Hepatitis Monthly
Volume 22 · Issue 1 · e130862

OPEN PEER REVIEW

Comparative Transcriptional Signature Analysis of Peripheral Blood Mononuclear Cells in Early Stage of Hepatitis B-related Hepatocellular Carcinoma

Omid Gholizadeh, Hossein Bannazadeh Baghi, Mahin Ahangar Oskouee, Nader Mohammadzadeh, Behrooz Naghili, Narges Eslami, Mohsen Nasiri-Toosi, Alka Hasani, Mohammad Ahngarzadeh Rezaei, Tina Taikandi, Vahdat Poortahmasebi

SUBMITTED	REVISED	ACCEPTED	DOI
26 Aug 2022	14 Nov 2022	17 Nov 2022	10.5812/hepatmon-130862

About this report

This open peer review (OPR) report shows the public comments made on this article during peer review, by the reviewers, the associate editor and the editor-in-chief, for every revision round, together with the authors' replies. Comments appear only with the consent of the people who wrote them. Reviewers who chose to sign their report are named; the others are shown as "Referee". Comments are edited for language only, and confidential remarks to the editors are not included.

More about open peer review: brieflands.com/knowledgebase/opr

Contents

1 **Original submission** Editor-in-Chief 2
2 **Revision 1** Editor-in-Chief 3
Authors' reply to reviewers 4
Reviewer and editor comments 6

1 Original submission

1 comment · 26 Oct 2022

Editor-in-Chief

MAJOR REVISION 26 Oct 2022

Dear Authors,

Please follow the peer-review comments and submit a revision.

Regards,
EIC

2

Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reviewer 1:

Comments to the Author

In this study, the authors experimentally evaluated the expression of the genes mentioned above in PBMC samples from CHB and HCC patients via quantitative real-time polymerase chaineaction (qRT-PCR). The study is interesting, but I have several major comments.

1- Age, ALT and AST were significantly higher in HCC patients than CHB subjects and normals (P-value < 0.001). HBV load was significantly higher in HCC patients than CHB subjects (P-value < 0.0001) (Table 1).

Answer: Progression of CHB may be influenced by viral load (HBV DNA level), infection with other viruses and probably HBV genotypes. Also, ALT and AST were significantly higher in HCC than in the CHB group. During 2000 through 2010, temporal trends in HCC rates diverged by age group, with stable rates noted among individuals aged 35 to 49 years, but strong increases observed among those aged 50 to 64 years and ≥65 years.

2- There was an association between HBeAg and HCC (p=0.002). The comparison should be made only in HCC patients than CHB subjects.

Answer: We appreciated for your comment. We correct this comment (Result section> highlighted in yellow color).

3- Could the authors differentiate between CHB cases who had active and inactive disease?

Answer: All of patients belong to the inactive HBsAg carrier state comment (Methods section> Patients> highlighted in yellow color).

4- What does the "*" mean in Figure 3? What statistical test have you used for comparison?

Answer: Done. Please see Figure 3 legend (Highlighted in yellow color).

5- The authors do not describe or discuss the limitations of their study. I suggest including a paragraph on limitations, including design and sample size.

Answer: We didn't have any limitation in our study. One of the most important limitation of our study, if not arguably the most, was to obtain large samples size from HCC and CHB patients (Discussion section> highlighted in yellow color).

Reviewer 2:

The article named "Comparative transcriptional signature analysis of peripheral blood mononuclear cells in early stage of hepatitis B related hepatocellular carcinoma" was carried out using microarray technology, which allows the

expression of many genes, which has been very popular in recent years, to be monitored simultaneously.

1- Results within the abstract are not clarified.

Answer: Dear reviewer, please refer to abstract section.

2- The authors did not demonstrate the previously published literature in the same topic. Comparison was done with only two papers. This needs clarification from the authors.

Answer: Dear reviewer, we cited previous related articles in discussion and introduction section. Please refer to References.

3- The whole paper's English language should be revised by a professional English translation office.

Answer: Based on these comments and suggestions, we have made careful modifications to the manuscript, and carefully proof-read the manuscript to minimize typographical and grammatical errors.

Answer: We summarize the table in the original manuscript.

5- There are several GEO Data Sets when you perform a search with PBMCs and HBV. Could some of the findings presented in this manuscript be validated in some other cohort of patients?

Answer: First and foremost, we do appreciate your consideration. Out of numerous datasets only few datasets related to our study. There are just few datasets correlated with studies which have executed on “Homo Sapience” and none of those are similar to our investigation, so there is three major reasons why our investigation was different from those.

2 Revision 1

1 comment · 17 Nov 2022

Editor-in-Chief

ACCEPT 17 Nov 2022

Dear Authors,

I am delighted to inform you that your manuscript is accepted for publication.

Regards,
EIC