

## SUPPORTING INFORMATION

### **Chemogenomic fingerprints associated with stage-specific gametocytocidal compound action against malaria parasites**

**Jandeli Niemand<sup>1,2</sup>†, Riëtte van Biljon<sup>1</sup>#, Mariëtte van der Watt<sup>1</sup>, Ashleigh van Heerden<sup>1</sup>, Janette Reader<sup>1</sup>, Roelof van Wyk<sup>1</sup>, Lindsey Orchard<sup>3</sup>, Kelly Chibale<sup>4,5</sup>, Manuel Llinás<sup>3,6</sup> and Lyn-Marié Birkholtz<sup>1,2\*</sup>**

<sup>a</sup> Department of Biochemistry, Genetics and Microbiology, University of Pretoria, Hatfield, Pretoria, 0028, South Africa

<sup>b</sup> Institute for Sustainable Malaria Control, University of Pretoria, Hatfield, Pretoria, 0028, South Africa

<sup>c</sup> Department of Biochemistry & Molecular Biology and the Huck Centre for Malaria Research, Pennsylvania State University, University Park, PA, 16802, USA

<sup>d</sup> Drug Discovery and Development Centre (H3D), University of Cape Town, Rondebosch, Cape Town, 7701, South Africa

<sup>e</sup> South African Medical Research Council, Drug Discovery and Development Research Unit, Department of Chemistry and Institute of Infectious Disease and Molecular Medicine, University of Cape Town, Rondebosch 7701, South Africa

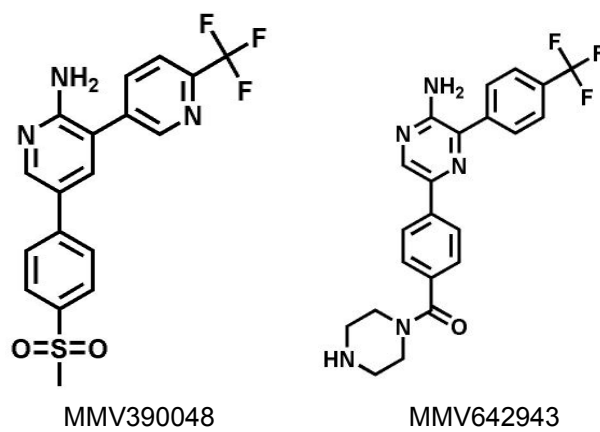
<sup>f</sup> Department of Chemistry, Pennsylvania State University, University Park, PA, 16802, USA

† Shared first author

# Current affiliation: Department of Biochemistry & Molecular Biology and the Huck Centre for Malaria Research, Pennsylvania State University, University Park, PA, 16802, USA

**\* Corresponding author:**

Lyn-Marie Birkholtz: lbirkholtz@up.ac.za



**Figure S1 related to Figure 2.** MMV390048 or MMV642943 chemical structures

S2	Gene ID	MMV666810				MMV674850			
		24 h		48 h		24 h		48 h	
		M	Q	M	Q	M	Q	M	Q
	<b>Early gametocytes</b>								
	PF3D7_1102800	-3.37	-1.74	-2.32	-3.32	-1.13	-3.32	-3.02	2.32
	PF3D7_0202500	-2.47	-2.32	-1.25	-3.32	-0.80	-2.32	-2.39	2.32
	PF3D7_1335400	-3.77	-1.00	-4.54	-1.32	-0.87	-0.51	-3.54	0.51
	PF3D7_1401500	1.67	0.78	1.81	-0.36	0.33	2.74	1.99	1.78
	PF3D7_0904700	-0.52	0.26	0.36	0.26	-0.21	-1.74	-0.20	2.00
	PF3D7_0610400	-0.03	0.38	0.00	1.63	-0.48	0.58	-1.28	0.26
	PF3D7_0611100	-0.74	0.14	0.34	-1.74	-0.10	1.54	-0.55	0.74
	<b>Late gametocytes</b>								
	PF3D7_0202500	-5.43	-1.32	-2.87	-2.32	-5.16		-2.18	3.32
	PF3D7_1401500	-0.13	0.21	1.07	2.35	-0.21	-0.47	0.50	0.23
	PF3D7_0904700	2.89	3.45	2.43	2.04	2.13	1.26	1.42	1.32
	PF3D7_0610400	2.80	3.50	3.30	3.51	2.16	-0.15	2.85	1.00
	PF3D7_0611100	3.21	2.04	2.99	2.46	2.75	0.14	2.05	1.32

**Figure S2 related to figure 2.** Verification of microarray-identified (M) differential gene expression with qPCR (Q) analyses.

