Supporting Information

17-O-acetyl,10-hydroxycorynantheol, a selective antiplasmodial alkaloid isolated from Strynchos usambarensis leaves
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Antiplasmodial assays

Cultures of chloroquine-sensitive and chloroquine-resistant *Plasmodium falciparum* strains (3D7 and W2, respectively) were maintained following the procedure of Trager and Jensen [19] and as described previously [2]. Each test sample was applied in a series of eight four-fold dilutions (final concentration of 20 µg/mL) and was tested in duplicate. Parasite growth was estimated by determination of lactate dehydrogenase activity as described by Kenmogne et al. [20].

Artemisinin (98%, Sigma-Aldrich) was used as positive control in all experiments with an initial concentration of 100 ng/mL. Its 3D7 and W2 IC<sub>50</sub> values were 0.021 µM and 0.007 µM, respectively.

In vitro cytotoxic assay

Cells from the human normal foetal lung fibroblast cell line, WI-38, were cultivated *in vitro* as described in the procedure of Jonville [21]. For each sample, 6 threefold dilutions (final concentrations ranging from 0.0015 to 1.5 mg/mL) were prepared, placed in triplicate in a 96-well microplate, and each set of tests was performed 4 times. Camptothecin (~95%, Sigma-Aldrich) was used as a positive control, and the IC<sub>50</sub> value obtained on the WI-38 line was 0.033 µM. After 48 hours of incubation, cell viability was determined by measuring the fibroblast mitochondrial enzyme activity, as previously described [22]. The results were expressed by the mean of IC<sub>50</sub>s of at least two independent assays and the selectivity index (the ratio between the cytotoxic WI-38 cells and antiparasitic 3D7 strain activity) was calculated.