

Characterization of Screening *Staphylococcus aureus* Isolates Harboring *mecA* Genes among Intensive Care Unit Patients from Tertiary Care Hospital in Jakarta, Indonesia

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Abstract : The objective of this study is to determine the prevalence of methicillin-resistant *Staphylococcus aureus* (MRSA) harboring *mecA* genes from screening isolates among intensive care unit (ICU) patients. All MRSA screening isolates from ICU's patients of Cipto Mangunkusumo Hospital during 2011 and 2014 were included in this study. Identification and susceptibility test was performed using Vitek2 system (Biomereux®). PCR was conducted to characterize the SCCmec of *S. aureus* harboring the *mecA* gene on each isolate. Patient's history of illness was traced through medical record. 24 isolates from 327 screening isolates were MRSA positive (7.3%). From PCR, we found 17 (70.8%) isolates carrying SCCmec type I, 3 (12.5%) isolates carrying SCCmec type III, and 2 (8.3%) isolates carrying SCCmec type IV. In conclusion, SCCmec type I is the most prevalent MRSA colonization among ICU patients in Cipto Mangunkusumo Hospital.

Keywords : MRSA, *mecA* genes, ICU, colonization

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