

Our study on therapeutic evaluation of Compound-1 for the possible treatment of typhoid led to an Indian Patent No. 331376, granted in February 2020. This patent discloses a water-soluble, drug-loadable, low molecular weight chitosan oligosaccharide nanoparticle having efficient drug loading entrapment and release kinetics.

One of my study was to investigate whether the repurposed drugs Chloroquine and Colchicine could boost the anti-*T. cruzi* effect of the standard but suboptimal anti-*T. cruzi* drug Benznidazole (BZN), optimizing its therapeutic efficacy in the chronic phase of Chagas disease. In particular, we tested the ability of Chloroquine and Colchicine to synergize with BZN, thereby reducing the dose (and the consequent toxicity) needed to fight and/or eradicate the parasite. This study demonstrated that the combination of Chloroquine and Colchicine with BZN potentiated the latter's effect by several-fold. This is the first study of its kind in Latin America as per the PubMed. I received the Federation of Clinical Immunology Societies Travel Award 2017 to present my work in Santiago, Chile, Latin America.

**Pandey RP, Nascimento MS, Franco CH, Bortoluci K, Silva MN, Zingales B, Gibaldi D, Castaño Barrios L, Lannes-Vieira J, Cariste LM, Vasconcelos JR, Moraes CB, Freitas-Junior LH, Kalil J, Alcântara L, Cunha-Neto E. Drug Repurposing in Chagas Disease: Chloroquine Potentiates Benznidazole Activity against *Trypanosoma cruzi* *In Vitro* and *In Vivo*. Antimicrob Agents Chemother. 2022 Nov 15;66(11):e0028422**