**Supplementary Table 2: Admission Variables and Outcomes (excluding deaths within 7 days).**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Patients without TBI** | | | | |  | | **Patients with TBI** | | | |
| **No MODS** | | **ERMODS** | **PRMODS** | **Death <7 Days** | **P value1** | **No MODS** | **ERMODS** | | **PRMODS** | **Death <7 Days** | **P value1** |
| N | 82 | | 103 | 45 | 8 | - | 39 | 109 | | 133 | 65 | - |
| ***Admission Variables*** | | |  |  |  |  |  |  | |  |  |  |
| Age | 32 (22-48) | | 37 (24-51) | 47 (32-65) | 39 (28-45) | 0.004 | 35 (24-54) | 40 (27-54) | | 39 (25-57) | 45 (28-58) | 0.849 |
| Male (%) | 66 (80.5) | | 91 (88.3) | 33 (73.3) | 5 (62.5) | 0.0262 | 30 (76.9) | 90 (82.6) | | 109 (82.0) | 45 (69.2) | 0.1192 |
| Blunt (%) | 52 (63.4) | | 73 (70.9) | 39 (86.7) | 6 (75.0) | 0.1202 | 34 (87.2) | 105 (96.3) | | 130 (97.7) | 60 (92.3) | 0.3352 |
| First BD | 2.4 (0.4-5.4) | | 4.3 (1.3-7.6) | 8.8 (4.6-14.1) | 4.8 (2.2-20.7) | <0.001 | 1.5 (-1.1-2.4) | 2.3 (0.6-4.7) | | 4.0 (1.3-7.7) | 5.6 (1.2-8.7) | 0.008 |
| First GCS | 15 (14-15) | | 14 (11-15) | 14 (13-15) | 15 (6-15) | 0.783 | 14 (11-14) | 9 (6-13) | | 7 (4-9) | 4 (3-6) | <0.001 |
| ISS | 22 (18-28) | | 25 (19-30) | 27 (20-36) | 34 (23-50) | 0.416 | 25 (18-34) | 29 (24-36) | | 34 (25-43) | 38 (26-45) | 0.007 |
| Head AIS | 0 (0-0) | | 0 (0-0) | 0 (0-0) | 0 (0-0) | 0.486 | 4 (4-4) | 4 (4-5) | | 4 (4-5) | 5 (4-5) | 0.182 |
| Chest AIS | 3 (2-4) | | 3 (3-5) | 3 (3-4) | 4 (3-5) | 0.517 | 2 (0-3) | 2 (0-3) | | 3 (2-4) | 3 (0-4) | 0.008 |
| Abdominal AIS | 2 (0-3) | | 2 (0-3) | 2 (0-4) | 4 (0-5) | 0.197 | 0 (0-0) | 0 (0-2) | | 0 (0-2) | 0 (0-2) | 0.575 |
| Extremity AIS | 2 (0-3) | | 2 (0-3) | 2 (1-3) | 3 (0-5) | 0.381 | 1 (0-2) | 1 (0-3) | | 2 (0-3) | 0 (0-3) | 0.414 |
| PRBC Units | 1 (0-4) | | 4 (2-8) | 8 (3-16) | 12 (8-17) | 0.002 | 0 (0-1) | 0 (0-3) | | 0 (0-6) | 4 (0-8) | 0.095 |
| Total blood products | 1.5 (0-8) | | 8 (2-16) | 14 (6-36) | 23.5 (16.5-39) | 0.002 | 0 (0-1) | 0 (0-6) | | 1 (0-12) | 5 (0-18) | 0.117 |
| ***Outcomes*** |  | |  |  |  |  |  |  | |  |  |  |
| Infection (%) | 15 (18.8) | | 43 (43.4) | 41 (91.1) | 0 (0) 2 | <0.0012 | 1 (2.7) | 53 (48.6) | | 115 (87.8) | 2 (3.1) | <0.0012 |
| Day of first infection | 4 (3-5) | | 3 (3-4) | 5 (4-6) | - | 0.007 | 8 (8-8) | 4 (3-6) | | 5 (3-7) | 3.5 (3-4) | 0.199 |
| ACCU LOS | 4 (2-6) | | 7 (4-12) | 20 (12-33) | 3 (2-4) | <0.001 | 2 (1-4) | 8 (4-12) | | 17 (13-24) | 2 (1-3) | <0.001 |
| Hospital LOS | 13 (9-24) | | 19 (11-32) | 35 (22-58) | 3 (2-5) | <0.001 | 10 (5-17) | 25 (15-38) | | 41 (26-54) | 2 (1-3) | <0.001 |
| VFD | 28 (26-28) | | 22 (19-26) | 7 (0-17) | 0 (0-0) | <0.001 | 27 (26-28) | 22 (20-26) | | 12 (5-17) | 0 (0-0.5) | <0.001 |

Medians (IQR) presented unless expressed otherwise. MODS: multiple organ dysfunction syndrome; ERMODS: early resolving MODS; PRMODS: prolonged MODS; TBI: traumatic brain injury; BD: base deficit; GCS: Glasgow coma scale; ISS: injury severity score; AIS: abbreviated injury scale; PRBC: packed red blood cells; ACCU: adult critical care unit; LOS: length of stay (days); VFD: ventilator free days; 1ERMODS vs. PRMODS Mann-Whitney U-test unless 2ERMODS vs. PRMODS χ2 test.