

Treatment options for Chagas Disease: a systematic review and meta-analysis preclinical studies with animal models

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ADMINISTRATIVE INFORMATION

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Review Stage at time of this submission - The review has not yet started.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202430101

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 25 March 2024 and was last updated on 25 March 2024.

INTRODUCTION

Review question / Objective Search in the literature for studies that describe testing new molecules for the treatment of Chagas Disease in animal models. We are searching for the impact of the variation of the models in evaluating the efficacy of the new molecules.

Condition being studied Chagas disease, also known as American trypanosomiasis, is a tropical parasitic disease caused by *Trypanosoma cruzi*. It is spread mostly by insects in the subfamily Triatominae, known as "kissing bugs".

METHODS

Participant or population The review will focus on studies performed in mice models.

Intervention Treatment and control groups.

Comparator Efficacy of the new treatment on mice experimentally infected with *T. cruzi*.

Study designs to be included Infection and treatment type of studies.

Eligibility criteria Data on the type of compound used for treatment, dosage, length of treatment, total sample size, number and species of experimental animals infected with *T. cruzi*, phase of CD, *T. cruzi* strain, sample type, and description of the controls were extracted from each of the chosen studies.

Information sources The searches will be focused on Pubmed (<https://pubmed.ncbi.nlm.nih.gov/>).

Main outcome(s) Data on the type of compound used for treatment, dosage, length of treatment, total sample size, number and species of experimental animals infected with *T. cruzi*, phase of CD, *T. cruzi* strain, sample type, and description of the controls were extracted from each of the chosen studies.

Quality assessment / Risk of bias analysis Five authors will review independently all the selected studies.

Strategy of data synthesis The data will be analyzed within the R environment.

Subgroup analysis The data will be analyzed within the R environment.

Sensitivity analysis The data will be analyzed within the R environment.

Country(ies) involved Peru, Brazil.

Keywords Chagas disease; treatment; efficacy; systematic review; meta-analysis; parasitemia.

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