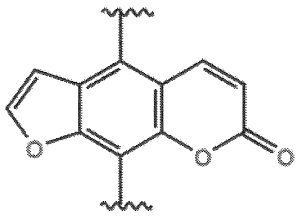
CLAIMS

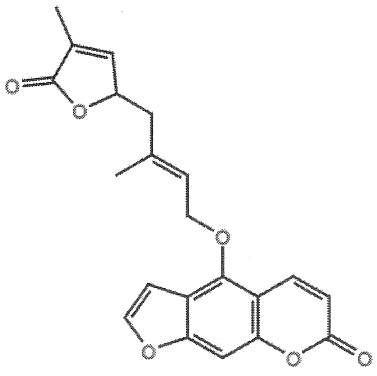
1. A pharmaceutical composition for use in the treatment and/or prevention of a parasitic mediated disease, wherein the parasitic mediated disease is malaria, comprising a furanocoumarin derivative having the following core structure (**A**),



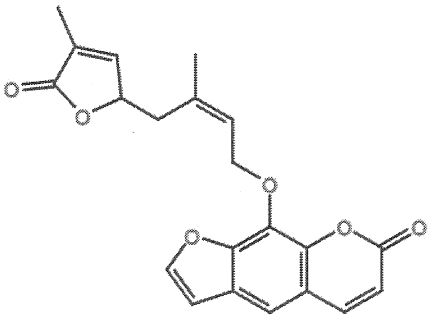
(**A**)

its pharmaceutically acceptable salt, or a combination thereof

wherein the furanocoumarin derivative has the structure (**1b**) or (**2c**):



(**1b**) or



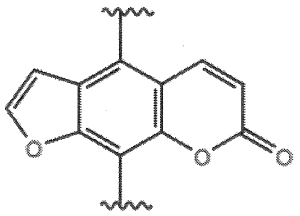
(**2c**).

2. The pharmaceutical composition for use according to claim 1, wherein the parasitic mediated disease is transmitted by an arthropod comprising an *Anopheles* genus.

3. The pharmaceutical composition for use according to any one of the preceding claims, wherein the parasitic mediated disease is caused by a *Plasmodium* parasite.

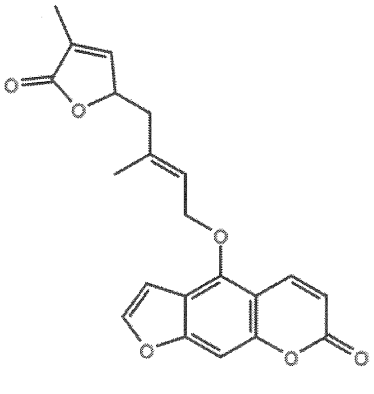
4. The pharmaceutical composition for use according to claim 3, wherein the *Plasmodium* parasite is a *Plasmodium Falciparum*.

5. A compound for use in the treatment and/or prevention of a parasitic mediated disease, wherein the parasitic mediated disease is malaria, the compound consisting of a furanocoumarin derivative having the following core structure (**A**),

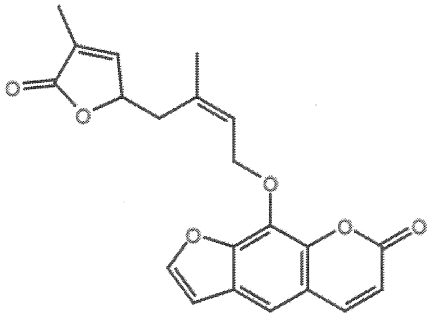


(**A**)

wherein the furanocoumarin derivative has the structure (**1b**) or (**2c**):



(**1b**) or



(2c).

6. The compound according to claim 5, wherein the parasitic mediated disease is transmitted by an arthropod, wherein the arthropod comprises an *Anopheles* genus.

7. The compound according to claim 5 or 6, wherein the parasitic mediated disease is caused by a *Plasmodium* parasite

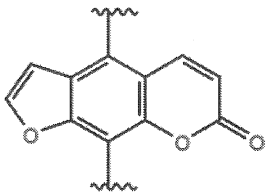
8. The compound according to claim 7, wherein the *Plasmodium* parasite is a *Plasmodium Falciparum*.

9. The compound according to any one of claims 5 to 8, wherein the compound is isolated from a plant, wherein the plant comprises a *Rutaceae* family

10. The compound according to claim 9, wherein the plant comprises a *Clausena lansium* species.

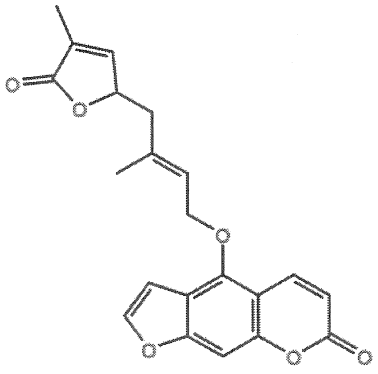
11. The compound according to claim 9 or 10, wherein the compound is isolated from the leaves of the plant.

12. Use of a compound consisting of a furanocoumarin derivative having core structure (**A**),

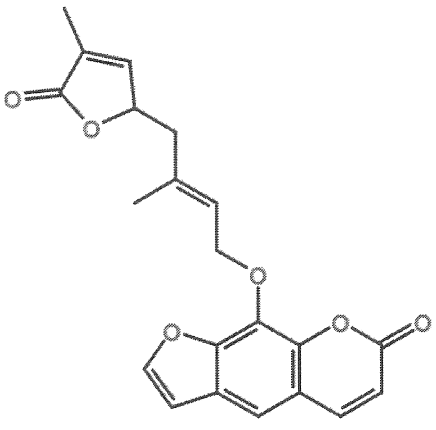


(**A**)

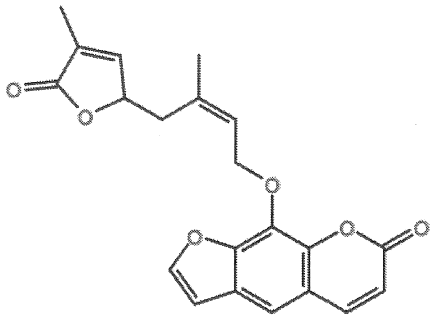
its pharmaceutically acceptable salt, or a combination thereof, wherein the furanocoumarin derivative has the structure **(1b), (2b)** or **(2c)**:



(1b)



(2b) or



(2c)

in the manufacture of a medicament for use in the treatment and/or prevention of a parasitic mediated disease, wherein the parasitic mediated disease is malaria.

13. The use according to claim 12, wherein the compound is isolated from a plant, preferably the leaves of a plant and wherein the plant comprises a *Rutaceae* family.

14. The use according to claim 13, wherein the plant comprises a *Clausena lansium* species.

15. The use according to any one of claims 12 to 14, further comprising the steps of:

(a) defatting the leaves of a plant comprising *Clausena lansium* prior to a step of maceration in a polar solvent and evaporation of the polar solvent, preferably by ultrasonication in a hydrocarbon solvent, preferably hexane;

(b) acidifying the maceration extract to form an acidified extract, preferably by adding hydrochloric acid solution after the first extract is dissolved in ethanol;

(c) filtering the acidified extract to obtain a filtrate;

(d) basifying the filtrate to form a basified filtrate, preferably by adding sodium hydroxide solution;

(e) extracting the basified filtrate with dichloromethane to form a second extract;

(f) separating the second extract into a first aqueous fraction and a second dichloromethane fraction, wherein the dichloromethane fraction is preferably separated by column chromatography; and

(g) drying the first and second fractions, preferably the dichloromethane fraction is further extracted with an alcohol solvent,

wherein the furanocoumarin derivative is present in the first and/or second fraction, and wherein preferably one or more steps are repeated to increase purity and/or yield.