RESEARCH NOTE

MONITORING OF THE H275Y MUTATION IN PANDEMIC INFLUENZA A(H1N1) 2009 STRAINS ISOLATED IN MALAYSIA

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Abstract. The 2009 pandemic influenza A(H1N1) infection in Malaysia was first reported in May 2009 and oseltamivir was advocated for confirmed cases in post-exposure prophylaxis. However, there are cases of oseltamivir-resistance reported among H1N1-positive patients in other countries. Resistance is due to substitution of histidine by tyrosine at residue 275 (H275Y) of neuraminidase (NA). In this study, we have employed Sanger sequencing method to investigate the occurrence of mutations in NA segments of 67 pandemic 2009 A(H1N1) viral isolates from Malaysian patients that could lead to probable oseltamivir resistance. The sequencing analysis did not yield mutation at residue 275 for all 67 isolates indicating that our viral isolates belong to the wild type and do not confer resistance to oseltamivir.

Keywords: influenza A (H1N1), H275Y mutation, oseltamivir resistance, Malaysia

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