

(Answering Reviewers)

**Re: Manuscript ID: 70092**

November 11, 2021

Dear Editors and Reviewers:

Many thanks for your kind editorial efforts with regard to our manuscript (70092) entitled "Outreach onsite treatment with a simplified pangenotypic direct-acting antiviral regimen for hepatitis C virus micro-elimination in a Prison", submitted to *World Journal of Gastroenterology* for review. We have made efforts to revise our manuscript in accordance with reviewers' and editors' comments. We have highlighted all the changes in revised manuscript. All the changes and response to comments are demonstrated from page 2. All changes are marked with red color. We would like to express our deep appreciation to you for the most informative and instructive comments.

With best regards

Ming-Lung Yu, M.D, Ph.D.

Address: Hepatobiliary Division, Department of Internal Medicine, Kaohsiung Medical University Hospital, No.100, Shin-Chuan 1st Road, Sanmin Dist., Kaohsiung City, 80708, Taiwan

Tel: +886-7-312-1101 ext. 7475

Fax: +886-7-312-3955

E-mail: fish6069@gmail.com

## **Response to comments**

Reviewer #1:

In the manuscript Outreach onsite treatment with a simplified pangenotypic direct-acting anti-viral regimen for hepatitis C virus micro-elimination in a Prison, the authors present a well-written and comprehensive study that provide successful strategies toward HCV micro-elimination among prisoners. I think that the title reflects the main subject/hypothesis of the manuscript. The abstract summarizes and reflects the work described in the manuscript, and keywords are appropriate. Methods and results are described in adequate detail. The manuscript is well organized. I think it is a very good work.

Reply→Thank you very much for the comments.

Reviewer #2:

The paper by Chun-Ting Chen, et al. entitled 'Outreach onsite treatment with a simplified pangenotypic direct-acting antiviral regimen for hepatitis C virus micro-elimination in a Prison' is an important practical report about successful strategies toward HCV micro-elimination among prisoners. Generally, this manuscript is well-written and is of interest for the readers in the field. Some comments are listed as below:

Major comments: 1. It is of contradiction that the abstract states there was no virological failure but in fact one patient in the "Sporadic HCV therapy in outpatient clinics" experienced virological failure.

Reply→Thank you very much for the question. In our abstract, we described "There was no virological failure, treatment discontinuation, and serious adverse event among sofosbuvir/velpatasvir-treated patients." We focused on the clinical effectiveness of sofosbuvir/velpatasvir in the HCV micro-elimination group. In HCV control group, only one patient experienced glecaprevir/pibrentasvir treatment failure. To avoid confusing the readers, we revise the sentence as "There was no virological failure, treatment discontinuation, and serious adverse event among sofosbuvir/velpatasvir-treated patients in the HCV micro-elimination group." (Page 5, line 8-9)

2. As mentioned by the authors, unexpected releasing from prisons or transferring to other prisons frequently led to the interruption of treatment or lost-to- follow up, shortened treatment duration would be theoretically beneficial in this scenario. By the way, the results suggested that most HCV-infected prisoners are treatment-naïve

with good liver reserve, the authors should address why they chose sofosbuvir/velpatasvir rather than glecaprevir/pibrentasvir in this study. Furthermore, sofosbuvir/velpatasvir may not be available in some countries, the pros and cons of using sofosbuvir/velpatasvir vs. glecaprevir/pibrentasvir in this setting should be addressed.

Reply→Thank you very much for the expert comment. We add one paragraph to address why we choose sofosbuvir/velpatasvir rather than glecaprevir/pibrentasvir in our study. (Page 20, line 14-19, Page 21, line 1-8). The advantages of glecaprevir/pibrentasvir is a shorter 8-week regimen for treatment-naïve HCV patients and IFN-experienced non-cirrhotic patients with compensated liver diseases, which would be benefit for prisoners who are expected to be released or transferred in a short term. However, glecaprevir, a protease inhibitor, is contraindicated for patients with hepatic decompensation and at risk for rare occurrence of serious drug-induced liver injury. Also, glecaprevir/pibrentasvir has higher pill burden, three tablets a day. The advantages of sofosbuvir/velpatasvir include a universal fixed 12-week regimen, one tablet a day, for all HCV patients with compensated liver diseases, less frequency of potential drug-drug interactions, and safety for those with hepatic decompensation. However, a 12-week regimen with sofosbuvir/velpatasvir needs one more visit and monitoring when compared to an 8-week regimen with glecaprevir/pibrentasvir. Therefore, we select sofosbuvir/velpatasvir as the antiviral regimen for our outreach onsite treatment.

#### Minor comments 1

Although the words “virological” and “virologic” can be used interchangeably, they should be used consistently in the same article.

Reply→Thanks for the suggestion. In our manuscript, all “virologic” is replaced by “virological”.

#### Minor comments 2

In the last paragraph of "Introduction" the word “diagnose” should be “diagnosis”.

Reply→Thanks for the comment. In the last paragraph of introduction, the word “dagnosis” is corrected.

#### Science editor:

The manuscript implemented an outreach strategy in combination with universal mass screening and immediate onsite treatment with a simplified pan-genotypic DAA regimen, 12 weeks of sofosbuvir/velpatasvir, in a PWID-dominant prison. The writing of the manuscript is meaningful, but it should explain why they chose

sofosbuvir/velpatasvir instead of glecaprevir/pibrentasvir in this study; the full text of "virological" and "virologic" should be consistent.

Reply→Thank you very much for the expert comment. We add one paragraph to address why we choose sofosbuvir/velpatasvir rather than glecaprevir/pibrentasvir in our study. (Page 20, line 14-19, Page 21, line 1-8). The advantages of glecaprevir/pibrentasvir is a shorter 8-week regimen for treatment-naïve HCV patients and IFN-experienced non-cirrhotic patients with compensated liver diseases, which would be benefit for prisoners who are expected to be released or transferred in a short term. However, glecaprevir, a protease inhibitor, is contraindicated for patients with hepatic decompensation and at risk for rare occurrence of serious drug-induced liver injury. Also, glecaprevir/pibrentasvir has higher pill burden, three tablets a day. The advantages of sofosbuvir/velpatasvir include a universal fixed 12-week regimen, one tablet a day, for all HCV patients with compensated liver diseases, less frequency of potential drug-drug interactions, and safety for those with hepatic decompensation. However, a 12-week regimen with sofosbuvir/velpatasvir needs one more visit and monitoring when compared to an 8-week regimen with glecaprevir/pibrentasvir. Therefore, we select sofosbuvir/velpatasvir as the antiviral regimen for our outreach onsite treatment.

In the revised manuscript, all “virologic” is replaced by “virological”.

Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastroenterology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office’s comments and the Criteria for Manuscript Revision by Authors. Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.

→Thanks for these suggestions. We revise our manuscript to fit all guidelines and submit the revised paper.