

Table S2. Comparison between patients who did invasive sampling while receiving or not receiving invasive mechanical ventilation

| | Not fiberoptic-bronchoscopy* | | Fiberoptic-bronchoscopy* | | P value |
|---|------------------------------|---------------------|--------------------------|---------------------|---------|
| | Not Required iMV (n=35) | Required iMV (n=87) | Not Required iMV (n=43) | Required iMV (n=35) | |
| Age, years, mean SD | 66 ± 13 | 66 ± 12 | 66 ± 14 | 67 ± 11 | 0.99 |
| APACHE II Score at HAP diagnosis, mean SD | 15.2 ± 4 | 17.7 ± 6 | 13.3 ± 4 | 17.5 ± 5 | <0.001 |
| SOFA Score at HAP diagnosis, median [p25-p75] | 5 [4-7] | 7 [5-10] | 5 [4-8] | 6 [4-8] | <0.001 |
| PaO ₂ /FiO ₂ , mean SD | 192 ± 93 | 169 ± 71 | 209 ± 86 | 151 ± 63 | 0.006 |
| Bilateral infiltrates, n (%) | 9 (26%) | 36 (41%) | 6 (14%) | 15 (43%) | 0.007 |
| Multilobar infiltrates, n (%) | 16 (46%) | 51 (59%) | 22 (51%) | 20 (57%) | 0.58 |
| ARDS at pneumonia diagnosis, n (%) | 2 (6%) | 17 (20%) | 0 (0%) | 8 (24%) | 0.003 |
| Respiratory support | | | | | |
| NIV previous of HAP diagnosis | 4 (11%) | 17 (20%) | 14 (33%) | 11 (31%) | 0.077 |
| NIV to provide support upon HAP diagnosis | 9 (26%) | 23 (26%) | 10 (23%) | 12 (34%) | 0.73 |
| Need of invasive mechanical ventilation | | | | | <0.001 |
| Within <24h | | 60 (69%) | | 12 (34%) | |
| Within 24-72h | | 17 (20%) | | 13 (37%) | |
| Within >72h | | 10 (11%) | | 20 (29%) | |
| Time to intubation, days | | | | | 0.001 |
| Mean SD | | 0.91 (2) | | 1.57 (2) | |
| Median [p25-p75] | | 0 [0-1] | | 1 [0-3] | |
| Definitive causative pathogen | 12 (34%) | 47 (54%) | 19 (44%) | 21 (60%) | 0.112 |

ARDS: Acute respiratory distress syndrome, APACHE II: Acute Physiology and Chronic Health Evaluation, FBS: fiberoptic-bronchoscopy, HAP: hospital-acquired pneumonia, iMV: invasive mechanical ventilation, NIV: non-invasive ventilation, SOFA score: Sequential Organ Failure Assessment.

* In this table, only considered the invasive approaches (fiberoptic-bronchoscopy) performed before invasive mechanical ventilation in those patients who were subsequently intubated.