

Quick reference guide to malaria chemoprophylaxis

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VERY IMPORTANT: This chart should be used in conjunction with the UK Malaria Guidelines- see below for details, BNF and Summary of Product Characteristics (found at www.medicines.org.uk) for further details, especially on contra-indications, caution in use, special notes, precautions and less common side effects for all drugs.

Generic Name	Chloroquine	Proguanil	Mefloquine	Doxycycline	Atovaquone / Proguanil
Trade Name	Avloclor® (Astra Zeneca UK Ltd.)	Paludrine® (Astra Zeneca UK Ltd.)	Lariam® (Roche Products Ltd.)	Doxycycline (Non-proprietary) Vibramycin® (Pfizer)	Malarone TM (GlaxoSmithKline UK) Atovaquone/Proguanil (Non-proprietary)
Available forms	Tablet	Tablet only	Tablet only	Capsules, Vibramycin also in dispersible tablet form	Tablet only (Paediatric dose tablets available for those 40 kgs in weight and below)
Caution in Use	<ul style="list-style-type: none"> Hepatic and renal impairment G6PD deficiency May exacerbate psoriasis May aggravate myasthenia gravis 	<ul style="list-style-type: none"> Renal impairment Drug interaction - effect of warfarin possibly enhanced 	<ul style="list-style-type: none"> Pregnancy (but can be used if risk of malaria high – see guidelines) Severe liver disease Cardiac conduction disorders Breast feeding mothers – see long term UK malaria guidelines 	<ul style="list-style-type: none"> Avoid in porphyria Rarely causes photosensitivity Metabolism of doxycycline may be influenced by some anticoagulants – refer to UK guidelines See Malaria Guidelines for use in those with epilepsy & barbiturates and see dosage 	<ul style="list-style-type: none"> A repeat tablet should be taken if vomiting occurs within an hour of taking daily malarone dose. In the event of diarrhoea, normal dosing should continue. Absorption of atovaquone may be reduced, so personal protection re bite prevention is essential
Contra-indications	<ul style="list-style-type: none"> For prophylaxis if history of epilepsy 		<ul style="list-style-type: none"> Children under 5 kgs Cardiac conductive disorder History of neuropsychiatric disorders including depression or convulsions Epilepsy in patient (caution is use for epilepsy in 1st degree relative) Hypersensitivity to quinine & mefloquine 	<ul style="list-style-type: none"> Breast feeding mothers Children under 12 years of age Systemic lupus erythematosus History of tetracycline allergy 	<ul style="list-style-type: none"> Known hypersensitivity to atovaquone or proguanil hydrochloride or any component of the formulation. Prophylaxis of <i>P.falciparum</i> malaria in patients with severe renal impairment (creatinine clearance <30mL/min) Pregnancy and lactation – seek advice if no other option
Most common side effects	Gastrointestinal disturbances and headache	Diarrhoea, mild gastric intolerance. Occasional mouth ulcers & stomatitis	Gastrointestinal disturbances Headache Loss of balance, dizziness	Gastrointestinal disturbances Vaginal candidiasis Oesophagitis (unless taken correctly)	Headache Abdominal pain Diarrhoea
Less common side effects	Visual disturbances, convulsions, depigmentation or loss of hair, skin reactions (rashes, pruritis) rarely, bone marrow depression	Skin reaction and hair loss reported	Sleep disorders (insomnia, drowsiness, abnormal dreams) Neuropsychiatric reactions including anxiety, panic attacks, hallucinations refer to SPC and BNF for full details	Erythema (stop medication and contact medical help)	Limited data, but serious adverse effects appear rare. Refer to Summary of Product Characteristics.
<p>PLEASE NOTE: in regard to PREGNANCY, BREAST FEEDING and PLANNED PREGNANCY whilst travelling to a malarious area – the UK Malaria Guidelines should ALWAYS be referred to – please see especially pages 55-57. PDF document is found via http://goo.gl/nw17UH or see http://www.janechiodini.co.uk/help/malaria/</p>					

Generic Name	Chloroquine	Proguanil	Mefloquine	Doxycycline	Atovaquone / Proguanil
Dosage and administration	310mg base (2 tablets) weekly	200mg (2 tablets) daily	250mg (1 tablet) weekly	100mg (1 capsule) daily Take capsules after food in an upright position, do not lie down afterwards for at least 30 minutes BUT 2015 malaria guidelines (p59) recommends 100mgs bd if on some anticonvulsant drugs	Combined tablet of atovaquone / proguanil (1 tablet) taken daily with food or milky drink at the same time each day. (Paediatric tablets given for persons 5 - 40 kgs in weight. (see guidelines for dosages in children – page 34).
	Refer to UK Malaria Guidelines or current BNF for child doses for these prophylactic antimalarials – useful charts are in the UK Malaria Guidelines – pages 33-34. Weight better guide in decision of doses than age in children over six months of age.				
Commencement of medication	1 week before entering malarious area	1 week before entering malarious area	2½ weeks before entering malarious area	1 or 2 days before entering malarious area.	1 or 2 days before entering the malarious area
Duration of course	All time in malarious area and for 4 weeks after leaving	All time in malarious area and for 4 weeks after leaving	All time in malarious area and for 4 weeks after leaving	All time in malarious area and for 4 weeks after leaving	Continue taking during period of stay in malarious area and for 7 days after leaving malarious area
Special Notes / Precautions	Safe for use in pregnancy. Extremely toxic in over dosage - Keep away from children. Concomitant administration of chloroquine with ID rabies vaccine may affect the antibody response of vaccine and should not be used. See 2015 guidelines (p25) and use if taking hydroxychloroquine	Safe for use in pregnancy - but folate supplement needed.	Advise patient to contact medical adviser if side effects develop so that medication can be reviewed prior to departure. Mefloquine should not be taken 12 hours either side of a dose of oral typhoid vaccine. Caution should be exercised with regard to driving, piloting aircraft and operating machines, as dizziness, a disturbed sense of balance or neuropsychiatric reactions have been reported during and up to three weeks after use of mefloquine.	Vibramycin licensed in the UK for malaria (June 2000) but only for use with <i>P.falciparum</i> malaria. Avoid excessive exposure to sunlight and use high factor sun cream (UVA and UVB). Current BNF documents that ACMP recommends doxycycline could be written up for a period of 2 years	Concomitant administration of rifampicin or rifabutin is known to reduce atovaquone levels by approximately 50% and 34% respectively. Concomitant administration of Malarone TM with these drugs is not recommended. Concomitant treatment with metoclopramide and tetracycline have been associated with significant decreases in plasma concentrations of atovaquone. Only licensed for prophylactic use with <i>P. falciparum</i> malaria.
Duration of prescribing	Several years- seek specialist advice and	As for chloroquine	Up to one year under licence but malaria guidelines suggest up to three years	No details now on Vibramycin SPC. Malaria guidelines suggest 2 years	'continue taking during period of stay' in malarious area within SPC,
	See Malaria Guidelines table 10 on page 75 for more detail on long term malaria chemoprophylaxis for adults				
Prescribing information	Available OTC for malaria chemoprophylaxis	Available OTC for chemoprophylaxis	Available only on private prescription. Local policy may vary.	Available only on private prescription. Local policy may vary.	Available only on private prescription except for Maloff Protect which is a P only medicine. Local policy may

KEY RESOURCES

- Malaria Reference Laboratory for Health Professionals fax-line for complex problems. Complete form on www.malaria-reference.co.uk then fax to: 020 7637 0248. Answer received by fax within three working days - if more urgent telephone NaTHNaC or TRAVAX.
- Public Health England - Guidelines for malaria prevention in travellers from the UK access via www.malaria-reference.co.uk or <https://www.gov.uk/government/publications/malaria-prevention-guidelines-for-travellers-from-the-uk> or see <http://www.janechiodini.co.uk/help/malaria/>
- Also refer to BNF <http://www.evidence.nhs.uk/formulary/bnf/current> and SPCs at www.medicines.org.uk
- To understand more about **P only** medicine see <http://www.nhs.uk/chq/Pages/1325.aspx>