

# Resistance to Chloroquine by *Plasmodium vivax* at Alor in the Lesser Sundas Archipelago in Eastern Indonesia

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The therapeutic response to standard chloroquine therapy against *Plasmodium vivax* was evaluated in 36 subjects living at Alor in the Lesser Sundas Archipelago of eastern Indonesia. Chloroquine level were measured on 32 individuals, and showed evidence of adequate absorption of standard chloroquine therapy. Three subjects failed treatment by Day 2 or 3, with evidence of rising asexual parasitemia, and two others had stable parasitemia to Day 7. Ten more subjects had recurrent parasitemia by Day 14, two by Day 21, and another one by Day 28. Three subjects had recurrent parasitemia on Days 14 and 28, but with chloroquine < 100 ng/mL. Eleven subjects cleared parasitemia by Day 3 and had no recurrences up to Day 28. In summary, 28-day cumulative incidence of confirmed resistance to chloroquine was 56% of infections evaluated. Chloroquine should not be considered adequate for treatment of acute vivax malaria acquired in this region.