

Characterization of Domiphen Bromide as a New Fast-acting Antiplasmodial Agent Inhibiting the Apicoplastidic Methyl Erythritol Phosphate Pathway

Arnaud Biosca ^{1,2,3,#}, Miriam Ramírez ^{1,#}, Alex Gomez-Gomez ^{4,5}, Aritz Lafuente ^{1,2,3}, Valentín Iglesias ^{1,2,3,6}, Oscar J. Pozo ^{4,5}, Santiago Imperial ^{3,7}, Xavier Fernández-Busquets ^{1,2,3,*}

¹ Barcelona Institute for Global Health (ISGlobal, Hospital Clínic-Universitat de Barcelona), Rosselló 149-153, 08036 Barcelona, Spain; naubiosca@gmail.com (A.B.), miriam.ramirez@isglobal.org (M.R.), aritz.lafuente@gmail.com (A.L.), valentin.iglesias.mas@gmail.com (V.I.)

² Nanomalaria Group, Institute for Bioengineering of Catalonia (IBEC), The Barcelona Institute of Science and Technology, Baldiri Reixac 10-12, 08028 Barcelona, Spain

³ Nanoscience and Nanotechnology Institute (IN2UB), University of Barcelona, Martí i Franquès 1, 08028 Barcelona, Spain; simperial@ub.edu (S.I.)

⁴ Integrative Pharmacology and Systems Neuroscience Research Group, Neurosciences Research Program, IMIM-Institut Hospital del Mar d'Investigacions Mèdiques, Doctor Aiguader 88, 08003 Barcelona, Spain; agomez@imim.es (A.G.-G.), opozo@imim.es (O.J.P.)

⁵ Department of Experimental and Health Sciences, Universitat Pompeu Fabra, Doctor Aiguader 88, 08003 Barcelona, Spain

⁶ Institut de Biotecnologia i Biomedicina and Departament de Bioquímica i Biologia Molecular, Universitat Autònoma de Barcelona, 08193 Bellaterra, Spain

⁷ Department of Biochemistry and Molecular Biomedicine, University of Barcelona, Avda. Diagonal 643, 08028 Barcelona, Spain

Both authors contributed equally

* Correspondence: xfernandez_busquets@ub.edu (X.F.-B.); Tel.: +34-93-227-5400 (extension 4581)

Supplementary Material

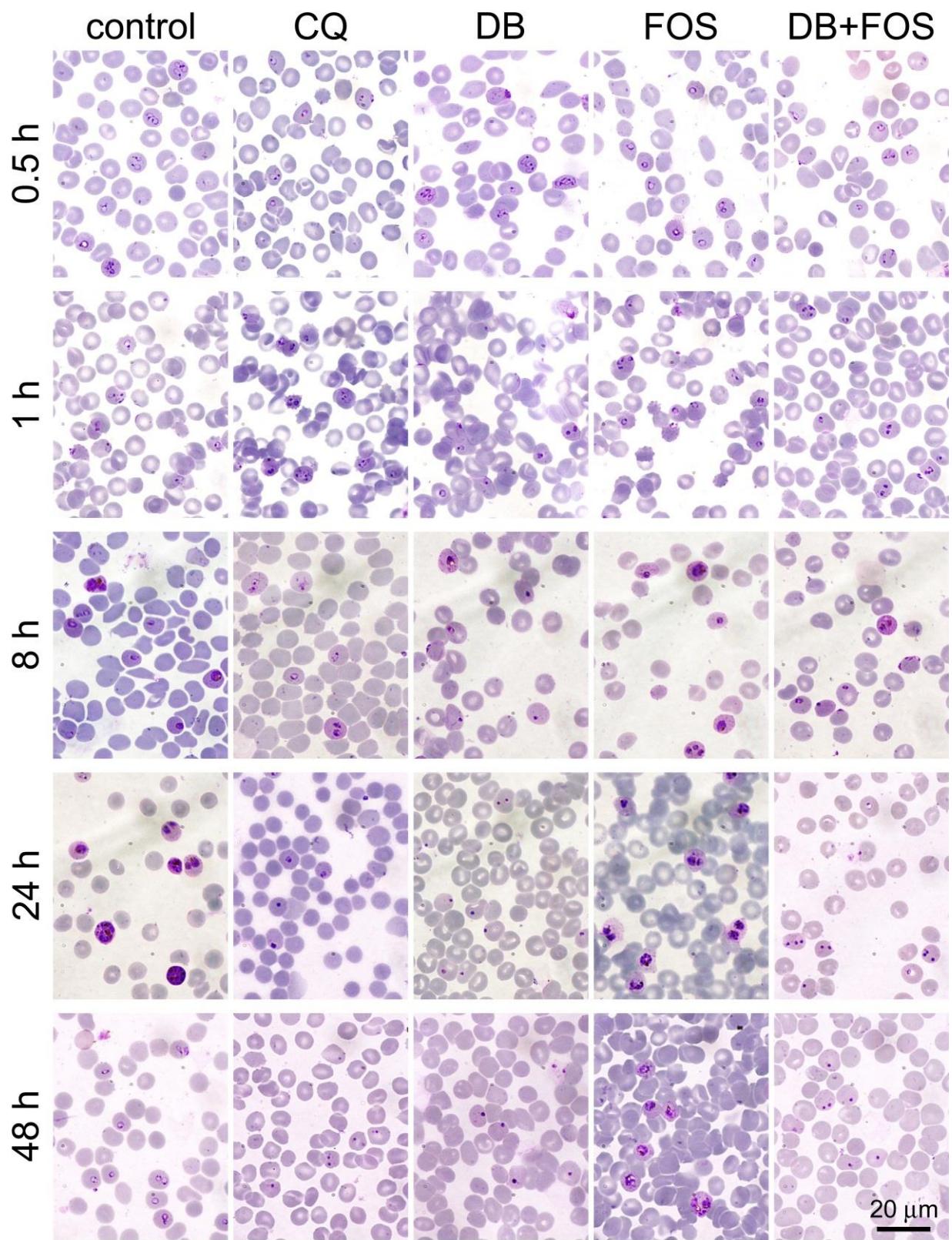


Figure S1. Effect of DB and fosmidomycin (FOS) on *in vitro* *P. falciparum* cultures.
Representative images of Giemsa-stained *P. falciparum* cultures at different times after the addition of antimalarial drugs. CQ: chloroquine.