background and Purpose

Although several studies analyzing the effectiveness of DAAs have showed no differences between HCV-monoinfected and HIV/HCV-coinfected patients[1], data in real-life setting are still limited.

The purpose of this study was to compare efficacy and costs of DAAs in HCV-monoinfected and HIV/HCV-coinfected subjects.

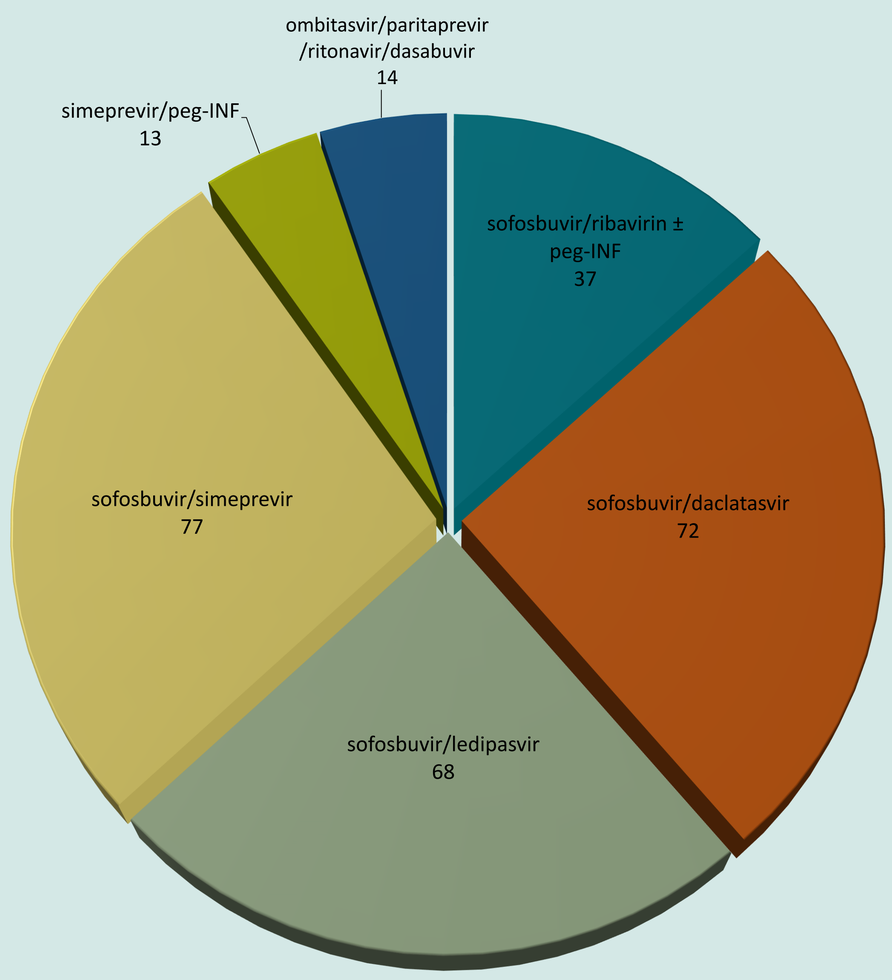
Material and Methods

A database of HCV-monoinfected and HIV/HCV-coinfected adults who started HCV therapy between January 2015 and July 2016 was created in order to collect the following data:

- sustained virological response to DAAs therapy at week 12 (SVR12) after the end of the treatment;
- sustained virological response to DAAs therapy at week 24 (SVR24) after the end of the treatment;
- treatment regimens;
- overall cost of anti-HCV regimens.

Patients were treated as shown in Figure 1:

Figure 1

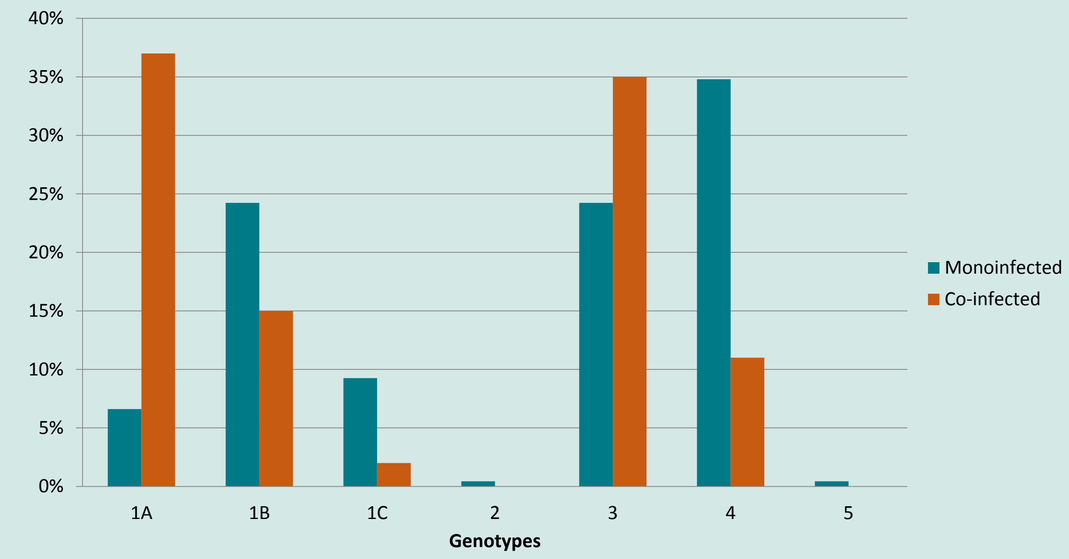


Overall, ribavirin was used in combination with DAAs in 67% of patients.

Results

The study enrolled 281 subjects (81% monoinfected and 19% co-infected), treated for 12 (54% of monoinfected and 50% of co-infected) or 24 weeks (46% of monoinfected and 50% of co-infected). HCV genotype distribution is reported in Figure 2.

Figure 2

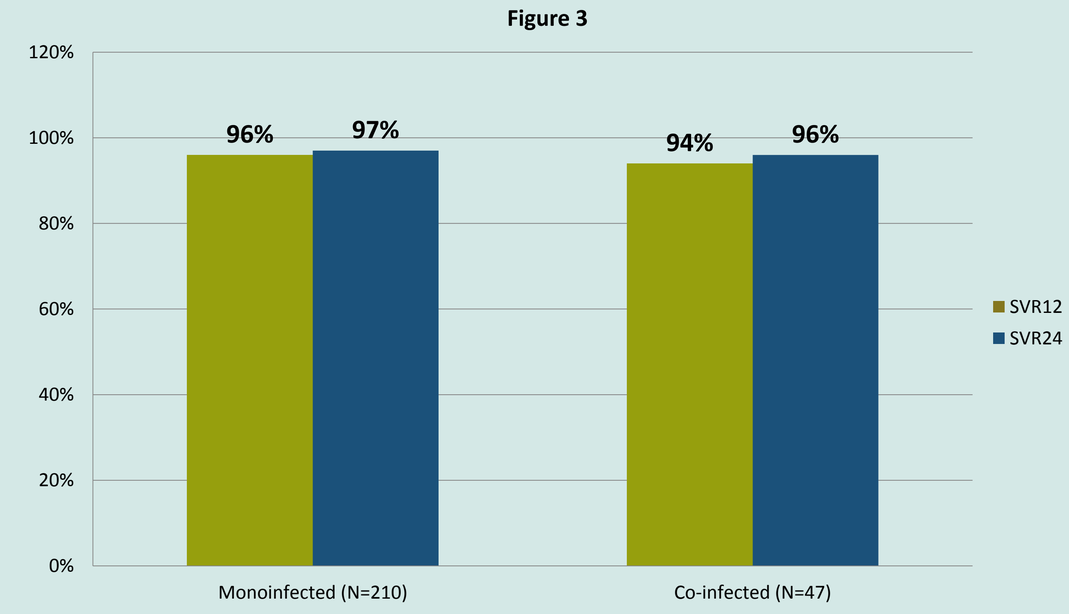


Two hundred and twenty nine patients had cirrhosis or high degree fibrosis (≥F3) at the beginning of DAAs (79% of HCV-monoinfected and 91% of HIV/HCV co-infected); other 23 subjects (all but one HCV-monoinfected) were treated after liver transplantation.

Two hundreds and ten (93%) HCV-monoinfected patients completed the treatment; 96% achieved SVR12 and 97% reached SVR24 (Fig 3). The most prescribed regimens were 12-week sofosbuvir/simeprevir (27%) or sofosbuvir/ledipasvir (17%), and 24-week sofosbuvir/daclatasvir (17%).
The average cost of a complete HCV-treatment in monoinfected population was € 49.633 per patient.

Among the 47 HIV/HCV-coinfected patients who completed the treatment (87%), 94% achieved SVR12 and 96% obtained SVR24 (Fig 3); 12-week sofosbuvir/simeprevir was prescribed to 24% of them, whereas the most frequent 24-week treatments were sofosbuvir/daclatasvir and sofosbuvir/ledipasvir (20% each).
The average cost of a complete HCV-treatment in coinfected population was € 53.573 per patient.

Figure 3



Conclusions

This study confirms the high effectiveness of DAAs for the treatment of HCV infection in real life setting, both in HCV-monoinfected and HIV/HCV-coinfected patients.

The average cost of single treatment was also similar between the two groups.

[1] Boesecke C, Rockstroh JK. Treatment of chronic HCV genotype 1 coinfection. Curr HIV/AIDS Rep 2015 3:326-35.

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