

ABSTRACT OF THE DISCLOSURE

SPIRO AND DISPIRO 1,2,4-TRIOXOLANE ANTIMALARIALS

A means and method for treating malaria, schistosomiasis, and cancer using a spiro or dispiro 1,2,4-trioxolane is described. The preferred 1,2,4-trioxolanes include a spiroadamantane group on one side of the trioxolane group, and a spirocyclohexyl on the other side of the trioxolane group, whereby the spirocyclohexyl ring is preferably substituted at the 4-position. In comparison to artemisinin semisynthetic derivatives, the compounds of this invention are structurally simple, easy to synthesize, non-toxic, and potent against malarial parasites.