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## MAJOR SURFACE IMMUNOGENS OF *TRYPANOSOMA CRUZI* TRYPOMASTIGOTES

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The surface antigens of *Trypanosoma cruzi* trypomastigotes were identified using immunoprecipitation with human immune sera and compared with metabolically labeled excretory-secretory products (ES) released by the parasite *in vitro*. A series of major immunogenic components in the ES material were revealed (160; 120 and 80-96 kDa). The trypomastigote surface bears the 130 kDa band and the 80-120 kDa complex. Competition experiments carried out demonstrated the common antigenic structure of ES and surface antigens. The fibronectin receptor of *T. cruzi* trypomastigotes (FnR) was also identified in the ES antigens. The presence of Acetylcholinesterase (AChE) activity in *T. cruzi* soluble antigens has been reported in our laboratory<sup>1</sup>. This observation together with the presence of FnR on *T. cruzi* trypomastigotes<sup>2,3</sup>, allowed us to investigate the relationship between the AChE and the parasite FnR by using immunological and biochemical probes. Here we present evidence that the parasite FnR exhibits immunological cross-reactivity with human AChE. Antibodies to AChE were detected in *T. cruzi*-infected patients sera and during experimental infection of BALB/c mice. Anti-idiotypic antibodies were also found in these sera. These antibodies may contribute to the appearance of the conducting tissue damage. The presence of anti-idiotypic antibodies may support the notion for a functional idiotypic network that may play a role in the immunopathology of Chagas' disease. This work was supported by INSERM U167-CNRS 624 and the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases.

1-T. Duriez *et al.* (1983), *Protistologica*, XIX: 299.

2-M.A. OuaiSSI *et al.* (1984), *Nature*, 308 :380.

3-M.A. OuaiSSI *et al.* (1986), *Mol. Biochem. Parasitol*, 19 : 201.