

# **Glucose-6-phosphate dehydrogenase (G6PD) mutations in Myanmar: G6PD Mahidol (487G>A) is the most common variant in the Myanmar population**

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## **Abstract**

We conducted a survey of malaria diagnoses and treatments in remote areas of Myanmar. Blood specimens from more than 1,000 people were collected by the finger-prick method, and 121 (11%) of these people were found to be glucose-6-phosphate dehydrogenase (G6PD) deficient. Of these 121, 50 consented to analysis of the G6PD genome. We read the G6PD sequences of these subjects and found 45 cases of G6PD Mahidol (487G>A), two of G6PD Coimbra (592C>T), two of G6PD Union (1360C>T), and one of G6PD Canton (1376G>T). Taken together with data from our previous report, 91.3% (73/80) of G6PD variants were G6PD Mahidol. This finding suggests that the Myanmar population is derived from homogeneous ancestries and is different from Thai, Malaysian, and Indonesian populations.