

# Evidence Update

Malaria Series

January 2005

Is intramuscular arteether (also known as artemotil) as effective as other antimalarial drugs in people with severe malaria?

There is insufficient research to know whether arteether is better or worse than quinine for patients with severe malaria.

## Inclusion criteria

### Studies:

Randomized and quasi-randomized controlled trials.

### Participants:

Adults and children with severe malaria as defined by the World Health Organization.

### Intervention:

Intervention: intramuscular arteether (artemotil and arteether).

Control: other antimalarial drugs, including quinine, artemether, artesunate, and artemisinin, given intravenously, intramuscularly, or rectally.

### Outcomes:

Primary: death; neurological complications at follow up.

Secondary: time to regain consciousness; presence of parasites at days 7 and 28; parasite clearance time; fever clearance time.

## Results

- Two small trials that compared arteether with intravenous quinine in 194 children were included. Both concealed allocation.
- No difference in the number of deaths in those receiving arteether and those receiving quinine was demonstrated (relative risk 0.75, 95% confidence interval 0.43 to 1.30, n=194; 2 trials).
- One small trial did not show a difference in the number of neurological complications in those receiving arteether and those receiving quinine (relative risk 1.18, 95% confidence interval 0.31 to 4.46, n=58).
- No difference was demonstrated for time to regain consciousness, parasite clearance time, or fever clearance time.

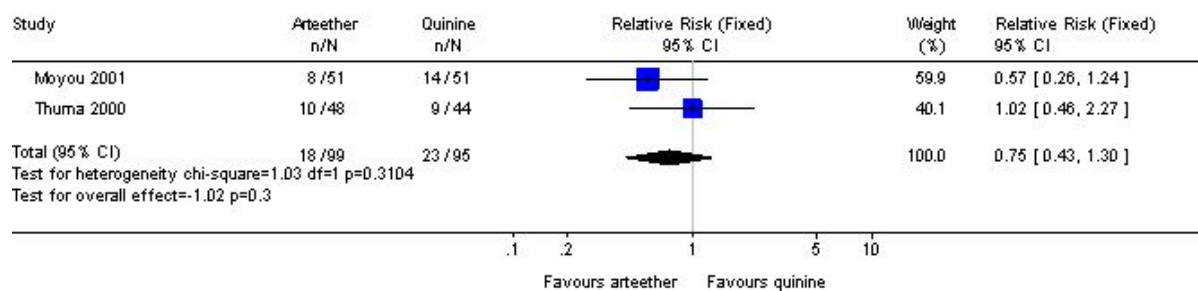


**DFID** Department for  
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Adapted from Afolabi BB, Okoromah CN. Intramuscular arteether for treating severe malaria. *The Cochrane Database of Systematic Reviews* 2004, Issue 4. Art. No.: CD004391. DOI: 10.1002/14651858.CD004391.pub2.

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Review: Intramuscular arteether for treating severe malaria  
 Comparison: 01 Arteether versus quinine  
 Outcome: 01 Death



## Authors' conclusions

### Implications for practice:

The data are too limited to determine the effects of arteether on death, neurological complications at follow up, time to regain consciousness, parasite clearance time, presence of parasites on days 7 and 28, fever clearance time, and adverse events.

### Implications for research:

More trials that compare arteether with other antimalarial drugs in children and adults, and that have sufficient statistical power to detect clinically significant differences in the number of deaths and other important outcomes, are needed.