

Table S1: Comparison of inhibitory activity of 12 known antimalarial drugs on immature and mature stages of the *P. falciparum* gametocytes as obtained from different assay platforms on different gametocyte stages.

Compound	IC ₅₀ (nM)							
	NF54 ^{Pfs16} luciferase (48 h) [*]		Mitotracker (SALSA) [#]				NF54 ^{Pfs16} luciferase (72 h) ^{&,\$}	
	Immature	Mature	Stage II	Stage III	Stage IV	Stage V	Immature ^{&}	Late stage ^{\$}
DHA	20.5	2103	2.7	6.7	2.1	>5000	0.9	91.5
OZ439	20	>5000	5.2	3.4	2	>5000	ND	ND
Chloroquine	5.92	>5000	98	>5000	>5000	>5000	76.75	ND
Amodiaquine	54	>5000	8.8	107	2460	1780	189.71	ND
Piperaquine	108	4000	14	31	4000	4000	ND	ND
Pyronaridine	27	938	10	126	2579	2075	168.09	4914.3
Lumefantrine	9.88	2382	13	15	599	520	7.82	ND
Methylene Blue	62.7	396	15	13	12	258	29.64	38.3
Atovaquone	>5000	1000	>5000	>5000	>5000	>5000	>10 000	ND
Pyrimethamine	>5000	>5000	>5000	>5000	>5000	>5000	> 40 000	ND
Sulfadoxine	>5000	>5000	>5000	>5000	>5000	>5000	ND	ND
Tafenoquine	3988	5000	3680	3730	3484	2449	3628	2505.1

^{*} Data obtained from the assay platform developed here (48 h incubation)

[#] Data obtained from the SALSA assay in Plouffe et al. 2016 (72 h incubation)

[&] Data as published in Lucantoni et al. 2013 (72 h incubation)

^{\$} Data as published in Lucantoni et al. 2016 (72 h incubation)