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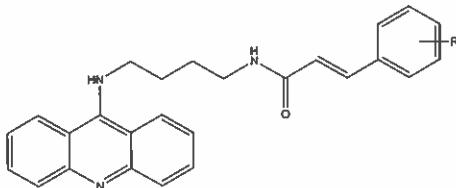
In vitro efficiency of 9-(N-cinnamoylbutyl)aminoacridines against blood- and liver-stage malaria

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Quinacrine (QA), the first synthetic antimalarial drug derived from quinine, was used until 1946 when it was substituted by chloroquine (CQ) given CQ's greater potency, safety, and lower cost. However, abuse of CQ in the second half of the XXth century lead to global resistance of *P. falciparum* strains to this antimalarial.^[1] Moreover, resistance of *Plasmodium* to artemisinin-based therapies is now becoming apparent, demonstrating a clear need for new antimalarial drug discovery. In this context, and in agreement with our previous work,^[2-4] our group developed 9-(N-cinnamoylbutyl)aminoacridines (**1**) similar to traditional antimalarial drugs such as QA, CQ, or primaquine (PQ), to evaluate their efficiency *in vitro* against blood- and liver-stage malaria. The compounds tested presented mid-nanomolar activity against the erythrocytic stage of the CQ-resistant *Plasmodium falciparum* W2 strain. Also, two of the most active derivatives exhibited activity against liver stage of *P. berghei* higher than PQ. Hence, we herein report 9-(N-cinnamoylbutyl)-aminoacridines as a new class of promising multi-target leads for prevention and treatment of malarial infection.



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Acknow
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