

Dose of Artesunate (single doses)								
Generation	2.4mg/kg	3.3mg/kg	4mg/kg	15mg/kg	30mg/kg	60mg/kg	120mg/kg	240mg/kg
1 <sup>st</sup> (5 mice)	3, 3, 3, 3	6, 4, 2	1, 2	-	-	-	-	-
2 <sup>nd</sup> (9 mice)	-	1	2, 1, 3	4, 9, 9, 6, 6	1, 2, 1, 2	-	-	-
3 <sup>rd</sup> (6 mice)	-	-	-	-	2, 4, 5, 3, 4	5*	-	-
4 <sup>th</sup> (1 mouse)	-	-	-	-	-	1	3	1
5 <sup>th</sup> (6 mice)	-	-	-	-	-	-	3, 4, 2, 3	2, 4
6 <sup>th</sup> (10 mice)	-	-	-	-	-	-	3, 2, 2, 2, 2, 2	2, 1, 1, 1, 2, 7
7 <sup>th</sup> (6 mice)	-	-	-	-	-	-	-	1, 2, 1, 1, 1, 1
<b>Number of mice injected with given dose</b>	4	4	5	5	9	2	11	15

**Additional File 5: Number and intensity of artesunate drug pressure cycles required to select for artemisinin-resistance using single doses of artesunate.**

Each digit tabulated represents a mouse at a given time in the artemisinin resistance selection process. The number indicates how many single dose APCs that mouse underwent at a given drug concentration, and the color of the digit indicates the response that was produced by parasites infecting that mouse to the last APC at that drug concentration (green=sensitive/intermediate, red=resistant). \*See NSG 385 SI Fig 1