**Supplementary Table 3** Characterisation of secondary outcome

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **First author** | **Mortality census day** | **Sepsis severity score with metformin [mean ± SD or median (IQR)]** | **Sepsis severity score without metformin [mean ± SD or median (IQR)]** | **Initial lactate with metformin (median [IQR])** | **Initial lactate without metformin (median [IQR])** | **Creatinine (mg/dL; mean ± SD) or Renal replacement therapy (RRT; %) or Acute Kidney Injury (AKI; %) with metformin** | **Creatinine (mg/dL; mean ± SD) or Renal replacement therapy (RRT; %) or Acute Kidney Injury (AKI; %) without metformin** | **Mechanical ventilation with metformin (%)** | **Mechanical ventilation without metformin (%)** | **Vasopressors usage with metformin (%) or maximum dose of noradrenaline (ug/kg/min; median [IQR])** | **Vasopressors usage without metformin (%) or maximum dose of noradrenaline (ug/kg/min; median [IQR])** | **Initial glycaemia with metformin (mg/dL; mean ± SD) or (mmol/L; media [IQR]) or HBA1c >8 (%)** | **Initial glycaemia without metformin (mg/dL; mean ± SD) or (mmol/L; media [IQR]) or HBA1c >8 (%)** |
| van Vught LA et al. | 28 day | APACHE IV: 83 (64–106) SOFA: 7 (5–8) | APACHE IV: 82 (68–104) SOFA: 8 (6–10) | 2.7 [1.6-4.5] | 3.3 [2.5.1] | AKI: 43.9% | AKI: 36.2% | 61.4 | 66.9 | 24.6% | 39.4% | 12.5 (10.3-15.5) | 13.3 (10.6-16.7) |
| Hloch O et al. | Hospital | - | - | 16.4+6.8\*\* | 12.5+5.7\*\* | - | - | - | - | - | - | - | - |
| Jochmans S et al. | 28 day | SAPS II: 57 [46–68] | SAPS II: 48 [40–68] | 4.5 [2.1–8.7] | 1.4 [1–2.8] | AKI: 80.8%, RRT: 51.9% | AKI: 78.5%, RRT: 30.4% | 76.9 | 70.9 | 0.61 [0.23–1.16] | 0.4 [0.21–0.76] | - | - |
| Christiansen C et al. | Hospital | - | - | - | - | - | - | - | - | - | - | 20.2% | 17.8% |
| Park J et al. | Hospital | APACHE II: 13+6 SOFA: 6+3 | APACHE II: 16+8 SOFA: 7+3 | 5.3\* | 4.4\* | Creatinine 1.6+1.0 | Creatinine 1.7+1.7 | 7 | 8 | 44% | 63% | 260 ± 152 | 160 ± 82 |
| Green et al | 30 day | PIRO score: 11 ± 4.7 | PIRO score: 11 ± 5.0 | 2.2 [1.6-3.2] | 1.9 [1.3-2.8] | Creatinine 1.3 ± 0.7 | Creatinine 1.6 ± 1.5 | - | - | - | - | 210 ± 117 | 153 ± 102 |
| Doenyas-Barak et al. | ? Hospital (hospital notes review) | APACHE II: 41.12 ± 8.8 | APACHE II: 37.97 ± 6.16 | 12.7 [11.1–15.0] | 12.7 [11.3–16.3] | AKI: 86.7 %, RRT: 38.6% | AKI: 56.7%, RRT: 21.2% | - | - | - | - | - | - |
| Scale et al. | ? Hospital (hospital notes review) | - | - | 9.5 [7.4-11.7] | 9.1 [7.6-11.8] | - | - | - | - | - | - | - | - |

\*mean ± SD \*\*mean