## **Peer Review File**

Article information: https://dx.doi.org/10.21037/hbsn-23-562

## Reviewer A:

This is a very interesting review on the role of genetics and epigenetics of HCV-related hepatocellular carcinoma. The manuscript is very well written and updated. I have few comments.

**Response:** We thank the reviewer for his/her positive comments.

1. Lines 14-17 and 50-53 look very similar. I suggest rewriting those.

Response: Done.

2. Page 2. lines 50-58. Paragraph 2 looks incomplete. Also, the figure is not very well described with all risk factors for HCC that authors have proposed.

**Response:** We have now modified this paragraph for clarity and expanded the figure legend.

3. I suggest adding a short paragraph about other risk factors involved in the HCC development such as ethnic group, race, also, MAFLD, diabetes, chronic hepatitis B infection, alcohol liver disease and aflatoxins.

**Response:** A good suggestion that we have now incorporated.

4. In the conclusion section I suggest to adding some lines about the Artificial intelligence-based prediction of molecular and genetic markers for hepatitis C-related hepatocellular carcinoma

**Response:** A good suggestion that we have now incorporated.

## **Reviewer B:**

The authors provided a comprehensive and updated review of research on the genetics and epigenetic mechanisms implicated in developing HCC associated with HCV infection and the potential translational implications, including novel biomarkers and drugs for treatment. Interesting and well done manuscript. No specific comments but language revision

**Response:** We thank the reviewer for his/her positive comments.