

Table S1. Summary of inclusion criteria

Study design	Observational studies
Population	Adult patients (age \geq 18 years) Hospitalized for at least 48 hours
Intervention	Studies were included if they evaluated the use of the following treatments: vancomycin/piperacillin-tazobactam (V+PT) versus vancomycin/meropenem (V+M)
Primary Outcomes	Acute kidney injury (AKI)
Secondary Outcomes	Length of stay (LOS) in hospital Renal replacement therapy (RRT) Mortality
Language of publication	Only English language publications

Table S2: Newcastle–Ottawa scale for assessing the quality of included studies

Study	Selection				Comparability	Outcome			Score
	Representativeness of the exposed cohort	Selection of the non-exposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability of cohorts on the basis of the design or analysis	Assessment of outcome	Was follow-up long enough for outcomes to occur	Adequacy of follow up of cohorts	
Alyami, 2017	✓	✓	✓	✓	✓	✓	✓	✓	8
Rutter, 2019	✓	✓	✓	✓	✓✓	✓	✓	✓	9
Blevins, 2019	-	✓	✓	✓	✓✓	✓	✓	✓	8
Robertson, 2018	✓	✓	✓	✓	✓✓	✓	✓	✓	9
Balci, 2018	✓	✓	✓	✓	✓✓	✓	✓	✓	9
Mullins, 2018	✓	✓	✓	✓	✓✓	✓	✓	✓	9
Kang, 2019	-	✓	✓	✓	✓✓	✓	✓	✓	8
Cannon, 2018	✓	✓	✓	✓	✓✓	✓	✓	✓	9
Schreier, 2019	-	✓	✓	✓	✓✓	✓	✓	✓	8
Ide, 2019	-	✓	-	✓	✓✓	✓	✓	✓	7
Rungkitwattanakul et al,2021	✓	✓	✓	✓	✓	✓	✓	✓	8
Tookhi et al,2021	✓	✓	✓	✓	✓✓	✓	✓	✓	9

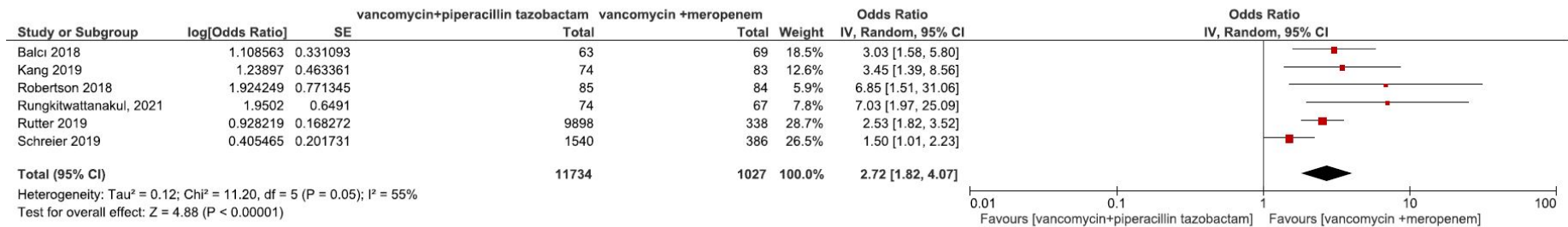


Figure S1. Acute kidney injury (AKI); pooled analysis of the adjusted odds ratio (aOR).

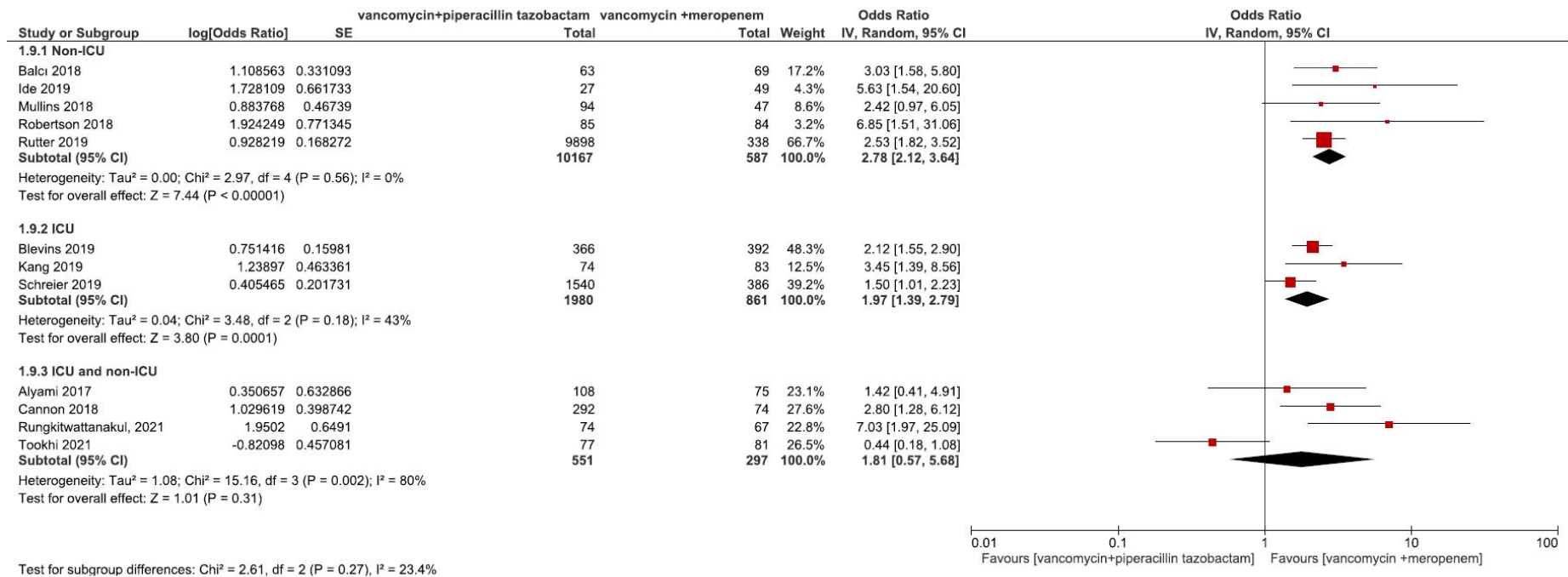


Figure S2. Acute kidney injury (AKI) based on clinical setting.

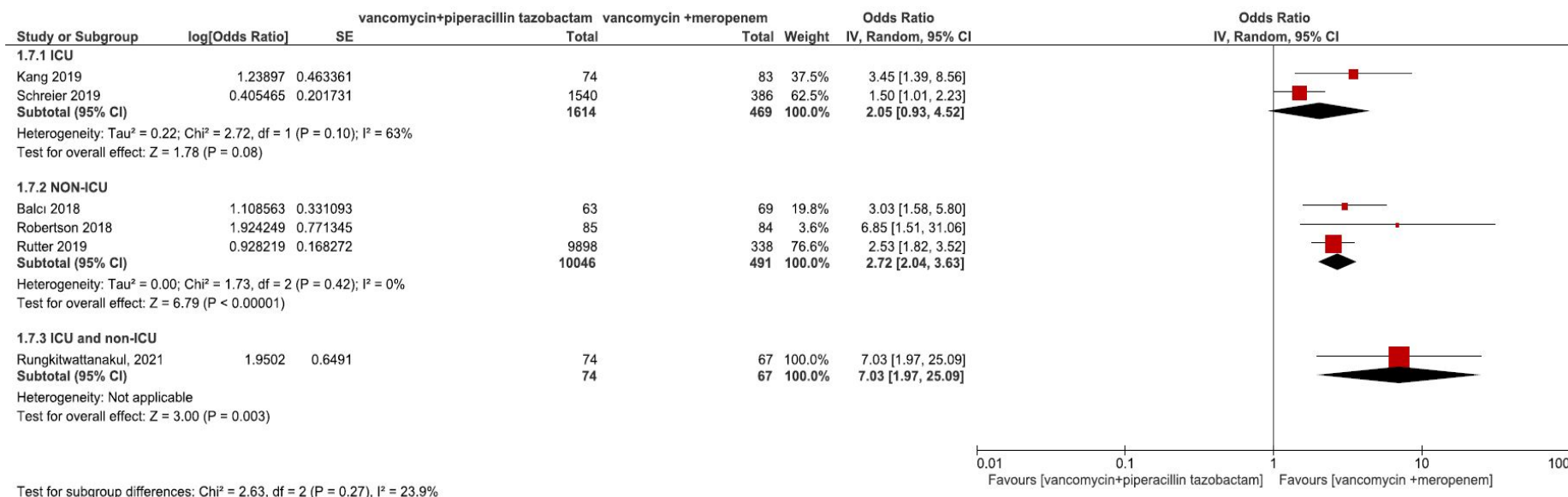


Figure S3. Acute kidney injury (AKI) based on clinical setting for studies reported adjusted analysis for potential confounders.

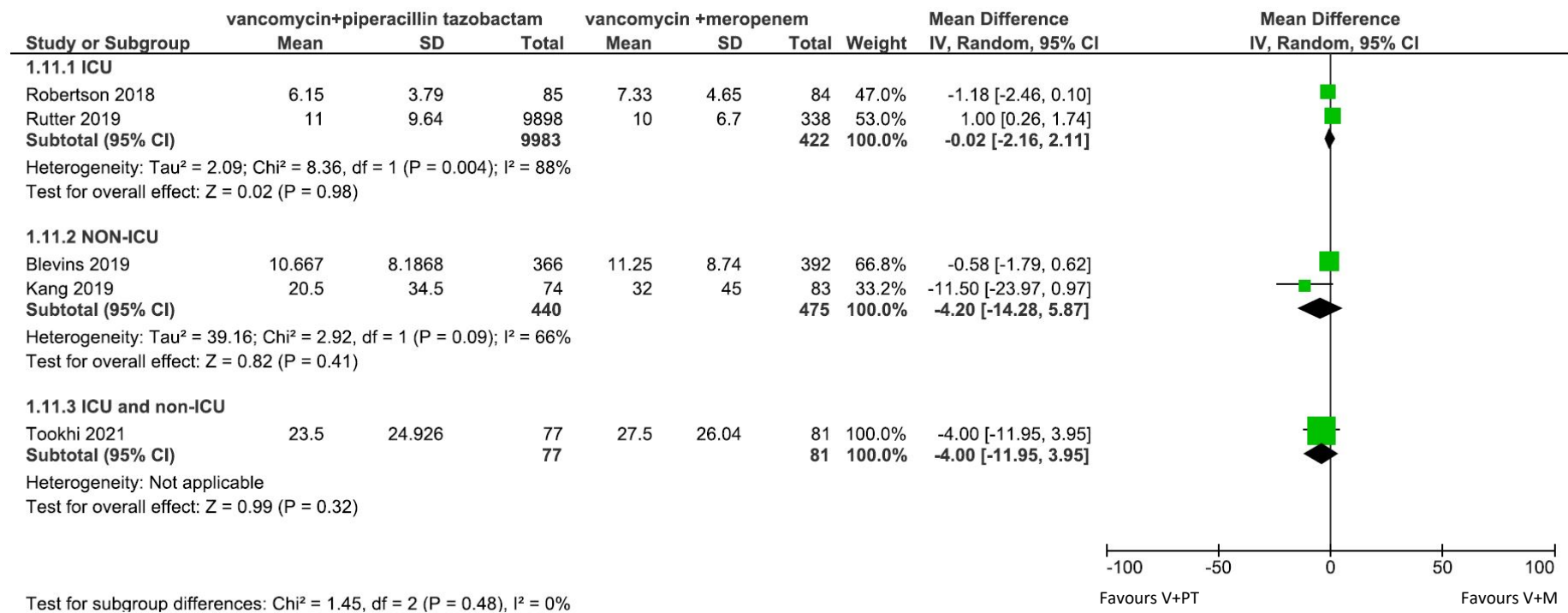


Figure S4. Length of stay (LOS) in hospital based on clinical setting.

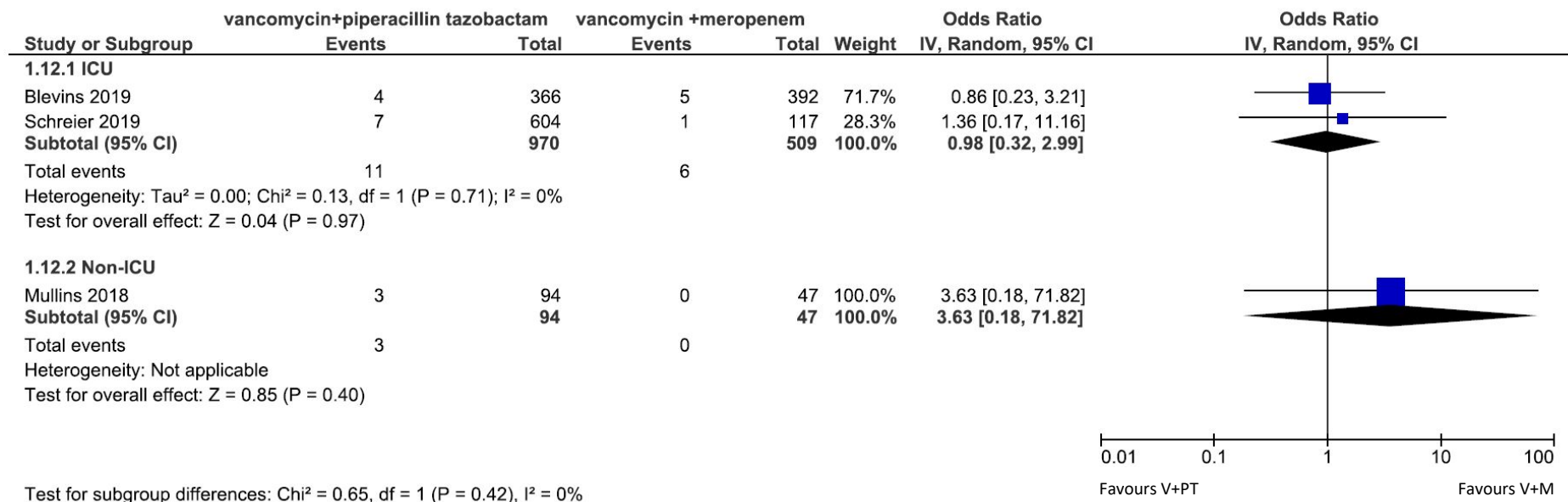


Figure S5. Renal replacement therapy (RRT) based on clinical setting.

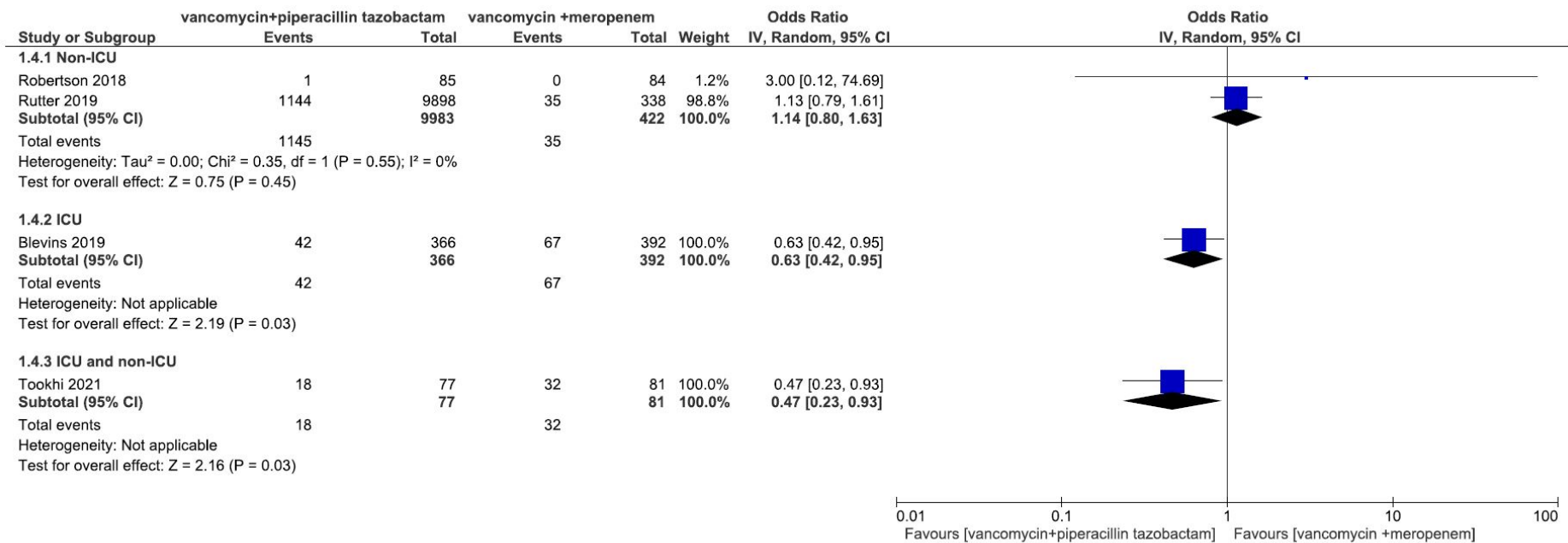


Figure S6. Mortality based on clinical setting.