Author's response to reviews

Title: Study of the effect of antiviral therapy on homocysteinemia in hepatitis C virus- infected patients

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Author's response to reviews: see over
Dr John Dillon  
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BMC Gastroenterology

Subject: Submission of Revised Manuscript to BMC Gastroenterology (1100528138718985)

I am grateful to the editors and reviewers of the journal for a quick review and useful suggestions to improve the manuscript. The suggested changes have now been incorporated and the revised manuscript is submitted for consideration. The title of the manuscript is also revised as ‘The effect of antiviral therapy on homocysteinemia in HCV infected patients’. The point to point response to reviewers’ suggestions is enclosed. The changes in the manuscript text have been underlined.

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Reviewer 1
In the manuscript of Mustafa et al. entitled Study of the effects of antivirus therapy in patients with chronic liver disease due to hepatitis C virus infection, the authors have put an interesting effort to monitor the effect of the gold standard therapy for the treatment of hepatitis C patients. However I feel some points/issues can be clarified before it is published.

Major Compulsory Revisions
From Table 2, It seems ALT level in Non responders is low as compare to other groups before treatment. Is it statistically significant? if yes then what is the impact of this finding on the consideration to start gold standard therapy to Hepatitis C patients.

Answer:
Serum ALT level corresponds to the relative degree of damage to the liver. In the current study, ALT level in non-responders is low as compared to other groups and this difference is statistically significant. The difference might be correlated with the expected response of the patients to antiviral therapy. However, to establish this type of correlation, further studies in different HCV genotypes may be suggested.

Discretionary Revisions
Authors did not describe the Genotype of Hepatitis C in patients group. Is there any correlation between Genotype of Hepatitis C virus and response of combined gold therapy?

Answer:
Yes; the genotype testing is important in the diagnosis and monitoring of HCV infection treatment; the response to antiviral therapy differs for each genotype. However, the main focus of this study was to assess the effects of antiviral therapy on homocysteine levels to monitor the diagnosis and treatment of HCV in addition to other parameters. Therefore, this study was conducted on multi-genotype of HCV, although we have suggested (in concluding remarks of the manuscript) further similar studies on different HCV genotypes to establish homocysteine level as a biomarker to monitor anti-HCV therapy.

Reviewer 2
The study presented in the manuscript by mubeen et al. showed the importance of homocysteine as a biomarker for HCV therapy efficacy through comparative levels of plasma homocysteine before, during and after the therapy along with other parameters. The manuscript is well written and may be considered for publication subject to following revisions:

1. It seems that the study is based on multigenotype of HCV, while response to antiviral therapy differs for each genotype. Therefore, it is suggested that the title may be revised to
highlight the significance of homocysteine as a biomarker for antiviral therapy efficacy in chronic HCV patients, which is the major emphasis of the study.

Answer
Agreed; considering the editorial and reviewer comments, the title has been revised to “The effect of antiviral therapy on homocysteinemia in HCV infected patients”.

2. The article is based on HCV patients in Pakistan, so it should address HCV prevalence in Pakistan in introduction?
Agreed; HCV prevalence in Pakistan has been briefly addressed in the revised manuscript.

3. It should be clear for relapse patients, whether Hcy decreased during therapy and (increased again after therapy) or the therapy had no effect on Hcy levels?
The antiviral therapy could not reduce the Hcy levels in relapse patients as indicated by the analysis of this parameter before and after treatment. Unfortunately, it could not be possible to determine Hcy during therapy for large number of patients group. Therefore, we could not address the effect of therapy on Hcy in relapse patients specifically during treatment.

4. The results showed that the antiviral therapy was effective only for 43% patients. So the conclusion may be revised to mention the need of other more efficient drugs with better efficiency. Like direct acting drugs which are under investigation now a days.
The conclusion has been revised as suggested by the reviewer.