

ANTIBODY RESPONSE IN HEALTHCARE WORKERS VACCINATED WITH LIVE-ATTENUATED RECOMBINANT JAPANESE ENCEPHALITIS CHIMERIC VACCINE

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Abstract. A recent survey indicated 20% of urban Thai healthcare workers (HCWs) have insufficient level of Japanese encephalitis (JE) neutralizing antibody (seronegative or JE antibody titer <1:10). The study determined safety and immunogenicity after one dose of JE chimeric vaccine (JE-CV) immunization in seronegative HCWs in a single arm open trial. Blood samples for JE antibody using plaque reduction neutralization test (PRNT) as well as information on possible vaccine-associated adverse effects were obtained on day 28 post-immunization. Among participants ($n = 60$) seroconversion (JE antibody titer of $\geq 1:10$ post-vaccination) occurred in 98% of subjects with a geometric mean titer (GMT) (SD) of 719 (1054). Proportion of adequate JE immunity (GMT) for subjects 21-30, 31-40, 41-50, and 51-60 years of age was 93 (744), 100 (635), 100 (GMT 717), and 100% (GMT 731), respectively. Adverse reactions were mild with self-limited fever and maculopapular rash in 8 and 2% respectively. In conclusion, a single dose of JE-CV in adults was well tolerated and provided high rate of seroconversion in adult HCWs.

Keywords: adult, health care workers, Japanese encephalitis vaccine, neutralizing antibody, Thailand

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