

Supplementary Table 1. Definition criteria for HAP/VAP.

Type of infection	Definition
HAP/VAP	<p>Pneumonia fulfilling CDC/NHSN surveillance definition of healthcare-associated infection for pneumonia with specific laboratory findings.</p> <p>Ventilator-associated pneumonia was defined in persons who had a device to assist or control respiration continuously through a tracheostomy or by endotracheal intubation within the 48 h period before the onset of infection. BAL was performed according to routine clinical practice.</p> <p>The specific criteria required for diagnosis of pneumonia were all of the following:</p> <ol style="list-style-type: none">1. Chest radiograph with new or progressive and persistent infiltrate, consolidation or cavitation;2. At least 1 of the following signs of sepsis: fever $>38^{\circ}\text{C}$ with no other recognised cause; leucopenia ($\text{WBC}<4000/\text{mm}^3$) or leucocytosis ($\text{WBC}>12\,000/\text{mm}^3$); for adults aged >70 years, altered mental status with no other recognized cause;3. At least 1 of the following respiratory signs/symptoms: new onset of purulent sputum or change in character of sputum or increased respiratory secretions or increased suctioning requirements; new onset or worsening cough or dyspnoea or tachypnoea >25 breaths per minute; rales or bronchial breath sounds; worsening gas exchange, including O_2 desaturation, $\text{PaO}_2/\text{FiO}_2 <240$ or increased oxygen requirements;4. Laboratory criterion: growth of the relevant bacteria in culture of sputum, tracheal aspirate, BAL or protected specimen brushing. For any lower respiratory secretion other than BAL or PSB, the respiratory sample has to contain >25 neutrophils and <10 squamous epithelial cells per low power field, identified by Gram stain

BAL, bronchoalveolar lavage; CDC/NHSN, Centers for Disease Control and Prevention/ National Healthcare Safety Network; FiO_2 , fractional inspired oxygen; HAP, healthcare-associated pneumonia; PaO_2 , arterial oxygen tension; PSB, protected specimen brush; VAP, ventilator-associated pneumonia; WBC, white blood count

Supplementary Table 2. Covariates included in the Propensity Score.

• Age
• Sex
• COVID-19
• ICU stay
• Charlson comorbidity index
• type of infection (BSI, VAP or others)
• SOFA score
• invasive mechanical ventilation,
• Septic shock
• Extracorporeal membrane oxygenation
• Source control
• ID consultation
• Polymicrobial infection

BSI: bloodstream infections; ICU: intensive care units; ID: infectious disease; VAP: ventilator-associated pneumonia.

Supplementary Table 3. Balance table before propensity score.

	CFDC-containing regimens	Colistin-containing regimens	Standardized differences
Age, mean	61.45	63.77	-0.14
ID consultation	100%	61%	0.91
Polymicrobial infection	17%	28%	-0.27
Sex (male)	62%	82%	-0.46
ICU	89%	90%	-0.01
COVID-19	40%	38%	0.06
Charlson Comorbidity Index, mean	3.00	3.40	-0.17
Type of infection			
BSI	57%	68%	-0.21
VAP	29%	32%	-0.10
Others	17%	3%	0.53
SOFA score, mean	7.93	7.81	0.12
Invasive mechanical ventilation	58%	58%	-0.11
Septic shock	64%	58%	0.11
ECMO	15%	3%	0.47
Source control	38%	40%	-0.04

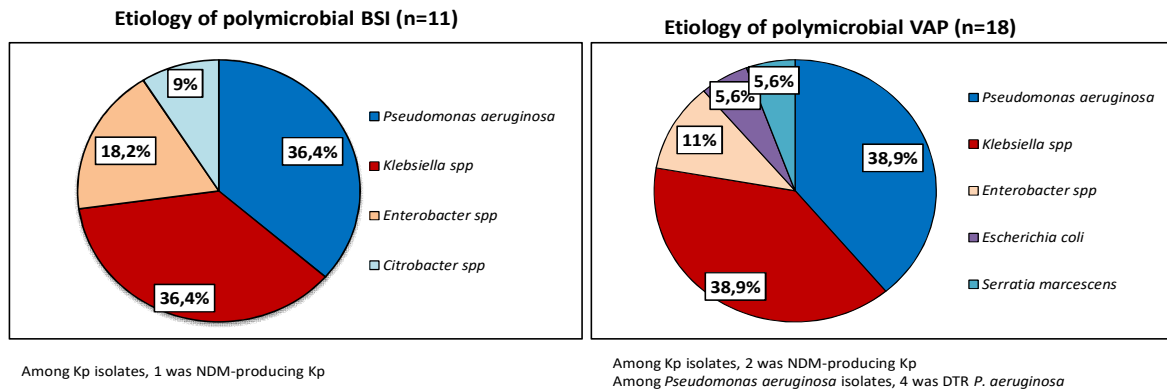
BSI: bloodstream infections; CFDC: cefiderocol; ECMO: extra corporeal membrane oxygenation;
ICU: intensive care units; VAP: ventilator-associated pneumonia.

Supplementary Table 4. Balance table after propensity score using the inverse probability of treatment weighting.

	CFDC-containing regimens	Colistin-containing regimens	Standardized differences
Age, mean	62.65	63.89	0.08
ID consultation	100%	71%	0.68
Polymicrobial infection	16%	26%	-0.26
Male sex	67%	81%	-0.33
ICU	89%	89%	0.00
COVID-19	44%	40%	0.08
Charlson Comorbidity Index, mean	3.1	3.41	-0.13
Type of infection			
BSI	57%	65%	-0.17
VAP	29%	65%	-0.07
Others	14%	3%	0.42
SOFA score, mean	6.69	7.23	0.03
Invasive mechanical ventilation	58%	57%	-0.01
Septic shock	66%	63%	0.08
ECMO	14%	3%	0.43
Source control	39%	40%	-0.02

BSI: bloodstream infections; CFDC: cefiderocol; ECMO: extra corporeal membrane oxygenation;
ICU: intensive care units; VAP: ventilator-associated pneumonia.

Supplementary Figure 1. Etiology of polymicrobial BSI in patients with BSI and VAP caused by CRAB.



Legend: BSI: bloodstream infections; CRAB carbapenem-resistant *A. baumannii*; DTR: difficult-to-treat resistant; Kp *Klebsiella pneumoniae*; NDM: New Delhi metallo-beta-lactamase; VAP: ventilator-associated pneumonia.