Journal of the Formosan Medical Association (2018) **117**, 1036—1037

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Letter to the Editor

The choice of antiviral therapy for hepatitis C recurrence after liver transplantation in the real world

Dear Editor,

We read with interest the article by Yu et al.,[1] "Paritaprevir/ritonavir/ombitasvir plus dasabuvir (PrOD) with ribavirin for treatment of recurrent chronic hepatitis C genotype 1 infection after liver transplantation: Real-world experience" in the June 2018 issue of *Journal of the Formosan Medical Association*. The authors reported a PrOD-named patient program for compassionate treatment, and all patients finally achieved sustained virologic response (SVR). Although PrOD has been showed to be an effective interferon-free regimen for recurrent hepatitis C after liver transplantation in the early era of direct-acting antiviral (DAA),[2] several flaws limit its application in the real world. Therefore, the real-world data of PrOD use for transplant patients remain limited. Yu's article can provide a good chance for discussing the choice of DAA therapy for transplant patients from the real-world viewpoints.

Except for virus genotype, treatment experience, and underlying comorbidities, several considerations in the choice of DAA therapy for transplant patients are critical. First, the dosage adjustment for immunosuppressant should be convenient. With severe drug—drug interactions, the dosage of immunosuppressant should be largely modified before initiating PrOD treatment, and clinicians might not be familiar with the adjustment criteria as mentioned in the article. Moreover, frequent clinic visits could reduce patient compliance with treatment and also increase medical cost. Second, the combination of ribavirin would be better to be avoided. In Yu's report, almost all adverse effects came from ribavirin, and 58.3% patients required dose reduction. Furthermore, some patients had to discontinue ribavirin or receive erythropoietin injection. Ribavirin obviously increases the risk of adverse effects and may result in therapy cessation. Third, treatment duration would better to be 12 weeks. In current guidelines, 12 weeks or less have become the standard duration of DAA therapy for most patients with chronic hepatitis C. Of note, the 12-week treatment duration has recently been approved to be effective for transplant patients in glecaprevir/pibrentasvir or sofosbuvir/velpatasvir regimen.[3,4] In Yu's report, all 3 patients who received only 12-week PrOD plus ribavirin therapy also achieved SVR. However, the efficacy of 12-week PrOD for transplant patients with genotype 1b hepatitis C needs to be confirmed by clinical trials.

In the current era of new DAA therapy, we have more choices for transplant patients, and a ribavirin-free regimen, unnecessary or easy adjusted immunosuppressant dosage, with short treatment duration, can be expected in the real-world practice.

Conflicts of interest

The authors have no conflicts of interest relevant to this article.

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https://doi.org/10.1016/j.jfma.2018.09.013

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8 September 2018