Author's response to reviews

Title: Role of CD8+ T cells in protection against Leishmania donovani infection in healed Visceral Leishmaniasis individuals

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Author's response to reviews: see over
To,  

The Editor,  

“BMC Infectious Diseases”  

Subject: Submission of revised manuscript to “BMC Infectious Diseases”  

Dear Sir,  

We are thankful to the reviewers for providing useful comments which have helped us to improve the manuscript entitled “Role of CD8+ T cells in protection against Leishmania donovani infection in healed Visceral Leishmaniasis individuals”. We are providing the responses to the comments raised and the revised manuscript.  

Sincerely,  

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Reply to comments

Reviewer: Anuradha Dube

- Minor Essential Revisions:

The current study evaluated the immunological mechanism associated with resistance to the disease in healed VL (HVL) individuals to *L. donovani* infection and possible role of CD8+ T cells in the protective immunity. Although the manuscript is well written but it may be considered for publication if the following concerns are properly addressed by the authors.

Comment: The statement of authors that in HVL group there is a high cellular immunological response to total soluble *Leishmania* antigen in terms of lymphoproliferation and production of Th1 cytokines is not a new observation. However, the estimation of granzyme B level is a new study which they have done to assess the production of cytotoxic T cells. On the basis of this they have hypothesized the role of CD8+ T cells in resistance to *L. donovani* infection.

Response: We thank the referee for valuable comments. We have modified the manuscript accordingly.

As per reviewer’s suggestion, we have highlighted the findings on granzyme B and its association with Proliferation Index to show the preponderance of CD8+ T cells in resistance to *Leishmania* infection. This has been done both in Abstract and Discussion sections.

The present study included HVL individuals with long history of VL, with mean±SD, 11±5.76 in yrs, ranging from 1 to 20 yrs, unlike earlier studies with short VL history (up to 1 year) (Kushawaha PK et al., *PLoS One* 2012, Baharia RK et al., *PLoS One* 2014, Gupta R et al., *PLoS One* 2014, Saha S et al., *J Immunol.* 2007). Therefore, our data is based on HVL individuals with long history of VL, indicating durable and strong cellular immune response upon *L. donovani* infection in HVL individuals.

Comment: There are some spelling mistakes which needs attention.

Response: This has been done.

Comment: Needs some language corrections before being published.

Response: Appropriate corrections have been made in the revised manuscript.

Reviewer: Sujit Kumar Bhattacharya

Reviewer's report: Interesting in an area of current research interest.

Response: We thank the referee for comment.