Systematic review of *Plasmodium knowlesi* in Indonesia: a risk of emergence in the context of capital relocation to Borneo?

ABSTRACT

Background: The Indonesian Republic plans to relocate its capital from Jakarta to East Kalimantan, Borneo Island, in the next few years. This relocation may be associated with deforestation, decreased biodiversity, and an increased risk of emerging zoonotic infections, including Plasmodium knowlesi malaria. The Malaysian part of Borneo Island is one of the main hotspots of P. knowlesi malaria. Methods: Considering this risk, we evaluated the transmission dynamics of P. knowlesi in the Indonesian Archipelago based on a literature search and extensive review of data from the Indonesian Ministry of Health. Results: We report that 545 P. knowlesi cases were documented in Indonesia, mainly in the Aceh and North Sumatra provinces, with 95% of these occurring in the last 4 years. Conclusions: The main P. knowlesi vectors are present in the area of the future capital, requiring strengthened surveil- lance to reduce the risk of emerging cases in a rapidly growing population.