**Electronic Supplemmentary Material (ESM)**

Title: KINETICS OF C-REACTIVE PROTEIN AND PROCALCITONIN IN THE EARLY IDENTIFICATION OF ICU-ACQUIRED INFECTIONS IN CRITICALLY ILL COVID19 PATIENTS

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**Table 1 ESM – Characterization of microbiological cultures (A) and Isolated microorganisms (B) in the analyzed population**

|  |  |
| --- | --- |
| Culture | n |
| Lower respiratory tract | 96 |
| Blood | 156 |

**A**

**B**

|  |  |
| --- | --- |
| Isolated Microorganisms | n (%) |
| *Citrobacter koseri* | 4  |
| *Corynebacterium striatum* | 1 |
| *Enterobacter cloacae* | 1 |
| *Enterococcus faecalis* | 4 |
| *Escherichia coli* | 1 |
| *Klebsiella oxytoca* | 1 |
| *Klebsiella pneumoniae* | 11 |
| *Neisseria meningitidis* | 1 |
| *Proteus mirabilis* | 2 |
| *Providentia stuartii* | 1 |
| *Pseudomonas aeroginosa* | 3 |
| *Serratia marcescens* | 1 |
| *Staphylococcus aureus* | 7 |
| *Staphylococcus epidermidis* | 7 |
| *Streptococcus agalactiae* | 1 |
| *Streptococcus constellatus* | 1 |
| *Streptococcus pneumoniae* | 4 |

**Table 2 ESM – Demographic and primary clinical characteristics according to CRP kinetic patterns**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Pattern A(n=3 (8.5%)) | Pattern B(n=19 (54.3%)) | Pattern C(n=12 (34.3%)) | Pattern D(n=1 (2.9%)) | p |
| Age, years (mean ± sd) | 68.3 ± 8.4 | 64.5 ± 10.4 | 61.1 ± 8.1 | 67 | 0.602 |
| Gender, males (n (%)) | 2 (66.7) | 13 (68.4) | 10 (83.3) | 1 (100) | 0.731 |
| SOFA at admission (median (IQR)) | 3 (2.3;3.3) | 5 (3.5; 8) | 8 (4.3; 12.5) | 1 | 0.061 |
| SAPS III at admission (mean ± sd) | 42.3 ± 7.5 | 40.6 ± 13.9 | 44.1 ± 13.8 | 25 | 0.419 |
| Mechanical Ventilation (n (%)) | 3 (100) | 18 (94.7) | 12 (100) | 1 (100) | 0.833 |
|  Length of mechanical ventilation, days (mean ± sd) | 28.7 ± 13.3 | 21.6 ± 9.9 | 24.5 ± 8.7 | 9 | 0.467 |
|  Minimum paO2/FiO2 registered (mean ± sd) | 72.8 ± 10.6 | 93.9 ± 20.6 | 91 ± 26.1 | 112 | 0.676 |
| Vasopressor Support (n (%)) | 3 (100) | 19 (100) | 10 (83.3) | 1 (100) | **0.003** |
| Renal support therapy (n (%)) | 2 (66.6) | 9 (47.4) | 5 (41.7) | 5 (100) | 0.689 |
| Maximum CRP registered, mg/dL (mean ± sd)\* | 29.4 ± 1.8 | 34.9 ± 7.3 | 32.5 ± 13.2 | 8.24 | 0.112 |
| Maximum PCT registered, ng/mL (median (IQR)\* | 8.8 (3.5; -) | 8.4 (2.9; 12.9) | 1.2 (0.4; 8.7) | 0.27 | 0.089 |
| ICU length of stay, days (median (IQR) | 32 ± 16.8 | 27.7 ± 11.9 | 28.1 ± 12.7 | 13 | 0.612 |
| In-Hospital Length of stay, days (median (IQR)) | 48.3 ± 29.2 | 46.3 ± 29 | 44.8 ± 29.3 | 28 | 0.820 |
| In-Hospital mortality rate (n (%)) | 1 (33.3%) | 7 (36.8) | 2 (16.7) | 0 (0) | 0.593 |

IQR denotes Interquartile range; SOFA denotes Sequential Organ Failure Assessment; SAPS denotes Simplified Acute Physiology Score; CRP denotes C-Reactive Protein; PCT denotes Procalcitonin

\* Registered before Day 0