Reviewer's report

Title: Leishmania amazonensis infection impairs dendritic cell migration from the inflammatory site to the draining lymph node

Version: 3
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Reviewer: Sofia Cortes

Reviewer's report:

This original article presents results on the ability of phagocyte cell populations (namely dendritic cells) migration to draining lymph nodes upon Leishmania amazonensis infection. The authors state and discuss clearly their findings and its relevance.

- Minor essential revisions

Abstract
1. Background should be more informative and display the relevance of work.
2. The first three sentences of Abstract Results (lines 32 to 36) are part of methodology so they should be included in Methods.
3. Line 36, write DC in full.

Main text
4. Background section is too long with paragraphs that should probably be in discussion section, as for the lines 78 to 86.
5. Again, the use of the murine model justification made by others (Bellingan et al., 1996) is too extensive and should be shorted, and some parts are more suitable in discussion section. Revise lines 100 to 122.
6. In Methods, authors must give more details on the L. amazonensis strain they are using, and at the first time it is stated, in line 158. Replace the word “parasites” by species/strain identification and morphological form. Moreover it should be briefly referred how parasites were maintained before the experiments.
7. In Methods, line 225, authors refer that experiments were performed a minimum of three times, but in figures 1 and 2, that include all experiment results, it is written that four experiments were independently performed (lines 506 and 520). Please correct in methods or in figure legends.
8. Line 234 include “of” before Leishmania phagocytosis.
9. As figures have infected and control groups, authors should put in brackets, along the results the word “control”, after the group that had medium alone and the same for infected group, in order to make easier the reading of figures along with text.
10. Line 249, put LNs in brackets after lymph nodes. In line 272 it was used but without having the abbreviation before. Replace other lymph nodes by the
abbreviation along the results.

11. Line 292: I think it would be clear if the authors put macrophage in brackets after CD11bhiF4/80hi, as it was done in the following sentence concerning cell population.

12. Line 300: replace Leishmania by Leishmania major which was indeed the studied species by Muriele and collaborators.


14. LNs should be included in List of abbreviations.

15. Revise the References, some journals are not in the abbreviated version.

Figures

In both Figure 1 and 2, infected (L. amazonensis) and control groups (medium alone) should be more explicit. You should standardize the terms used in text and in figures.

Although authors refer that the dot plots are from one representative experiment, it is hard to analyze results along to the figures, because the proportion values are different (in text are mean proportion values and on figures those are related to one experiment). I suggest that you put mean values of results in the figures. In addition, include in legend (lines 506 and 520, respectively) something like “values represent the mean of the four experiments”.

- Discretionary revisions

I consider that the last paragraph of discussion would be more appropriate after your main conclusions (line 367).

Authors should consider in including brief considerations, in Introduction or Discussion sections, concerning the species used in this study in terms of clinical form and epidemiology.

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.