Planned Tafenoquine interventions

APMEN meeting, Bangkok
September 07, 2018
The tafenoquine (TQ) proposition: G6PD testing + single dose radical cure

Quantitative G6PD diagnostic test + Tafenoquine single dose
G6PD test: Decision tool for appropriate *P. vivax* radical cure

**Standard malaria test**

**G6PD quantitative test**

**DECISION TOOL**

**3 DAY**

**Blood-stage**

**1 DAY**

**Liver-stage**

TAFENOQUINE

SINGLE DOSE

**7-14 DAY**

**Liver-stage**

PRIMAQUINE
Implementation studies to assess feasibility of G6PD testing prior to appropriate radical cure (TQ / PQ)

Implementation studies under discussion: Brazil, Thailand, Ethiopia, India

Overall objectives of the implementation study

• **Can it work?**
  Assess operational feasibility and safety of appropriate radical cure after G6PD testing under field conditions

• **How to scale-up?**
  Define core package of supporting interventions for scaling-up (Training, supervision, surveillance, pharmacovigilance)
Implementation study will be conducted through the normal health system

- G6PD tests and TQ will be supplied to the study sites through the NMCP system
- All relevant staff will be trained by the MoH on
  - G6PD testing,
  - Treatment algorithm based on G6PD levels
  - Adverse events of TQ and PQ
  - Identifying, reporting and managing adverse events (pharmacovigilance)
  - Surveillance (completion of revised SIVEP form)
- Phased roll-out
Different study designs under consideration for Brazil and Thailand

**Brazil: Feasibility / Appropriate use**
- Retrospective, observational study
- Anonymized data extracted from regular reporting system (SIVEP)
- No informed consent
- Routine follow-up (on Day 5)
- Real world use / no observational bias

**Thailand: Safety / Appropriate use**
- Prospective, longitudinal, low-interventional, observational study
- Case record forms
- Informed consent
- Active safety follow-up
- Drug utilization study / not real world use
Phased implementation of G6PD testing before radical cure

**Phase 1**
Higher level facilities only

**Primary objective:** Safety and appropriate use of TQ

**PV:** Active follow-up of patients / Patients asked to return on Day 5

**Interim analysis** after X adult *P. vivax* patients treated for green light to start Phase 2

**Criteria:** lower 95% confidence limit for proportion of patients receiving TQ with adequate levels of G6PD activity >95%

**Decision** by Study Oversight Committee

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**Phase 2**
Lower level facilities + Higher level

**All facilities:** Access to emergency care in 24hrs

**PV:** Active follow-up of patients / Patients asked to return on Day 5
**Study title (Brazil): Operational feasibility of G6PD testing before *P. vivax* radical cure with TQ or PQ**

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<tr>
<th>Objectives</th>
<th>Endpoints</th>
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<td><strong>Primary:</strong></td>
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<td>To investigate whether TQ is provided to patients with appropriate levels of G6PD activity.</td>
<td>% of <em>P. vivax</em> patients with ≥70% G6PD activity treated with TQ and those &lt;70% G6PD activity not treated with TQ (Age ≥ 16 years)</td>
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<td><strong>Secondary</strong></td>
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<tr>
<td>To investigate whether PQ is provided to patients with appropriate levels of G6PD enzyme activity</td>
<td>% of <em>P. vivax</em> patients with &gt;30% G6PD activity treated with PQ (Age &gt;6 months)</td>
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<td>To describe the characteristics of patients treated with TQ or PQ</td>
<td>Description of the characteristics of patients treated with TQ or with PQ</td>
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<td>To measure frequency of drug-induced signs of haemolysis and hospitalization</td>
<td>To measure frequency of signs of drug-induced haemolysis</td>
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<td>To measure frequency of hospitalization due to drug-induced hemolysis</td>
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Vivax.org website: Centralized platform and resource repository

Objectives:

• To serve as a one-stop shop for all *P. vivax* related information
• To bring together policies, links, publications on Pv diagnostics, G6PD test and treatment
• To act as a catalyst: create awareness & supporting coordination among radical cure interventions
• To create a central platform for materials and tools and disseminating key learnings / best practices
• To share the experience made with the introduction of new tools