

Cost-effectiveness analysis of several dosage regimens of vancomycin in ventilator-associated pneumonia critically ill patients

Bobby Presley^{1,2}, Steven Victoria Halim^{1,2}, Eko Setiawan^{1,2}

¹Department of Clinical and Community Pharmacy, Faculty of Pharmacy, University of Surabaya, Indonesia.

²Center for Medicines Information and Pharmaceutical Care (CMIPC), Faculty of Pharmacy, University of Surabaya, Indonesia.

doi: <https://doi.org/10.7324/JAPS.2024.194102>

SUPPLEMENTARY MATERIAL

Supplementary Table 1. Proportion of MRSA at each MIC value

MIC (mg/L)	Percentage (%)
0.5	0.24
1.0	60.35
2.0	39.11
4.0	0.3

Supplementary Table 2. Supporting material to administer the vancomycin.

Resources used	Unit	General Hospital	Small Hospital
Set of infusion	per day	50	
Syringe	per time	30	

Infusion Pump	per day	248,6767697	237,4197966
Water for injection	per ampul (10mL)	4,026545166	
Fluid for infusion	per 100mL	16,10618067	
ADR monitoring: Creatinine	per blood drawn	68,56519988	65,4951163
TDM Vancomycin	per concentration monitoring	225,1394623	
ICU stay: nurse cost	per day	967,0763267	
Hospital stay: nurse cost	per day	414,4612829	
MV used	per day	1358,958994	1295,540907
Physician cost	per visit	289,6112174	276,3075219

Notes, ADR, adverse drug reaction; TDM, therapeutic drug monitoring; MV, mechanical ventilation.

Supplementary Table 3. Duration of using drug, supporting material, and hospital length of stay

Item	Duration of Using (days)	Ref
Drug	11	37, 39, 41
Creatinine Monitoring	3	40
TDM	4	38
ICU - Nurse Cost	16	41
IPD - Nurse Cost	4	41
MV	15	37
Physician Cost	20	41

Notes, ADR, adverse drug reaction; TDM, therapeutic drug monitoring; MV, mechanical ventilation.