

SUSCEPTIBILITY OF LEISHMANIA DONOVANI TO ANTI-INFECTIVE INVESTIGATIONAL COMPOUND MARINOPYRROLE A

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Leishmaniasis is a potentially fatal disease spread by sand flies in countries such as India, Nepal, Brazil, and others. Its life cycle involves two different forms: one motile (promastigote) and one immotile (amastigote). This promastigote form is often used in vitro because it can be grown in a liquid culture without a mouse or white blood cells. Leishmaniasis can affect humans in different ways: through the skin, mucous membranes, or internal organs. New treatments for leishmaniasis are necessary due to the fact that existing treatments are either becoming less effective, too expensive, or are too unavailable to meet demand. Current treatments are also moderately toxic and cause more than undesirable side effects. To help combat the lack of treatments, we created susceptibility assays to find at what concentration, if any, the parasite *L. donovani* will be affected by the novel compound Marinopyrrole A. The goal is to find the half-maximal inhibitory concentration, the concentration at which at least half of the parasite's growth is stopped. To date, our findings provide initial support for Marinopyrrole A being effective against at least one parasite, *Toxoplasma gondii*, in recent experiments.