

Predicting Ventilator-associated Lower Respiratory Tract Infection Outcomes Using Sequenced-based Early Microbiological Response

NCT06467864

Status	RECRUITING
Sponsor	The First Affiliated Hospital with Nanjing Medical University
Enrollment	200 participants

Key Eligibility Criteria

Inclusion (3)

- Aged 18 years and above.
- Previously relied on mechanical ventilation (endotracheal intubation or tracheotomy) for breathing assistance, and the duration of mechanical ventilation was more than 48h.
- Lower respiratory tract infection based on at least two of the followings: abnormal temperature (body temperature greater than 38.5°C or less than 36.5°C), leucocyte count abnormality (leucocyte count greater than $12 \times 10^9/L$ or less than $4 \times 10^9/L$), and the presence of purulent tracheal secretions.

Exclusion (4)

- Bronchoscopy and respiratory specimen collection were not performed at screening (Day 1) and after 3 days of treatment (Day 4).
- Refusal of patients or families to participate in the study
- After initial screening, bronchoscopy was performed to obtain BALF for bacterial culture. The results of the culture showed no evidence of infection by study-associated lower respiratory pathogens.
- Note: The evidence of infection was defined as a single positive bacterial culture (pathogen quantification $\geq 10^4$ cfu/ml or "++" and more) on Day1. And the study-associated causative pathogens are *Pseudomonas aeruginosa*, *Acinetobacter baumannii*, *Klebsiella pneumoniae*, and *Staphylococcus aureus*. Additionally, the included patient must have single infection with one of these pathogens.

Locations (1 total)

he First Affiliated Hospital of Nanjing Medical University, Nanjing, Jiangsu, China