5.2.2. Duration of treatment

Clinical Question/ PICO

Population: Adults and children with uncomplicated malaria (malaria-endemic settings)
Intervention: Artesunate 4 mg/kg bw once daily for 3 days plus sulfadoxine–pyrimethamine on day 1
Comparator: Artesunate 4 mg/kg bw once daily for 1 day plus sulfadoxine–pyrimethamine on day 1

Outcome Timeframe	**Study results and measurements**	**Comparator** Artesunate 1 day plus sulfadoxine-pyrimethamine	**Intervention** Artesunate 3 days plus sulfadoxine-pyrimethamine	**Certainty of the Evidence** (Quality of evidence)	**Plain language summary**
Parasitological failure 14 days	Relative risk 0.36 (CI 95% 0.27 — 0.5) Based on data from 1,276 patients in 4 studies. (Randomized controlled)	19 per 1000 Difference:	7 per 1000 **12 fewer per 1000** (CI 95% 14 fewer — 9 fewer)	High 1	
Parasitological failure - PCR-unadjusted 28 days	Relative risk 0.62 (CI 95% 0.54 — 0.71) Based on data from 1,260 patients in 4 studies. (Randomized controlled)	47 per 1000 Difference:	29 per 1000 **18 fewer per 1000** (CI 95% 22 fewer — 14 fewer)	High 2	*Corresponding risk calculated is different than what is reported in WHO document*
Parasitological failure - PCR-adjusted 28 days	Relative risk 0.45 (CI 95% 0.36 — 0.55) Based on data from 1,202 patients in 4 studies. (Randomized controlled)	33 per 1000 Difference:	15 per 1000 **18 fewer per 1000** (CI 95% 21 fewer — 15 fewer)	High 3	*Corresponding risk calculated is different than what is reported in WHO document*
Gametocytaemia 7 days	Relative risk 0.74 (CI 95% 0.58 — 0.93) Based on data from 1,260 patients in 4 studies. (Randomized controlled)	20 per 1000 Difference:	15 per 1000 **5 fewer per 1000** (CI 95% 8 fewer — 1 fewer)	High 4	
Gametocytaemia 14 days	Relative risk 0.8 (CI 95% 0.57 — 1.14) Based on data from 1,199 patients in 4 studies. (Randomized controlled)	11 per 1000 Difference:	9 per 1000 **2 fewer per 1000** (CI 95% 5 fewer — 2 more)	High 5	*Corresponding risk calculated is different than what is reported in WHO document*
Gametocytaemi	Relative risk 0.36 (CI 95% 0.14 — 0.92)	3	1	Moderate	

Outcome Timeframe	**Study results and measurements**	**Comparator** Artesunate 1 day plus sulfadoxine-pyrimethamine	**Intervention** Artesunate 3 days plus sulfadoxine-pyrimethamine	**Certainty of the Evidence** (Quality of evidence)	**Plain language summary**
a 28 days	Based on data from 898 patients in 4 studies. (Randomized controlled)	per 1000 Difference:	per 1000 **2 fewer per 1000** (CI 95% 3 fewer — 0 fewer)	Due to serious imprecision [6]	

1. **Inconsistency: no serious.** All four studies found reductions with 3 days of artesunate, although there was some variation in the size of this effect. **Indirectness: no serious.** The four trials were conducted in children with uncomplicated P. falciparum malaria in the Gambia, Kenya, Malawi and Uganda. The same screening methods and inclusion criteria were used. Sulfadoxine–pyrimethamine was the partner antimalarial drug in all four trials. Resistance to sulfadoxine–pyrimethamine was noted at three study sites, parasitological failure with sulfadoxine–pyrimethamine alone being seen in 10–13% of participants in the Gambia, 27% in Kenya and 25% in Uganda. **Imprecision: no serious.** The confidence intervals are narrow, and the intervals comprise clinically important effects. No serious imprecision: The confidence intervals are narrow and do not include no effect.
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5. **Inconsistency: no serious.** All four studies found reductions with 3 days of artesunate, although there was some variation in the size of this effect. **Imprecision: no serious.** The confidence intervals are narrow, and the intervals comprise clinically important effects. No serious imprecision: The confidence intervals are narrow and do not include no effect.
6. **Inconsistency: no serious.** All four studies found reductions with 3 days of artesunate, although there was some variation in the size of this effect. **Imprecision: serious.** The confidence intervals are narrow, and the intervals comprise clinically important effects. Downgraded by 1 for serious imprecision: As gametocytaemia at this time was rare in both groups, the studies have inadequate power to confidently detect important differences.