**Appendix 1:** Definition of the complications used in this study

|  |  |
| --- | --- |
| **Complications** | **Definition (Reference)**  |
| **Infectious** |  |
| Ventilator-associated Pneumonia (VAP) | At least one of the following signs after 48 hours of intubation: temperature (>380C), leukocyte count >12,000 leukocytes/mm3, or leukopenia (leukocyte count <4000 leukocytes/mm3) plus new onset of purulent endotracheal secretions or change in character of sputum or increases in respiratory secretions, suctioning requirements, new rales, bronchial breath sounds, or worsening oxygen requirements (increasing FiO2 or PaO2:FiO2), and new or progressive plus persistent infiltrate on chest radiograph or consolidation or cavitation, and microbiological confirmation [Endotracheal Aspiration (ETA) Gram stain with polymorphonuclear (PMNL) with or without bacteria, semiquantitative ETA with moderate-to-heavy growth or quantitative ETA ≥1 x 106 cfu/mL].[36] |
| Ventilator-associated Tracheobronchitis (VAT) | At least one of the following signs after 48 hours of intubation: temperature (>380C), leukocyte count >12,000 leukocytes/mm3, or leukopenia (leukocyte count <4000 leukocytes/mm3) plus new onset of purulent endotracheal secretions or change in character of sputum or increases in respiratory secretions, or suctioning requirements plus Transient infiltrate, no new infiltrate, or non-diagnostic chest radiograph or CT (e.g., atelectasis, ARDS, or CHF), and microbiological confirmation (ETA Gram stain with PMNL with or without bacteria, semiquantitative ETA with moderate-to-heavy growth or quantitative ETA ≥1 x 106 cfu/mL).[36] |
| ICU-acquired Urinary Tract Infection | Patients with a positive urine culture (>100,000 cfu/mL of 1 or 2 organisms) first identified on ICU day 3 (>48 hrs.) or later. Patients with positive urine cultures within 48 hours of ICU discharge were also considered to have ICU-acquired UTIs.[37]  |
| Pressure sores | Areas of localized damage to the skin and underlying tissue caused by pressure, shear, or friction.[38] |
| Bacteremia  | Bacteraemia is defined as the growth of a viable organism in a blood culture taken from a patient during their ICU stay (>48 hrs). Organisms commonly considered to be contaminants – coagulase-negative staphylococci, Propionibacterium acnes and Corynebacterium spp – are considered true infections only if isolated from a patient in two or more consecutive cultures taken on different days.[39]  |
| **Non-infectious** |  |
| Pulmonary Barotrauma | Extra alveolar air due to positive pressure ventilation.[40] |