

[Available Issues](#) | [Japanese](#)Author: [ADVANCED](#)Volume  Page Keyword: [TOP](#) > [Available Issues](#) > [Table of Contents](#) > **Abstract**

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### ***In vitro* effect of current antimalarial drugs on the survival of *Schistosoma mansoni* adult worms and their egg production**

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**Abstract:** Some field trials have already demonstrated the high antimalarial efficacy of combination therapies using Artesunate (ART) and current antimalarial drugs (MQ, QN, AQ, PQ, CQ, Sf, and Py) (*et al.*, 2007; Mohamed *et al.*, 2009; Sissoko *et al.*, 2009). The antimalarial effects of these drugs are noteworthy, especially when they are used for the treatment of schistosomiasis endemic areas. However, the antischistosomal effects of these drugs (MQ, QN, AQ, PQ, CQ) and Py were assessed by *in vitro* incubation. The objective of the present study was to evaluate the effects of current antimalarial drugs on the egg productivity of adult *S. mansoni* and their survival times. The effect of the current antimalarial drugs (MQ, QN, AQ, PQ, CQ, Sulfadiazine (Sf) and Py on the

worm pairs of *Schistosoma mansoni* and their survival times during assessed at a concentration of 10 Mg/ml. AQ, PQ, CQ and Py significantly reduced the daily egg output of paired female worms at a concentration of 10 Mg/ml during *in vitro* cultivation. However, QN and Sf did not significantly affect the egg output during the 8-day incubation. One-day exposure to MQ killed all paired adult worms. AQ and PQ significantly decreased the survival of both male and female worms during the 14-day incubation, but QN, CQ, Py and Sf had a similar effect. The present result is consistent with an assessment of the effects of artemisinin-based combination therapy in malaria and schistosomiasis areas.

**Key words:** [antischistosomal drugs](#), [antimalarial drugs](#), [Schistosoma mansoni](#), [quinine](#), [amodiaquine](#), [primaquine](#), [chloroquine](#), [pyrimethamine](#), [sulfadiazine](#)

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