SURVEY OF ANTIPARASITIC EVALUATION METHODS FOR *Trypanosoma cruzi*

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Chagas Disease, a Neglected Tropical Diseases group member, is caused by the trypanosomatids *Trypanosoma cruzi*. This disease is among the leading causes of morbidity and mortality worldwide. It is responsible for incapacitating and/or killing millions of people, representing an important medical need that remains unmet. The general objective of this project is to survey antiparasitic evaluation methods for the trypanosomatids *T. cruzi* for producing a review article and implementing laboratory techniques. In addition, it aims to assist in the implementation of an in vitro and in vivo testing platform for compounds and substances with antiparasitic activity, creating the possibility of generating data that will have a direct impact on the process of developing drugs for parasitosis, through the identification of new prototypes and/or drug candidates. Direct searches were performed in the scientific literature on antiparasitic evaluation with the parasite species, published between 2013 and 2022 in the PubMed database, using the term “anti-*Trypanosoma cruzi*”. A total of 203 articles were screened, of which 129 experimental studies were selected for detailed methods. The information collected included strain, parasitic form, interaction cell, and in vitro and in vivo evaluation methods. It was possible to observe that the analysis of parasite viability through methods such as Neubauer chamber counting, flow cytometry, and colorimetric techniques are still the most used in evaluations of trypanocidal activity. The Y and Tulahuen strains (including their variations) are the most used for experimentation with *T. cruzi*, varying between the three life stages of the parasite; the most used interaction cells continue to be macrophages and fibroblasts. It has been possible to observe that the simplest evaluation techniques are still the most used in the screening of compounds and substances to select promising compounds in the treatment of Chagas Disease.

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