Letter to the Editor

Letter: chronic hepatitis C genotype 3 infection – still a hurdle toward a direct-acting anti-viral-induced HCV cure?

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SIRS, We read with interest the article of Cornberg *et al.*[1] who reported effectiveness and safety of different regimens against HCV (hepatitis C virus) genotype (GT) three infection from a large real-world experience. Until recently, HCV GT3-infection was widely recognised as a challenge in the era of direct-acting anti-virals (DAAs), particularly in cirrhotic and treatment-experienced subjects.[2] However, treatment options for HCV GT3-infection are rapidly evolving thanks to the recent introduction of sofosbuvir (SOF)+ daclatasvir (DCV)±Ribavirin (RBV) and, more recently, sosfosbuvir/velpatasvir in several countries.[3] These regimens represent the best option for HCV GT3 infection as currently recommended by international guidelines.[4]

In our centre, from February 2015 until December 2016, a total of 61 DAA-based regimens were prescribed for 57 HCV GT3-infected individuals (four patients were retreated), of whom 14 were HV/HCV co-infected. Cirrhosis was found in 34/57 subjects (59.6%); no patient had a decompensated cirrhosis. Forty-six treatments were completed and could be evaluated for sustained virological response (SVR). The following regimens were used: SOF+RBV for 24 weeks in 20 cases; SOF+DCV for 12 or 24 weeks in two and five cases respectively; SOF+DCV+RBV for 12 or 24 weeks in 4 and 13 cases, respectively, and SOF+ ledipasvir (LDV)+RBV for 24 weeks in one subject.

SVR12 was achieved in 38/46 cases (82.6%) at the intention-to-treat analysis; 22/24 (91.6%) with SOF+DCV±RBV; 15/21 (71.4%) with SOF+RBV; and 1/1 (100%) with SOF+LDV+RBV. Among the seven individuals who did not obtain SVR, five had a relapse, one cirrhotic patient died because of non-Hodgkin lymphoma and one discontinued treatment for variceal bleeding and then he was lost to follow-up. Of the five relapsers, four underwent retreatment. Clinical characteristics of the seven patients, who had a treatment failure are shown in Table 1.

The lower SVR rate in the group of SOF+RBV-treated patients compared to other regimens was expected, as 10 patients with an advanced liver disease, for whom anti-

Table 1 | Clinical characteristics of HCV GT3-infected patients who failed a DAA-based treatment

N.	Age	HIV	Cirrhosis	CP	IFN-experienced	Therapy	Outcome	Retreatment	SVR12 after retreatment
1.	55	No	Yes	B	No	SOF+DCV (24w)	Died (LNH)	–	–
2.	48	No	Yes	A	No	SOF+RBV (24w)	L-FU	–	–
3.	47	No	Yes	A	Yes	SOF+RBV (24w)	Relapse	SOF+DCV+RBV (24w)	Yes
4.	57	No	Yes	A	Yes	SOF+RBV (24w)	Relapse	SOF+DCV+RBV (24w)	Yes
5.	52	Yes	Yes	A	Yes	SOF+RBV (24w)	Relapse	SOF+DCV+RBV (24w)	Yes
6.	51	Yes	Yes	A	Yes	SOF+RBV (24w)	Relapse	SOF+DCV+RBV (24w)	Yes
7.	49	Yes	No	–	Yes	SOF+DCV (12w)	Relapse	–	–

CP, Child–Pugh score; IFN, interferon; SOF, sofosbuvir; DCV, daclatasvir; RBV, Ribavirin; w, weeks; LNH, non-Hodgkin lymphoma; L-FU, lost to follow-up.

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HCV treatment could not be further delayed, were treated with this combination because of the non-availability of DCV in our centre until July 2015.

In agreement with Cornberg, our clinical practice experience confirmed that a 24-week course of SOF+DCV±RBV can be already considered a good option for GT3-infected patients, including DAA treatment-experienced individuals with cirrhosis. Furthermore, a recent study reported high rates of SVR (90.5%) also in Child–Pugh score B/C individuals treated with sofosbuvir plus an NS5A inhibitor (daclatasvir or ledipasvir).[5] In the near future, HCV GT3 treatment options will be enriched leading to even higher rates of eradication in patients with advanced liver disease including those with renal impairment.[6]

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