Reviewer's report:

Title: Variations in DEPDC5 gene and its association with chronic Hepatitis C virus infection in Saudi Arabia

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Reviewer: Pin-Nan Cheng

Study from Al-Anazi et al. investigates the association of DEPDC5 gene with chronic hepatitis C patients in Saudi Arabia. This issue is interesting and important. Overall, there are many points that need to describe clearly and make revisions.

Major Compulsory Revisions

1. In the rationale of “Introduction” part, authors should address and explain why they investigate the association of cirrhosis and DEPDC5 SNPs. The original study of Miki D et al. analyzed the association of DEPDC5 and HCC, but not cirrhosis.

2. The possible confounding or contributing factors that associated with study results or development of cirrhosis should be stated in patient’s enrollment. There was no record concerning about alcohol consumption, exclusion of HBV or other etiology of hepatitis, antiviral treatment history, HCV genotyping, incidence of diabetes mellitus, etc. Authors should clarify more clearly.

3. Similarly, control subjects in this study did not defined clearly, not only depend on serology markers.

4. The definition of cirrhosis based on radiology or serology may not be sufficient. Adding other biomarkers, such as APRI or FibroScan etc., may help the diagnosis of cirrhosis more sound and acceptable. In addition, the severity of liver cirrhosis may take into account.

5. The patients in Group I exhibit heterogenous characteristics in either clinical manifestations or histological features. Authors should consider to re-define which characteristics, such as abnormal ALT, will be selected in this group of patients.

6. The “Genotyping of DEPDC5 SNPs” method part should be described more detail.

7. The analysis of cirrhosis/HCC should include other possible factors other than SNP in DEPDC5.

8. In discussion part, authors should address the issues of different results between Saudi Arabia patients and Japanese patients. The distribution of genotype of HCV is different between Saudi Arabia and Japan, study of HCV genotype is important in this study.
Minor Essential Revisions
1. In page 6 row 133, there should have a “,” after “August 2010”.
2. The diagnostic criteria of cirrhosis by biopsy should be stated.
3. In page 7 row 158, “manufacturer#s protocol” should be corrected.
4. Table 1a and 1b should be considered to merge together.
5. First paragraph of “Results” part, brief statement of Table 1a and 1b is necessary.
6. In page 9 row 196, authors need to explain more about the meaning of “significantly distributed between two groups”.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.