Diagnostic and Management Algorithm of Malaria due to 
**Non-Plasmodium Falciparum** Species

Obtain thick and thin blood smears

Is the blood smear positive?

**YES**

- Severe Malaria and/or patient is unable to take oral medication

- *If IV artesunate is needed, immediately contact the CDC through Montefiore ID pharmacist*

- Admit to the ICU

**NO**

- Determine plasmodium species

- If patient has a positive blood smear or high suspicious for malaria PLUS ≥ 1 of these sx = SEVERE MALARIA

**Evaluate severity of the disease**

- Impaired Consciousness/coma
- Hemoglobin <7 (consider hemoconcentration)
- Renal failure
- Pulmonary edema
- Acute respiratory distress syndrome
- Hypotension
- Disseminated intravascular coagulation

- Spontaneous bleeding
- Acidosis (severe disease with HCO3 <15)
- Hemoglobinuria
- Jaundice
- Repeated generalized convulsions
- Parasitemia ≥5%

**Plasmodium falciparum** or not yet identified species

**Uncomplicated Malaria**

**Non-falciparum species**

- **P. malariae**
  - Chloroquine
  - Hydroxychloroquine

- **P. ovale or P. vivax** (acquired outside Papua New Guinea or Indonesia)
  - Chloroquine
  - Hydroxyschloroquine
  - Primaquine
  - *Primaquine if not G6PD deficient and patient is not pregnant*

- **P. vivax** (acquired in Papua New Guinea or Indonesia)
  - Quinine
  - Doxycycline
  - *Primaquine if not G6PD deficient and patient is not pregnant*

- **P. knowlesi**
  - Chloroquine
  - Hydroxyschloroquine

- Repeat blood smears X 3 Q 12 or Q24 hours
  - If negative, consider different diagnosis
  - If positive, follow algorithm

- Evaluate severity of the disease

- Impaired Consciousness/coma
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- Spontaneous bleeding
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- If patient has a positive blood smear or high suspicious for malaria PLUS ≥ 1 of these sx = SEVERE MALARIA

- Please, see algorithm for plasmodium falciparum

- Repeat blood smears Q 8 hours until prove parasitic clearance in severe disease and Q 12 hours in mild disease

- Check CBC, chem, LFTs, LDH every 6 hours for first 12 hours or until clinically stable

- Updated 2019

Montefiore