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Trypanosoma cruzi isolates naturally adapted to congenital transmission display a unique strategy of transplacental passage

Paula Faral-Tello, Gonzalo Greif, Selva Romero, Andres Cabrera, Cristina Oviedo, Telma Gonzalez, Gabriela Libisch, Ana Paula Arévalo, Belen Varela, José Verdes, Martina Crispo, Yester Basmadjian, and Carlos Robello

Corresponding Author(s): Carlos Robello, Institut Pasteur de Montevideo

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Editor: Denis Sereno

Reviewer(s): Disclosure of reviewer identity is with reference to reviewer comments included in decision letter(s). The following individuals involved in review of your submission have agreed to reveal their identity: Ulrike Kemmerling (Reviewer #1)

Transaction Report:

(Note: With the exception of the correction of typographical or spelling errors that could be a source of ambiguity, letters and reports are not edited. The original formatting of letters and referee reports may not be reflected in this compilation.)

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September 6, 2022

Prof. Carlos Robello
Institut Pasteur de Montevideo
Unidad de Biología Molecular
Mataojo 2020
Montevideo 11400
Uruguay

Re: Spectrum02504-22 - CORRECTION (Trypanosoma cruzi isolates naturally adapted to congenital transmission display a unique strategy of transplacental passage)

Dear Prof. Carlos Robello:

Thank you for submitting your manuscript to Microbiology Spectrum. When submitting the revised version of your paper, please provide (1) point-by-point responses to the issues raised by the reviewers as file type "Response to Reviewers," not in your cover letter, and (2) a PDF file that indicates the changes from the original submission (by highlighting or underlining the changes) as file type "Marked Up Manuscript - For Review Only". Please use this link to submit your revised manuscript - we strongly recommend that you submit your paper within the next 60 days or reach out to me. Detailed instructions on submitting your revised paper are below.

Substantial modifications to the manuscript must be performed before being considered for publication in Microbiology Spectrum. 1) The references list is lacking in the paper, 2) "Informed consent" of the patients and "Informed permission" for the child are lacking, 3) Adherence of the clinical study to ethical standards in study design and execution, monitored by an Institutional Review Board is not quoted in the paper.

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Sincerely,

Denis Sereno

Editor, Microbiology Spectrum

Journals Department
American Society for Microbiology
1752 N St., NW
Washington, DC 20036
E-mail: spectrum@asmusa.org

Reviewer comments:

Reviewer #1 (Comments for the Author):

The manuscript "Trypanosoma cruzi isolates naturally adapted to congenital transmission display a unique strategy of transplacental passage" is an interesting study about the mechanisms of congenital transmission.

However, there are certain issues that must be addressed before accepting the manuscript:

- 1) the histopathological analysis is made with bad processed samples. The tissue have not been fixed and dehydrated in the correct way and some of the damage described in the text could be due to the wrong processing. Intracellular vesiculations is normally due to an excess of dehydrtation, separation of the tissue is due to wrong fixation. Better images must be provided.
- 2) Human and mouse placenta are structurally different, this should be mentioned and discussed in the manuscript.

Staff Comments:

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To submit your modified manuscript, log onto the eJP submission site at <https://spectrum.msubmit.net/cgi-bin/main.plex>. Go to Author Tasks and click the appropriate manuscript title to begin the revision process. The information that you entered when you first submitted the paper will be displayed. Please update the information as necessary. Here are a few examples of required updates that authors must address:

- Point-by-point responses to the issues raised by the reviewers in a file named "Response to Reviewers," NOT IN YOUR COVER LETTER.
- Upload a compare copy of the manuscript (without figures) as a "Marked-Up Manuscript" file.
- Each figure must be uploaded as a separate file, and any multipanel figures must be assembled into one file.
- Manuscript: A .DOC version of the revised manuscript
- Figures: Editable, high-resolution, individual figure files are required at revision, TIFF or EPS files are preferred

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Please return the manuscript within 60 days; if you cannot complete the modification within this time period, please contact me. If you do not wish to modify the manuscript and prefer to submit it to another journal, please notify me of your decision immediately so that the manuscript may be formally withdrawn from consideration by Microbiology Spectrum.

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Thank you for submitting your paper to Microbiology Spectrum.

Spectrum02504-22 - CORRECTIONR1

Response to Reviewers

The manuscript "*Trypanosoma cruzi* isolates naturally adapted to congenital transmission display a unique strategy of transplacental passage" is an interesting study about the mechanisms of congenital transmission.

However, there are certain issues that must be addressed before accepting the manuscript:

1) the histopathological analysis is made with bad processed samples. The tissue have not been fixed and dehydrated in the correct way and some of the damage described in the text could be due to the wrong processing. Intracellular vesiculations is normally due to an excess of dehydration, separation of the tissue is due to wrong fixation. Better images must be provided.

Response:

We thanks this comment. Taking it into account, we have repeated the experiments. We used fresh placentas that were immediately fixed and processed, and we incorporated an automatic method in order to process all the samples at the same time and conditions, in order to follow the suggestion of the reviewer. We used an SLEE MTP® Carousel tissue processor, and analyzed the new samples. The new Figure 9 is included, and changes in the section 2.14 include these modifications. In addition, we made changes in the legend of Figure 9.

2) Human and mouse placenta are structurally different, this should be mentioned and discussed in the manuscript.

I totally agree with this comment. In the discussion, we added the sentence, "Although there is a difference between the mouse and human placenta with respect to the depth of trophoblast invasion into decidual tissue, both are hemochorial placentas in which the fetal trophoblast is in direct contact with maternal blood."

January 3, 2023

Prof. Carlos Robello
Institut Pasteur de Montevideo
Unidad de Biología Molecular
Mataojo 2020
Montevideo 11400
Uruguay

Re: Spectrum02504-22 - CORRECTIONR1 (Trypanosoma cruzi isolates naturally adapted to congenital transmission display a unique strategy of transplacental passage)

Dear Prof. Carlos Robello:

Thank you for considering the reviewer comments in the new version of your paper as well as the ethical concerns.

Your manuscript has been accepted, and I am forwarding it to the ASM Journals Department for publication. You will be notified when your proofs are ready to be viewed.

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Thank you for submitting your paper to Spectrum.

Sincerely,

Denis Sereno
Editor, Microbiology Spectrum

Journals Department
American Society for Microbiology
1752 N St., NW
Washington, DC 20036
E-mail: spectrum@asmusa.org