

# Management of Patients with Symptoms of Vivax Malaria

## DIAGNOSIS and G6PD TEST

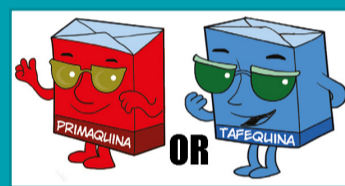


Patients with symptoms of malaria are tested as normal to confirm the presence of malaria parasites. Full details of the patient and their diagnosis are recorded on the SIVEP-MALARIA form. All patients with confirmed vivax malaria will be tested to define their G6PD levels before treatment is prescribed.

The G6PD test is analysed with blood collected from a finger prick. The analysis takes less than five minutes and the result is displayed in units per gram of haemoglobin. The haemoglobin level is also displayed on the analyser. The results must be shared with the patient and recorded on the patient's card and their SIVEP-MALARIA form.



## TREATMENT



All patients will receive three days of chloroquine treatment to kill the malaria parasite in the blood

To kill the parasites in the liver, eligible\* patients will also be treated with either primaquine (once a day for seven days if G6PD levels  $>4\text{U/g Hb}$  or once a week for eight weeks if G6PD levels  $\leq 4\text{U/g Hb}$ ), OR tafenoquine (two tablets taken on one day only if G6PD levels are  $>6\text{U/g Hb}$ )

\*Patients NOT eligible for treatment with primaquine or tafenoquine will be treated in accordance with national malaria guidelines

### PRIMAQUINE NOT ALLOWED



### TAFENOQUINE NOT ALLOWED



NOTE: Patients with a +ve LVC within the past 60 days must not be given tafenoquine

All patients must return to their health facility on Day 5 for follow up checks and signs of haemolysis

### WARNING SIGNS OF ACUTE HAEMOLYTIC ANAEMIA (AHA) WHEN TAKING PRIMAQUINE OR TAFENOQUINE

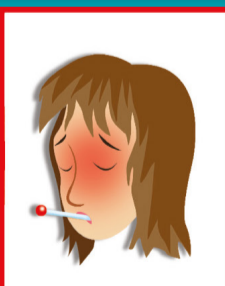
Patients with any warning signs of AHA must seek medical attention immediately



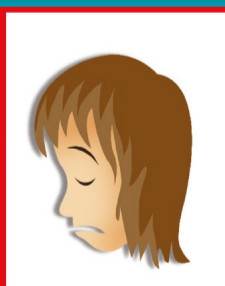
Dark urine



Jaundice



Persistent High Fever



Fatigue



Dizziness



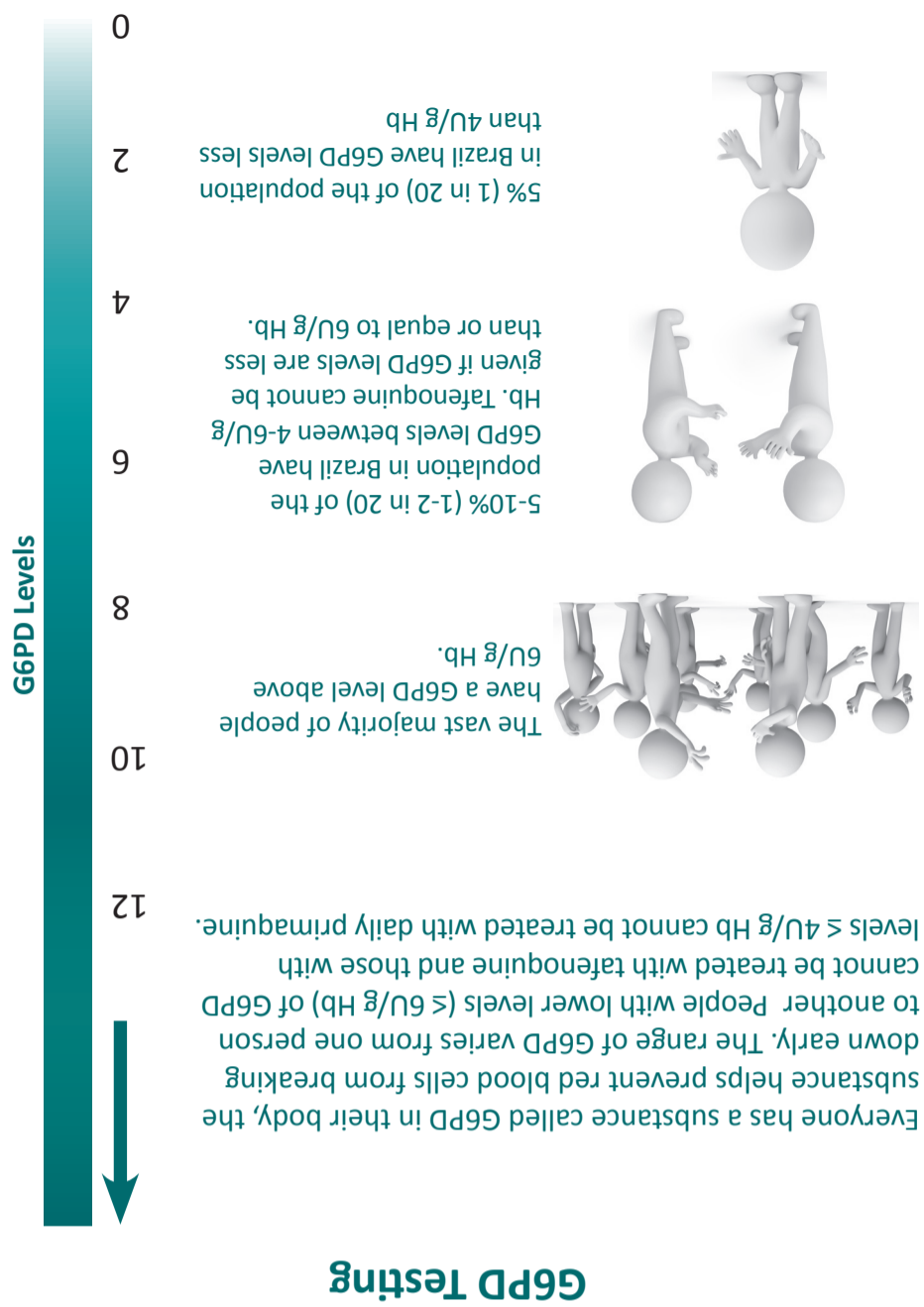
Breathlessness

## SEEK PATIENT CONSENT TO SHARE THEIR DATA

Ask the patient if they are willing to share their data about their diagnosis, treatment and any follow-up care necessary with the TRuST researchers. The goal of the research is to assess how tafenoquine and primaquine are being prescribed in Manaus and Porto Velho and to collect information on any side effects associated with these treatments. This will allow the MoH to decide whether to make the new test and drug available to all Brazilians. Information that could identify the patient will not be shared with anyone outside the Ministry of Health/healthcare services in Brazil.

**It is the patient's choice to decide if they are willing to share their information or not and they can change their decision at any time.**

Document their decision on the SIVEP-MALARIA form.



## G6PD Testing The risks and the benefits

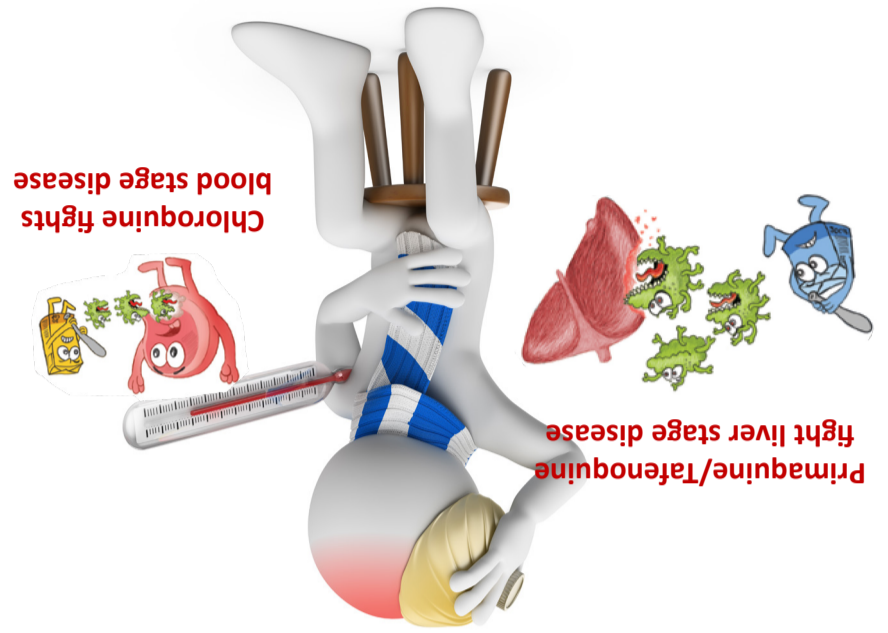
**G6PD testing is required before treating any patient for vivax malaria with primaquine or tafenoquine.**

The Ministry of Health has introduced this policy in Manaus and Porto Velho for a period of one year. The experience will give the Ministry of Health the information necessary to decide if tafenoquine will be incorporated definitely to the malaria treatment algorithm in Brazil.

- G6PD testing and the use of tafenoquine in patients aged sixteen and over, with a G6PD test result over 6U/g Hb has been approved for use in Manaus and Porto Velho prior to rollout across Brazil.
- G6PD is a substance that everyone has in their body, the substance helps protect red cells. People with low levels of G6PD cannot be prescribed tafenoquine or daily primaquine as the drug may cause side effects that can be serious including haemolysis (red cell death) leading to acute haemolytic anaemia (AHA) that may require hospitalisation.
- There is a very low risk of primaquine / tafenoquine being prescribed as a result of an inaccurate G6PD test (5 out of 1,000 cases). All patients will be educated with regard to warning signs of AHA.
- Patients' understanding of what their G6PD level is will support their awareness of symptoms that require immediate medical assessment.
- Using the result of a G6PD test to determine the most appropriate treatment for patients is expected to reduce the number of side effects as a result of taking primaquine or tafenoquine in patients with low levels of G6PD.

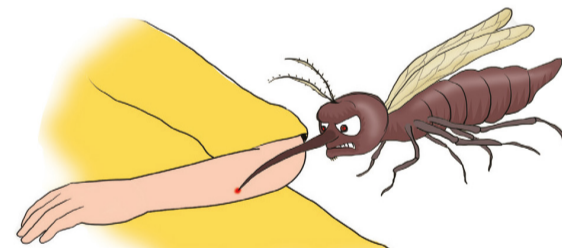
To treat vivax malaria so that it does not keep returning to blood and primaquine\* or tafenoquine\*\* to kill the parasites that lie dormant (sleeping) in the liver.

\*Primaquine is not given to pregnant or breastfeeding women or to babies less than six months old.  
\*\*Tafenoquine is not given to pregnant or breastfeeding women or to children under 16 years old.



A patient with vivax malaria is only aware that they are unwell and come to a clinic when the parasite causing the sickness has moved from the liver into the blood. Symptoms can include fever, chills, headache, vomiting and/or muscle pains.

## Vivax Malaria



## G6PD Testing and Primaquine/Tafenoquine Treatment Talking Points for vivax malaria patients

