Author's response to reviews

Title: Characterising the KMP-11 and HSP-70 recombinant antigens' humoral immune response profile in chagasic patients

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Version: 17 Date: 22 July 2009

Author's response to reviews: see over
Dr.
Melissa Norton,
Editor-in-Chief
BMC Infectious Disease

July 22th 2009,

Dear Dr,

We would like to submit our article entitled, “Characterising the KMP-11 and HSP-70 recombinant antigens’ humoral immune response profile in chagasic patients” by Ivonne Flechas, Adriana Cuellar, Zulma Cucunuba, Fernando Rosas, Victor Velasco, Mario Steindel, Maria del Carmen Thomas, Manuel Carlos Lopez, John Mario Gonzalez, and Concepción Judith Puerta, for consideration for publication in your prestigious journal.

In this study it has been analyzed the humoral response, total IgG and its subclasses, of chagasic patients against *T. cruzi* proteins such as kinetoplastid membrane protein-11 (KMP-11), and a fragment of the heat shock protein-70 (HSP-70), aminoacids 192-433, to find out differences according to the disease stages: acute, indeterminate and chronic. Also, an entire HSP-70 recombinant protein of *Trypanosoma rangeli*, a non-pathogenic parasite sympatric with *T. cruzi*, was included.
Obtained results showed that total and IgG subclass humoral response differs according to both the disease stage and the antigen used, being major variations presented between acute and chronic patients. Of note, it was observed a higher reactivity against the *T. rangeli* HSP-70 protein in most of the chagasic patients, suggesting that this protein is involved in the cross-reaction between these trypanosomes and could be explored for developing diagnosis tests.

Whereas IgG1 and IgG3 were identified as the prevalent subclasses implicated in response to the crude *T. cruzi* antigen, and *T. rangeli* HSP-70 recombinant protein, IgG1 was the only isotype observed against KMP-11 recombinant protein. It is proposed to study the role of these specific antibodies in controlling the infection or the progressing into the disease severity.

None of the authors has any potential financial conflict of interest related to this manuscript.

I thank you in advance and look forward to your soon response.

Yours sincerely,

Dr. Concepcion Puerta, PhD