

Supplementary Table S1 – Oligonucleotides used in real-time PCR experiment for melatonin treatment.

GENES	Primer Name	Oligonucleotides (5' → 3')
CDPK1 PF3D7_0217500	CDPK1-R	GGGTTTATCGCTAGGTCCTCC
	CDPK1-F	GGGTGTTCAACAAAGTTCAAACGT
CDPK2 PF3D7_0610600	CDPK2-R	ACACCACTAGACCAGATATCACATT
	CDPK2-F	GGAACAGGAGAATTTACAACGACT
CDPK3 PF3D7_0310100	CDPK3-R	CCCCGTCATTGTCTACGTCA
	CDPK3-F	GTGATGGCAGTGGGAAAATTGA
CDPK4 PF3D7_0717500	CDPK4-R	TGTATATTTCCCCGCTTCCACT
	CDPK4-F	CATACTTCTCTCAGGGTGCCC
CDPK5 PF3D7_1337800	CDPK5-R	TCGGGTGCTATATAATAAGGTGTCC
	CDPK5-F	TGATTGGGGATTTCGCTAGTAAATGT
CDPK6 PF3D7_1122800	CDPK6-R	TCCAAAGCCTGAAGAATCCGA
	CDPK6-F	ACGGATCATTGAGTCATCGAGA
CDPK7 PF3D7_1123100	CDPK7-R	ACCTTGCCCTAACTGTTTCATGT
	CDPK7-F	AGGGATGAATGGGTACAAGCG
GC α PF3D7_1138400g	GC α -R	ACCGACCACACCTGCAATAA
	GC α -F	ACTCTTTCAATAACGACAAAGCAGA
GC β PF3D7_1360500	GC β -R	TCTCCAGGTATCCCATTTGATTCA
	GC β -F	ATGGCTCATGTGTTGGTGGT
PfPKG PF3D7_1436600	PKG-R	TCTTCTGCATAAGTTTCACT
	PKG-F	TCAAAGACATAAAGGATCAC
PfPDE α PF3D7_1209500	PDE α -R	TCTTCGTTAATTTTGAGTGT
	PDE α -F	TGGCAAATATTCTGTCTTAT
PfPDE β PF3D7_1321500	PDE β -R	AAACTTCATTGTGTTTGTGTC
	PDE β -F	GTTGGTGTGTCAGAGAGTTTGA
PfPDE γ PF3D7_1321600	PDE γ -R	CTACCAAATGTCCTATATCAT
	PDE γ -F	AAGTAATTTAAATACAGCGAAT
PfPDE δ PF3D7_1470500	PDE δ -R	ATAAACTTCCTCATGTTTGTAT
	PDE δ -F	AACATTTTCCATATTACAACCTT

Supplementary Table S2 – Effects of 2-sulfenylindoles on the parasitemia of *P. falciparum* after 48 h of incubation with 500 nM compounds in combination with 100 nM melatonin.

ID	Parasitemia (%)	
	Treatment with compound (500nM)	Treatment with compound (500nM) + Melatonin (100nM)
(3)	98.22 ± 2.28 %	129.8 ± 6.78 %
(7)	96.55 ± 2.39 %	122.9 ± 5.60 %
(8)	101.6 ± 1.71 %	133.5 ± 8.06 %
(10)	100.6 ± 2.14 %	130.2 ± 6.02 %
(14)	97.75 ± 3.41 %	128.5 ± 4.13 %
(16)	111.8 ± 1.76 %	127.4 ± 4.10 %
(17)	98.57 ± 2.95 %	123.6 ± 3.11 %
(18)	97.99 ± 2.61 %	113.9 ± 2.90 %
(19)	100.5 ± 1.81 %	118.5 ± 2.85 %
(20)	109.7 ± 4.07 %	122.3 ± 3.71 %
(21)	104.4 ± 1.00 %	111.9 ± 2.78 %
(25)	107.2 ± 2.46 %	112.8 ± 2.93 %
(26)	92.66 ± 4.17 %	110.4 ± 3.18 %
(28)	109.3 ± 1.81 %	115.4 ± 2.98 %
Melatonin	107.5 ± 4.32 %	113.5 ± 2.75 %
Control	100.6 ± 1.88 %	100.7 ± 2.65 %

Data are presented as the percentage of parasitemia normalized to that of the control group treated with solvent (DMSO). Experiments were performed 3 independent times in triplicate.

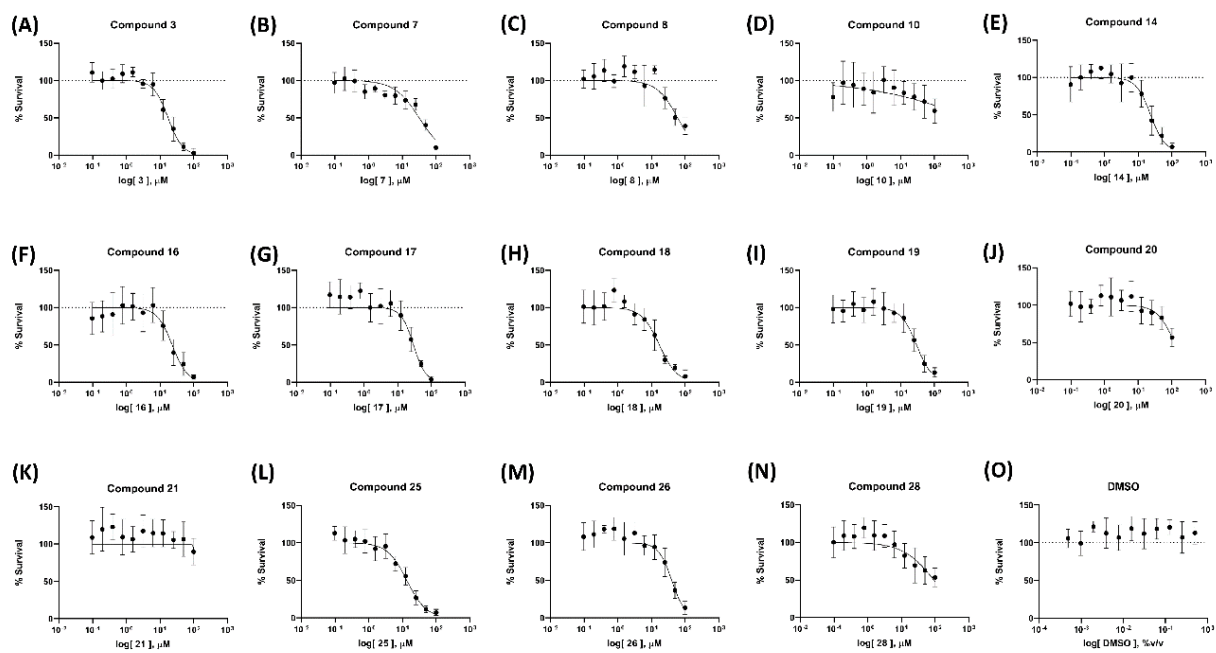


Figure S1 - Effect of indole derivatives in HEK293 cells. Cells were treated with concentrations ranging from 0 to 100 μM for compounds 3(A), 7(B), 8(C), 10(D), 14(E), 16(F), 17(G), 18(H), 19(I), 20(J), 21(K), 25(L), 26(M), 28(N). Each point represents mean \pm SD for four independent experiments.

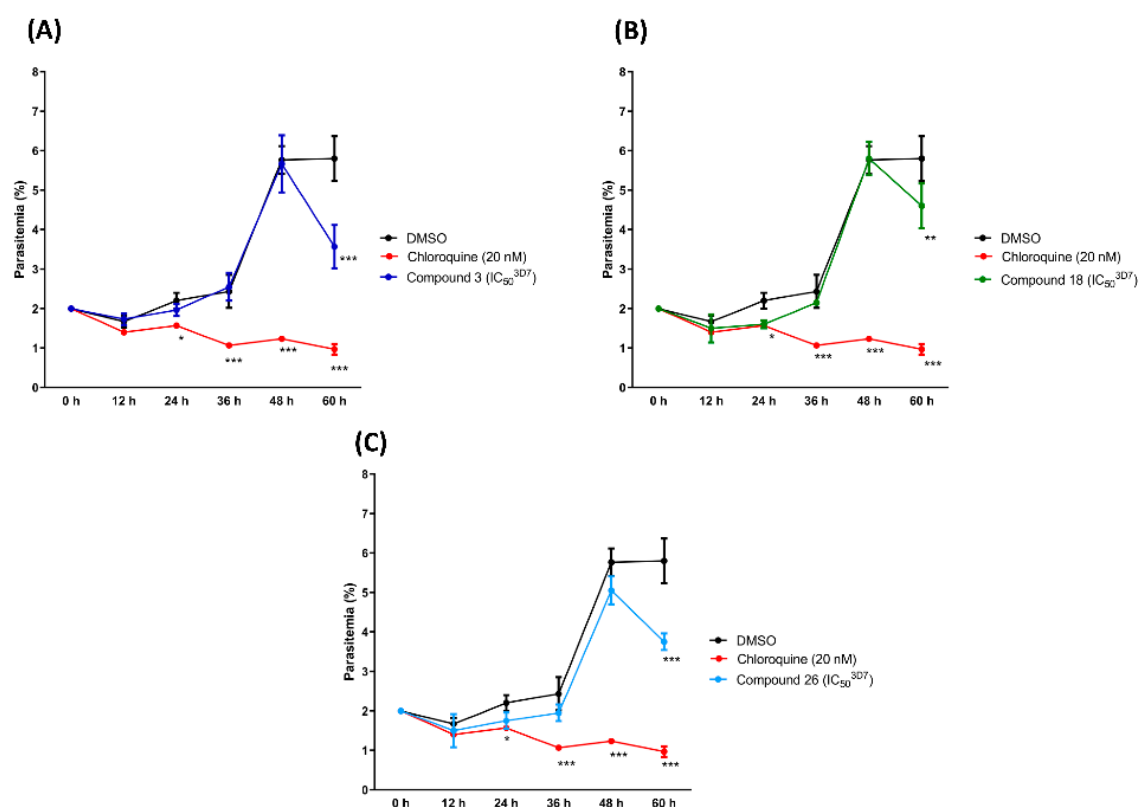


Figure S2 – Parasitemia reduction obtained after incubation with compound **3** (A), compound **18** (B), or compound **26** (C). Data are means \pm SD. Parasitemia determination was performed every 12 hours after drug administration to determine the stage activity. Parasites synchronized to the ring stage were treated with the compounds (**3**, **18**, and **26**), with the best activity against 3D7 parasites. The chosen treatment concentration was the IC₅₀ values obtained for these compounds against the 3D7 strain.