

SYNERGISM OF ANTIMALARIAL ANTIBIOTICS WITH HYDROGEN PEROXIDE IN INHIBITING *PLASMODIUM FALCIPARUM* GROWTH IN CULTURE

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Abstract. Although morbidity and mortality from malaria have steadily decreased worldwide, the ever present menace of the appearance of *Plasmodium falciparum* resistant to all antimalarials in current use, including most recently to artemisinin and its analogs, is of utmost concern, especially when development of new and affordable antimalarials has not kept abreast of this phenomenon. An alternative approach is to identify synergistic drug combinations, which would allow employment of otherwise non-efficacious antimalarial drugs. This study demonstrates that combinations of the chemical oxidant hydrogen hydroxide with antimalarial antibiotics targeting parasite mitochondrial and apicoplast ribosomes, which normally produce 'delayed-death' of parasites, act synergistically to inhibit *P. falciparum* growth in culture.

Keywords: *Plasmodium falciparum*, antibiotics, growth inhibition, hydrogen peroxide, synergism

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