

# Trypanosoma cruzi diversity in infected dogs from areas of the north coast of Chile

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© 2016 Elsevier B.V. As part of a multi-site research program on the eco-epidemiology and control of Chagas disease in northern Chile, we sought to identify the *Trypanosoma cruzi* discrete typing units (DTUs) infecting rural and peridomestic dogs, using direct methods without growth of the parasite in the laboratory and thus to assess the use of this species as a sentinel of the disease in well-defined endemic areas of *T. cruzi* in Chile. Infected dogs (35) from three villages were included in the study. The studied villages were Caleta Río Seco and Caleta San Marcos, both in the Tarapacá Region, and La Serena in the Coquimbo Region. These villages were selected based on previous evidence of *Mepraia* infection reports of the Chilean Ministry of Health. Amplicons from nested-PCR positive samples were used as targets to determine the infective *T. cruzi* DTUs circulating in blood using PCR-DNA blotting and hybridization assays with five specific DNA probes (TcI, TcII, TcIII, TcV and TcVI). Res