

Malaria Guidance Summary for Adults in NHS Grampian, NHS Orkney and NHS Shetland

Inform Infectious Diseases (ID) team of all positive malaria results tel:55762 or OOH bleep 4200.

This flow chart provides a summary of initial clinical management. Guidelines assume normal renal & hepatic function.

Malaria is a medical emergency.

Patients with suspected malaria should be evaluated immediately.

Returning traveller from a malaria-risk region with a fever
*Most cases occur within 3 months of travel but some infections may occur >1 year after return.*¹

Request **malaria parasite test**.
Travel history & details of prophylaxis should be included in the request.

If positive for malaria, assess for severity and treat as *P. falciparum* until species identified.

Non *P. falciparum* malaria

If Non *P. falciparum* and 'unwell' then admit for observation.
If vomiting and unable to tolerate oral therapy
treat as severe *P. falciparum*.

If **no** features of severe malaria,
1st line therapy is **Riamet**^{1,2} (as per non *P. falciparum*)

P. falciparum malaria

All patients must be discussed with the ID team and considered for admission.

Are there features of Severe Malaria?

- Parasitaemia > 2%³ on parasite test OR
- Schizonts³ on parasite test OR
- Complications
 - Acidosis^{2,3} - pH <7.3¹
 - Pulmonary oedema^{1,2,3} on X-ray or oxygen saturation <92% on room air with resp rate >30/min²
 - Renal failure³ - Cr >265micromol/L^{1,2}, blood urea >20mmol/L² or urine output <0.4ml/kg/hr¹
 - Jaundice¹ - Bilirubin >50micromol/L²
 - Anaemia^{2,3} - Hb <80g/L¹
 - Hypoglycaemia³ - <2.2mmol/L^{1,2}
 - Hypovolaemia/shock^{1,2,3}
 - Bleeding^{1,2,3}
 - DIC¹ /thrombocytopenia <50 x 10⁹/L
 - Reduced GCS/drowsy/confusion^{1,2,3}
 - Convulsions^{1,3}

If present - involve critical care team and treat as severe

Yes

1st Line Therapy for Severe Malaria

IV Artesunate 2.4mg/kg IV @ 0hr, 12hr, 24hr then every 24 hr.
Use actual body weight.⁴
Round dose to nearest 10mg. (Refer to [Medusa](#)).
Available: ARI Ward 111, DGH Emergency Cupboard, Balfour Hosp, Gilbert Bain Hosp.

2nd Line Therapy for Severe Malaria

If artesunate not available, IV quinine is an alternative, seek advice from ID and pharmacy.

1st Line Therapy for Non-Severe Non *P. falciparum* Malaria (>35kg)

Oral ***Riamet**[®] (Artemether 20mg/Lumefantrine 120mg)
4 tablets at 0hr, 8hr, 24hr, 36hr, 48hr & 60hr.
Give with fatty food/milk to maximise absorption.
Available ARI Ward 111 (overlabelled), DGH Emergency Cupboard (overlabelled), Balfour Hospital, Gilbert Bain Hospital.

Consider **primaquine** for relapse prevention for *P. ovale* and *P. vivax*.¹ Discuss with ID first and check G6PD (routinely performed on all positive malaria tests).

Pregnancy

Severe malaria in any trimester of pregnancy should be treated as for any other patient, artesunate preferred over quinine.³ Riamet[®] is recommended for non-severe malaria in ALL trimesters of pregnancy.^{2,3}

Do NOT give primaquine if pregnant, seek ID advice.

Breastfeeding

DHA a metabolite of artesunate is present in milk but not known to be harmful.^{4,5} The WHO recommends Riamet[®] in breastfeeding women for the treatment of non-severe malaria.²

Do NOT give primaquine if breastfeeding³ (until the G6PD status of child is known)¹ - seek specialist advice.

Monitoring and ongoing therapy:

- Take care with fluid resuscitation due to risk of pulmonary oedema;
- If hypotensive, give IV ceftriaxone 2g single dose. Further antibiotics on ID advice.
- Refer to Critical Care for monitoring and accurate fluid balance if ongoing hypotension.
- If unable to take oral medicines treat as per severe malaria.
- Take daily blood films to ensure reducing parasitaemia.
- Give Artesunate for minimum 24 hours – when clinically appropriate IVOST to Riamet[®] (Artemether 20mg/Lumefantrine 120mg) to complete the full 6 dose course. If >35kg Riamet[®] 4 tablets at 0hr, 8hr, 24hr, 36hr, 48hr & 60hr, to be given with fatty food/milk to maximise absorption.
- Check Hb at day 14 and day 28 post Artesunate (can cause delayed haemolysis).⁴
- For treatment failure refer to [UKHSA guidance](#).

*To prescribe Riamet[®] on HEPMA, search for 'Riamet' in 'protocols' and follow [instructions](#).

For more information, refer to [BIA UK Malaria Treatment Guidelines 2016](#) and [University College London Malaria diagnosis and treatment guideline 2025](#).

Click [here](#) for a list of abbreviations used in this document.

References

1. Lalloo DG, Shingadia D, Bell DJ, Beeching NJ, Whitty CJM, Chiodini PL. UK malaria treatment guidelines 2016. *Journal of Infection* (2016) 72,635-649 [https://www.journalofinfection.com/article/S0163-4453\(16\)00047-5/pdf](https://www.journalofinfection.com/article/S0163-4453(16)00047-5/pdf)
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3. University College London Hospitals NHS Foundation Trust. Malaria diagnosis and treatment guideline. 2025. https://www.uclh.nhs.uk/application/files/4617/4429/7989/Malaria_diagnosis_and_treatment_guideline_February_2025_final.pdf
4. Summary of Product Characteristics for Artesunate powder and solvent for solution for injection. Amivas Ireland Ltd. Last updated 24th July 2025. <https://products.mhra.gov.uk/substance-index/?letter=A> (Accessed online 18/11/25)
5. Joint Formulary Committee 'Artesunate' in British National Formulary. <https://bnf.nice.org.uk/drugs/artesunate/#breast-feeding> Accessed online 31.12.25
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8. Management of treatment failure (recrudescence) in *Falciparum* malaria. Updated 6 Feb 2025 UK Health Security Agency. <https://www.gov.uk/government/publications/management-of-treatment-failure-recrudescence-in-falciparum-malaria/management-of-treatment-failure-recrudescence-in-falciparum-malaria>
9. NHS Tayside Malaria Treatment Guidance updated May 2025. <https://www.nhstaysideadtc.scot.nhs.uk/Antibiotic%20site/pdf%20docs/MalariaAlgorithm07.pdf>

Malaria Guidance Summary for Adults in NHS Grampian, NHS Orkney and NHS Shetland
- Glossary of Abbreviations

tel	telephone
OOH	Out Of Hours
ID	Infectious Diseases
DGH	Dr Gray's Hospital
G6PD	glucose -6-phosphate deficiency
resp	respiratory
Cr	Creatinine
DIC	Disseminated intravascular coagulation
GCS	Glasgow Coma Score
DHA	Dihydroartemisinin
WHO	World Health Organisation
IVOST	IV to Oral Switch
Hb	Haemoglobin