

Drug	ART-S	Single Dose Regimen						Double Dose Regimen					
		ART-R ₃₀	F; p	ART-R ₁₂₀	F; p	ART-R ₂₄₀	F; p	ART-R _{DD19.2}	F; p	ART-R _{DD38.4}	F; p	ART-R _{DD80}	F; p
Artesunate	10.7 (10.2 – 11.2)	11.5 (6.6 – 16.85)	0.525; 0.47	82.5 (69.5 – 95.8)	191.3; <0.0001	100.3 (92.9 – 118.4)	304.8; <0.0001	24.0 (17.5 – 35.5)	31.9; <0.0001	59.1 (39.6 – 78.6)	58.3; <0.0001	47.7 (36.7 – 58.7)	147.6; <0.0001
DHA	13.8 (12.9–14.6)	-	-	54.6 (51.6–57.6)	300.3; <0.0001	49.5 (42.7–57)	132; <0.0001	-	-	-	-	30.3 (26.4 – 33.5)	53.6; p<0.0001
Amodiaquine	11.3 (10.6 – 12.1)	-	-	-	-	132.4 (115.5–149.3)	243.7; <0.0001	-	-	-	-	51.2 (46.1 – 56.3)	152.5; <0.0001
Mefloquine	41.7 (39.1 – 44.4)	-	-	-	-	39.1 (34.1 – 44.5)	0.82; 0.37	-	-	-	-	41.3 (39.2 – 50.5)	0.021; 0.89
Chloroquine	50.1 (46.5 – 53.7)	-	-	-	-	53.0 (42.7 – 68.3)	0.39; 0.54	-	-	-	-	52.4 (42.1 – 67.2)	0.346; 0.56
Quinine	49.7 (46.6 – 52.8)	-	-	-	-	226.9 (145.8 – 392.1)	23.12; <0.0001	-	-	-	-	106.25 (93.3 – 115.6)	98.9; <0.0001
Halofantrine	7.9 (7.3 – 8.6)	-	-	-	-	30.4 (25.9 – 34.9)	159.3; <0.0001	-	-	-	-	7.9 (6.8 – 9.0)	0.008; 0.93
Lumefantrine	7.5 (6.3 – 8.7)	-	-	-	-	7.8 (6.2 – 9.8)	0.13; 0.72	-	-	-	-	-	-
Pyremethamine	16.2 (13.8 – 18.8)	-	-	-	-	19.9 (16.5 – 24.6)	4.75; 0.05	-	-	-	-	-	-

Additional file 10: *In vitro* IC₅₀ nM (95%CI) values at different stages of ART-R

IC₅₀ (95% confidence interval) values for all drugs tested are shown for the drug-naïve progenitor strain (ART-S) and for strains that developed artemisinin resistance to increasing doses of artesunate under both the single dose regimen (ART-R₃₀, ART-R₁₂₀, ART-R₂₄₀) and the double dose regimen (ART-R_{DD19.2}, ART-R_{DD38.4}, ART-R_{DD80}). The probability (p) of the IC₅₀ value being calculated from the same curve obtained for the sensitive progenitor parasite is shown for each drug tested in each strain, as determined by the extra sum-of-squares F test.