

EMPIRIC CHOICE

Note: If patient received chemoprophylaxis for malaria, malaria treatment requires agents not used in prophylaxis.

✦ **Severe malaria** (manifests as decreased level of consciousness, respiratory/circulatory distress, acidosis, anemia, hypoglycemia, seizures, jaundice, and/or hemoglobinuria usually in the context of hyperparasitemia (defined as parasitemia of $\geq 2\%$ in non-immune travellers, but may occur with lower parasite burden)

- Artesunate 2.4 mg/kg IV x 4 doses at 0, 12, 24 and 48 hours (adult patients)
- Contact Pharmacist for drug access (via locating if after-hours)

Followed by

- Atovaquone-proguanil 250 mg/100 mg (Malarone®): 4 tablets PO q24h **with food** x 3 days (to be given within 4 hours after last dose of artesunate)



✦ **Uncomplicated/non-severe malaria**

- Chloroquine-sensitive: (see *CURRENT RESISTANCE ISSUES*)
 - Chloroquine phosphate 1000 mg then 500 mg PO at 6, 24 and 48 hours
(Note: chloroquine phosphate 1000 mg = chloroquine base 600 mg)
- Chloroquine-resistant/unknown: (see *CURRENT RESISTANCE ISSUES*)
 - Atovaquone 250 mg-proguanil 100 mg (Malarone®): 4 tablets PO q24 hrs x 3 days

ALTERNATIVES FOR ALLERGIES

✦ Consult ID

COMMON ORGANISMS

- ✦ *P. falciparum*
- ✦ *P. vivax*
- ✦ *P. ovale*

DIAGNOSTIC AND THERAPEUTIC COMMENTS

- ✦ Send blood (in Lavender-top EDTA tube) for:
 - Rapid diagnostic test
 - Microscopy: send at least 2 smears over 24 hours and ≥ 6 hrs apart to diagnose; once confirmed, send repeat smears at least daily until negative.
- ✦ If *P. vivax* or *P. ovale*, start primaquine 30 mg PO daily x 14 days to prevent relapse before finishing primary treatment.
 - Contraindications—Consult UHN Tropical Diseases Clinic at 416-340-3675 (or 14-3155) for the following:
 - G6PD deficiency (obtain status prior to administration)
 - Pregnant patients or nursing mothers if the infant may be G6PD deficient
- ✦ If artesunate was given, monitor CBC weekly after treatment for at least 4 weeks for signs of hemolysis

CURRENT RESISTANCE ISSUES

- ✦ *P. falciparum* chloroquine-sensitive areas are **only** in Central America north of the Panama Canal; Haiti; the Dominican Republic; and most of the Middle East
- ✦ Suspect chloroquine-resistant *P. vivax* in Oceania, particularly Papua New Guinea and Indonesia

References:

Boggild A, Brophy J, Charlebois P, et al. Summary of recommendations for the diagnosis and treatment of malaria by the Committee to Advise on Tropical Medicine and Travel (CATMAT), CCDC, April 3, 2014 Volume 40-7.
<https://www.canada.ca/en/public-health/services/reports-publications/canada-communicable-disease-report-ccdr/monthly-issue/2014-40/ccdr-volume-40-7-april-3-2014/ccdr-volume-40-7-april-3-2014.html>

Public Health Agency of Canada. Drugs (generic and trade name) for the treatment and prevention of malaria.
<https://www.canada.ca/en/public-health/services/travel-health/drugs-generic-trade-name-treatment-prevention-malaria.html>

US Center for Diseases Control and Prevention Guidelines for Treatment of Malaria in the United States

<http://www.cdc.gov/malaria/resources/pdf/treatmenttable.pdf>

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