Reviewer’s report

Title: Black tea extract prevents lipopolysaccharide-induced NF-kappaB signaling and attenuates dextran sulfate sodium-induced experimental colitis

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Reviewer: Julio Galvez

Reviewer’s report:

This study describes the preventative intestinal antiinflammatory effect of black tea extract in the DSS model of mouse colitis, as well as reports the effects of this extract on NF-kB signaling in bone marrow derived macrophages. This is the first study evaluating the effects of this extracts and confirms previous studies performed with some of its active components. The aim of the study is clear, and the experiments seem to be well conducted, being the data analyzed properly.

Some minor revision should be done to clearly improve the quality of the study:

- How was BTE obtained and/or provided? Is it possible to show the general chemical composition of BTE? This would be essential to characterize the extract, for instance by showing its polyphenolic content, or the content of specific compounds.

- In the in vivo studies, how was the proportion of BTE to be incorporated in the diet selected? Is there any plausible reason for this? It is interesting to note that both concentrations showed a similar beneficial effect. Maybe, lower doses should have been used to establish a dose-response effect.

- In Figure 1, only the dose of 100 ug of BTE is shown. Representative bands from the other different concentrations assayed should be included in this figure.

- In the present study a preventative dosing protocol was used, but it would have been more interesting a curative approach. maybe, this will be the aim of future studies. However, the authors should explain why they have used this model, by comparing it with other experimental models in which some of the components of the extracts have been assayed.

- The histologic evaluation of the colonic samples from colitic animals should be described in the text according to the different parameters evaluated and representative pictures included in the manuscript.

- Is there a probable mechanism that could justify the effects of the BTE? Can it be ascribed exclusively to its antioxidant properties?

Level of interest: An article of importance in its field

Quality of written English: Acceptable
**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