

# Diagnostic and Management Algorithm of Malaria due to *Plasmodium Falciparum*

Obtain thick and thin blood smears

Is the blood smear positive?

YES

NO

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
- Hemoglobin <7 ( consider hemoconcentration)
- Renal failure
- Pulmonary edema
- Acute respiratory distress syndrome
- Hypotension
- Disseminated intravascular coagulation
- Spontaneous bleeding
- Acidosis (severe disease with HCO<sub>3</sub> < 15)
- Hemoglobinuria
- Jaundice
- Repeated generalized convulsions
- Parasitemia ≥5%

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

YES

NO

**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

**Uncomplicated Malaria**

Determine plasmodium species

**Non- falciparum species**

Please, see algorithm for non-falciparum species

***Plasmodium falciparum* or not yet identified species**

Admit to the hospital

Determine region of malaria acquisition

**Chloroquine sensitive regions (Refer to tables/cdc.gov)**

Chloroquine  
Or  
Hydroxychloroquine

**Chloroquine and/or Mefloquine resistant regions**

Quinine **PLUS** doxycycline or clindamycin  
Or  
Artemether-lumefantrine

-Repeat blood smears Q 8 hours until 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