

Dear Reviewer,

Thank you for taking the time to read our manuscript and thoughtfully provide your feedback. We have carefully considered the comments which you provided to the editor and have made the following adjustments to our review.

- 1) Regarding the COVID vaccines on **line 71**, we have added more information about their efficacy and safety.
- 2) Concerning the structure of the review, it was mentioned that there was not enough background information on each of the parasites, and some vital vectors were missing. The following changes have been incorporated: **we have added the vector for *Plasmodium* on line 256-257, the disease burden for Chagas disease on line 374-375, the geographical distribution for schistosomiasis on line 543-547, the vector for *Leishmania* on line 682-683, and we have expanded on the geographical distribution for leishmaniasis on lines 673-676.**
- 3) Regarding the R21 vaccine, as per the request, we have added more information on this vaccine to describe its importance to the field in **lines 122-130.**
- 4) We have carefully read through the manuscript to adjust long sentences and rewrite complicated ideas in a concise manner. Specifically, we have corrected the two issues brought to light on line 821, and line 911.
- 5) Regarding our comments on the delay in CD8+ T cell responses to *T. cruzi* infection, we have added more information on the suggested reason for this observation, namely delayed TLR sensing on lines 397-400.
- 6) Finally, in discussing why heterologous prime boosting is gaining traction, we have clarified that the neutralizing antibodies mentioned in the text which act as a detriment to adenoviral vectored vaccines are in fact neutralizing antibodies specific to the vector itself on **lines 1048-1050.**

Again, we would like to sincerely thank the reviewer for their insightful comments to make our review more robust. If it pleases the editor, we believe we have made sufficient changes to the manuscript, and we have resubmitted it for your secondary review.

Warm regards,
Cal Koger-Pease, Dilhan J. Perera, and Momar Ndao