	Plasma Concentration of DHA (ng/mL)	
	1 hour post- injection	2 hours post- injection
NSG 491	3219.3	591.3
NSG 493	3159.8	1445.5
NSG 494	2423.3	330.3
NSG 495	1573.0	571.3

## Additional File 9: Mouse plasma dihydroartemisinin (DHA) concentrations measured after intravenous administration of artesunate

The plasma concentrations of dihydroartemisinin (the active metabolite of artesunate) as measured in four mice infected with the ART- $R_{120}$  strain 1 and 2 hours after intravenous administration of artesunate (120 mg/kg) using reversed-phase liquid chromatography coupled to tandem mass spectrometry (LC-MS/MS) are shown. Follow up of mouse parasitemia in the days following drug administration showed parasite survival and hence resistance to the measured drug concentrations in all four mice.