

## ESTABLISHMENT OF THE MOLECULAR METHOD IN THE LABORATORY DIAGNOSIS OF CHIKUNGUNYA IN SABAH STATE

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## **ABSTRACT**

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To find out the endemicity of Chikungunya (CHIK) infection in Sabah State, 100 serum samples of suspected Dengue/ Chikungunya cases both in patients and out patients, were collected from Pathology laboratory of Women and Children Hospital, Likas, Kota Kinabalu, Sabah, Malaysia between August 2014 to November 2014. The age of the cases ranged from the youngest 1 year old to the eldest of 75 years. Chikungunya RNA was tested by Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) using non structural protein 1 (nsP1) primer pairs. Out of 100 serum samples tested only one sample was CHIK RNA positive. CHIK IgM antibody were tested from 50 samples and only one sample showed weak positive for CHIK IgM. The test results showed that CHIK infection was endemic in Kota Kinabalu, Sabah but very few cases. According to hospital data only one fifth of the above patients were dengue rapid test positive. RT-PCR test is a rapid and sensitive test essential in differentiating dengue, CHIK infection and also other viral infections.

