

V-4

CLONAL STRUCTURE OF THE COLOMBIAN STRAIN OF *TRYPANOSOMA CRUZI* (BIODEME TYPE III): BIOLOGICAL, ISOENZYMIC AND HISTOPATHOLOGICAL ANALYSIS OF SEVEN ISOLATED CLONES. Edson Luis Paes Camandaroba¹, Rozália Figueira Campos², Juracy Barbosa Magalhães and Sonia G. Andrade – Centro de Pesquisas Gonçalo Moniz/Fiocruz. Rua Waldemar Falcão –121 –40295-001, Salvador-Bahia

Colombian strain of *Trypanosoma cruzi*, prototype of Biodeime Type III and Zymodeme 1, representative of the taxa *T. cruzi* I, presents well defined biological and isoenzymic characters, as well as pathogenicity and tissue tropism. The clonal structure of this strain was studied in order to characterize its populations and to establish its homogeneity or heterogeneity. Seven clones were isolated and compared with the parental strain in their biological isoenzymic and histopathological features. The seven clones presented the basic characteristics of Biodeime Type III and zymodeme Z1. The parental strain and four clones presented elevated virulence, with high mortality rate until 30 days (100%). Mortality was low (7 to 23%) in the other three clones. Histopathological lesions were characteristics of Type III strains with predominance of skeletal muscle parasitism and, to a lesser degree, in myocardium, exhibiting extensive necrotic-inflammatory lesions from 20th to 30th day of infection. In conclusion, clonal structure of the Colombian strain is homogeneous. Although varying in virulence the zymodeme profiles are maintained, so its high pathogenicity. The present results suggest the presence of "principal clones" in the populations of the Colombian strain, which are responsible for the pattern of lesions seen in experimental animals and, probably, influencing in the manifestations of Chagas disease in the endemic areas in which predominates this type of strain.