OPEN PEER REVIEW

Open Peer Review (OPR)

As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Open Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

An "Open Peer Review" process is making the details of all review process (including reviewers, associate editors, and EICs comments) as "Public" as it is agreed by EIC, Authors, and reviewers.

Advantages of "Open Peer Review" process

- More transparency, constructiveness and tactful comments of the peer review process: leads to an increase in the quality of reviews
- More motivations for all involved roles in the review process
- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
- Prevents reviewers from following their individual agendas and leading to the detection of reviewers' conflicts of interests

You can find out more at:
https://sites.kowsarpub.com/kowsar/knowledgebase/category/tree.html#opr.html

Hepatitis Monthly
Article DOI: 10.5812/hepatmon.103179
Published in: Hepatitis Monthly: 20(4); e103179

Peer Review Report for "Evaluation of Hepatic Enzymes Changes and Association with Prognosis in COVID-19 Patients"

Author(s): Versa Omrani-Nava, Iradj Maleki, Abdolrahim Ahmadi , Mahmood Moosazadeh, Akbar Hedayatizadeh-Omran , Fatemeh Roozbeh, Hasan Nahanghi, Reza Alizadeh-Navaei

Review Timeline:

- Submit Date: 29 Mar 2020
- Revised Date: 1 Apr 2020
- Accepted Date: 2 Apr 2020

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (0) 31 Mar 2020

Dear AE,
There are some comments which should be addressed by the author:
- The study, “Evaluation of hepatic enzyme changes and association with prognosis in COVID19 patients”, is remarkable, since Covid-19 is an emerging disease and there is lacking knowledge regarding it. There are some unclear points that should be addressed.
- Underlying diseases were found in 45 (48.3%) patients and they were probably already being treated for them. How can you rule out the fact that the medication or underlying diseases they were receiving is not altering the results?
- Other reasons for high AST like viral liver infections, alcohol abuse, or heart failure should be pointed out.
- Prognosis criteria in the Study Method should be determined.
Thanks.

REFEREE: Reviewer | **Revision** (0) 31 Mar 2020

Dear AE,
Thanks for inviting me to review manuscript NO.103179 entitled "Evaluation of hepatic enzyme changes and association with prognosis in COVID19 patients". The title is novel enough and the subject is interesting. There are some concerns about the scientific writing of the manuscript. My comments to the authors are as follow:
Abstract:
- The background part of the abstract is not proper. Please re-write it and mention the COVID-19 pandemia and the novelty of your work.
- The result section of manuscript needs P-value and more numerical data.
Introduction:
- This part needs language editing.
Methods:
- Please provide sub-headings for this section (Study population, Subjects' evaluation, ethical consideration, statistical analysis)
- Please explain more about the inclusion and exclusion criteria,
- Please make clear the sampling process for selecting cases and controls.
- Please provide an ethical consideration section for this part.
- The statistical analysis part is unclear. Explain more about that which test is used for each result.
- Please specify the exact methods of linear regression and logistic regression.
- Please use the extended form for abbreviation of ROC curve (receiver operating characteristic) for the first time used in the text.
- Please use three decimals for each P-value in both text and tables. The p value for BMI is 0.3
- The p value of 0.000 is not correct. Please use < 0.001 instead.
- Please use at-least one decimal for all numerical data. Some numbers have not any decimals "...levels of AST and direct Bilirubin (OR = 79 ...")
- Figure 1 and table 2 are not necessary. Mention their results in the text.
- Figure and tables' legend are not appropriate. Please use the extended form of abbreviations in the footnote.
- The legend of figure 2 "Figure 2. ROC curve for intensive care unit transfer and AST levels" should change to "Figure 2. Receiver operating characteristic (ROC) curve showing the accuracy of aspartate aminotransferase (AST) to predict the need to intensive care unit transfer".
Overall comments:
- AST, ALT, and ALP are not liver function tests (LFTs). They are liver enzymes. Please remove LFT from your manuscript. You can use the name of each enzyme instead.
The manuscript needs language editing.
Regards

Heidar Sharafi: Associate Editor | **Revision (0)** 31 Mar 2020

Dear EIC,
The manuscript was reviewed urgently to present valuable results to the medical community. In addition to the comments of reviewers, I have few comments:
1. The distribution of quantitative variables should be checked if they are normally

distributed or deviated from normal distribution. in case of deviation from a normal distribution, they should be analyzed using non-parametric tests such as Mann–Whitney U test.

2. The parameters in Tables 3 and 4 are not only liver enzymes and using term LFT is not appropriate for them.

3. How the cut-off value of 30.5 was selected for evaluation of sensitivity and specificity of AST for intensive care transfer? For Figure 2, they should add AUROC, 95% CI of AUROC, and P-value in the caption.

Regards

Seyed Moayed Alavian: EIC | **Revision** (0) 31 Mar 2020

Dear Author,

Your article is reviewed by the reviewers carefully. According to their comments, this document needs minor revision. Please follow their comments as requested.

Thanks.

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Reviewers' Comments and reply:

Reviewer 1:

-The study, “Evaluation of hepatic enzymes changes and association with prognosis in COVID19 patients”, is remarkable, since Covid-19 is an emerging disease and there is lacking knowledge regarding it. There are some unclear points should be addressed.

Reply: Dear reviewer, many thanks for your valuable comments we tried to respond to every concern raised.

-Underlying diseases were found in 45 (48.3%) patients and they were probably already being treated for them. How can you rule out the fact that the medication or underlying diseases they were receiving is not altering the results?

Reply: Underlying diseases were enrolled in both linear and logistic regression model and our result were adjusted with them.

-Other reasons for high AST like viral liver infections, alcohol abuse or heart failure should be pointed out.

Reply: Patients with viral liver infections, cirrhosis, hepatocellular carcinoma and alcohol abuse were excluded from study.

-Prognosis criteria in the Study Method should be determined.

Reply: Length of hospital stay, intensive/critical care requirement and mortality were considered as prognosis (this sentence added in text).

Reviewer 2:

Dear Associate Editor

Thanks for inviting me to review the manuscript NO.103179 entitled "Evaluation of hepatic enzymes changes and association with prognosis in COVID19 patients". The title is novel enough and the subject is interesting. There are some concerns about the scientific writing of the manuscript. My comments to the authors are as follow:

Abstract:

The background part of abstract is not proper. Please re-write it and mention the COVID-19 pandemia and the novelty of your work.

Reply: Many thanks, added.

The result section of manuscript needs P-value and more numerical data.

Reply: It was done.

Introduction:

This part needs language editing.

Reply: Some sentences were reviewed and rewritten.

Methods:

Please provide sub-headings for this section (Study population, Subjects' evaluation, ethical consideration, statistical analysis)

Reply: Thanks, changes are made.

Please explain more about the inclusion and exclusion criteria,

Reply: Patients with viral liver infections, cirrhosis, hepatocellular carcinoma, alcohol abuse and patients whose disease didn't required hospitalization were excluded from study (this sentence added in text).

Please make clear the sampling process for selecting cases and controls.

Reply: It was done.

Please provide an ethical consideration section for this part.

Reply: It was done.

Please specify the exact methods of linear regression and logistic regression.

Reply: It was done. We was used enter method.

Please use the extended form for abbreviation of ROC curve (receiver operating characteristic) for the first time used in the text.

Reply: It was done.

Please use three decimals for each P-value in both text and tables. The p value for BMI is 0.3

Reply: It was done.

The p value of 0.000 is not correct. Please use < 0.001 instead.

Reply: It was corrected.

Please use at-least one decimal for all numerical data. Some numbers have not any decimals "...levels of AST and direct Bilirubin (OR = 97 ..."

Reply: It was corrected.

Figure 1 and table 2 are not necessary. Mention their results in the text.

Reply: It was done.

Figure and tables' legend are not appropriate. Please use the extended form of abbreviations in the footnote.

Reply: It was done.

The legend of figure 2 "Figure 2. ROC curve for intensive care unit transfer and AST levels" should change to "Figure 2. Receiver operating characteristic (ROC) curve showing the accuracy of aspartate aminotransferase (AST) to predict the need to intensive care unit transfer".

Reply: It was done.

Overall comments:

AST, ALT, and ALP are not liver function tests (LFTs). They are liver enzymes. Please remove LFT from your manuscript. You can use the name of each enzyme instead.

Reply: It was corrected.

The manuscript needs language editing.

Reply: Reply: It was done.

Associate Editor's Comments:

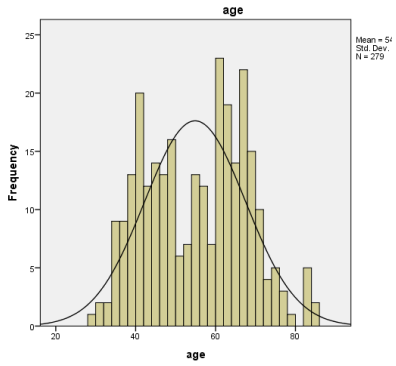
Associate Editor 1:

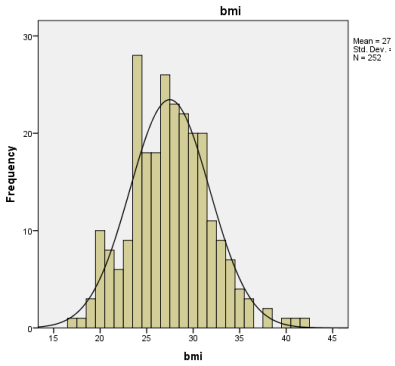
Dear EIC,

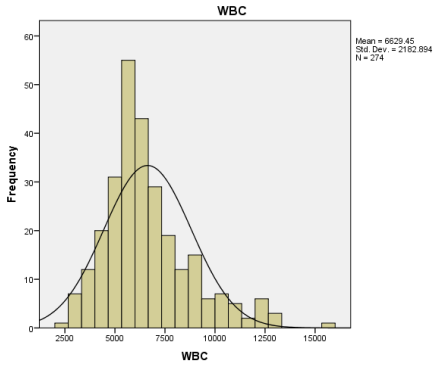
The manuscript was reviewed urgently to present the valuable results to medical community. In addition to comments of reviewers, I have few comments:

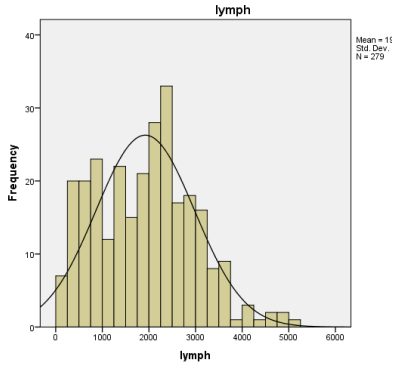
1. The distribution of quantitative variables should be checked if they are normally distributed or deviated from normal distribution. in case of deviation from normal distribution, they should be analyzed using non-parametric tests such as Mann–Whitney U test.

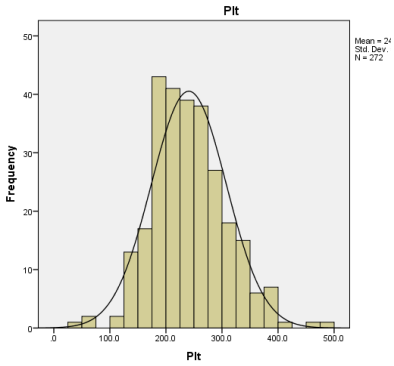
Reply: There were normal distribution for most parameter that was compared with t-test and inpatient days for linear regression.

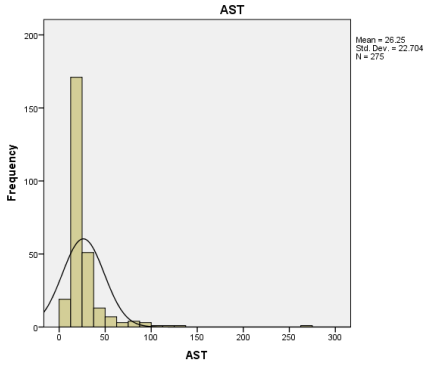


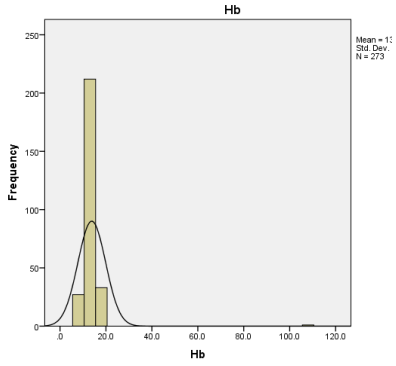


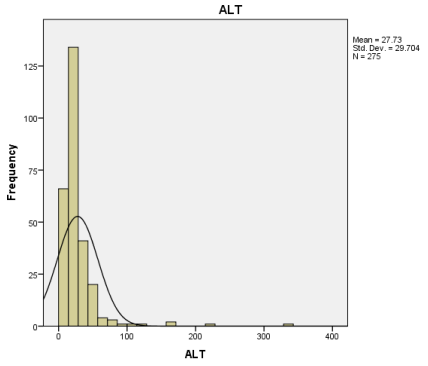


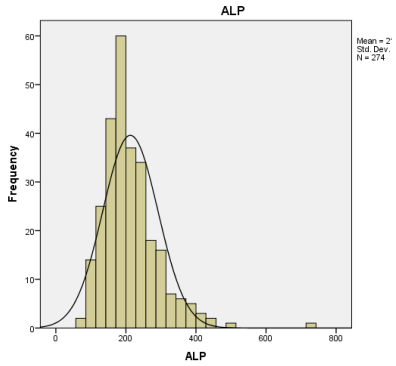

lymph
Frequency
lymph

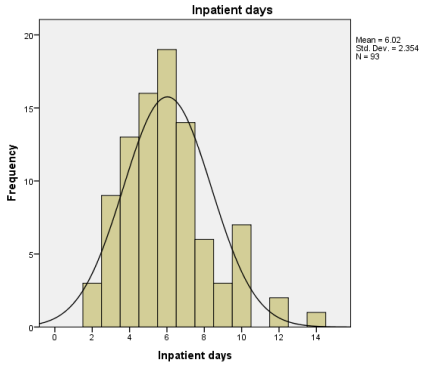

Plt
Frequency
Plt


AST
Mean = 26.25
Std. Dev. = 22.704
N = 275
Frequency
AST


Hb
Frequency
Hb


ALT
Mean = 27.73
Std. Dev. = 29.704
N = 275
Frequency
ALT


ALP
Frequency
ALP


Inpatient days
Mean = 6.03
Std. Dev. = 2.354
N = 93
Frequency
Inpatient days

2. The parameters in Tables 3 and 4 are not only liver enzymes and using term LFT is not appropriate for them.

Reply: It was corrected

3. How the cut-off value 30.5 was selected for evaluation of sensitivity and specificity of AST for intensive care transfer? For Figure 2, they should add AUROC, 95% CI of AUROC and P value in the caption.

Reply: 95% CI of AUROC and P value added in text.

OPEN PEER REVIEW

Revision (1)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Heidar Sharafi: Associate Editor | **Revision** (1) — 1 Apr 2020

Dear EIC,
Authors addressed most of the comments correctly. Please consider the revised manuscript for publication in Hepatitis Monthly.
Regards

Seyed Moayed Alavian: EIC | **Revision** (1) — 2 Apr 2020

Dear Author,
The document is reviewed carefully by the reviewers. According to their comments and your revisions as requested, this manuscript is accepted.
Thanks.