Burkholderia pseudomallei, a causative agent of a broad spectrum of diseases collectively known as melioidosis, is a facultative intracellular gram-negative bacterium. Its ability to survive and multiply inside phagocytic and non-phagocytic cells has been demonstrated. However, the pathogenic mechanisms and virulence factors of B. pseudomallei remain elusive. In the present study, we compared the invasion efficiency of six B. pseudomallei local isolates using human lung epithelial cells (A549). All six isolates were isolated from different sources; blood, sputum, urine and splenic biopsy. Invasion was determined using antibiotic protection assay after two hours of co-culturing at the multiplicity of infection (MOI) 1:10. Results obtained showed that the invasion efficiency of B. pseudomallei isolates from different sources varied from $1.72 \times 10^{-5}$ % to 0.7%. No correlation was observed between the invasion efficiency and the source of isolation.

Keywords: Invasion, B. pseudomallei