**Supplemental Table 1: Characteristics and outcomes in the extended biomarker subgroup.**

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| --- | --- | --- | --- | --- | --- |
| Number of Patients | **MLNORMAL**68 | **MLLOW + DDLOW**51 | **MLLOW + DDHIGH**45 | **MLHIGH + DDLOW**8 | **MLHIGH + DDHIGH**7 |
| **Admission characteristics** |  |  |  |  |  |
| Age, years | 28 (23-45) | 38 (27- 50)^ | 50 (34-62)\* | 27 (23-45) | 58 (24-59) |
| Male, n (%) | 58 (85%) | 44 (86%) | 34 (76%) | 7 (88%) | 6 (86%) |
| GCS | 15 (14-15) | 15 (14-15) | 11 (4-15)\*\* | 15 (13-15) | 8 (4-12) |
| SBP, mmHg | 138 (116-154) | 138 (118-151) | 128 (99-164) | 131 (120-175) | 120 (78-162) |
| BD, mmol/L | 0 (-1-1) | 1.5 (-1-4)^ | 2.5 (-1-5)\* | 1 (-2-16) | 17 (9-23)**++** |
| INR > 1.2, n (%) | 3 (1%) | 0 (0%) | 10 (24%)\*\* | 1 (13%) | 3 (43%) |
| EXTEM ML, % | 7 (6-10) | 3 (2-4)^^ | 3 (2-4) | 17 (16-96) | 100 (23-100) |
| D-Dimer, ng/ml | 4124 (664 – 11356) | 4224 (1041 – 11260) | 91700 (59388 – 140173)\*\* | 2824 (689 – 1658) | 109193 (46600 – 336490) |
| Injury to sample time, minutes | 83 (62-99) | 88 (67-103) | 98 (82-110)\* | 85 (73-115) | 104 (85-106) |
| **Injury characteristics** |  |  |  |  |  |
| Blunt, n (%) | 47 (69%) | 40 (78%) | 44 (98%)\* | 6 (75%) | 7 (100%) |
| ISS | 10 (5-21) | 10 (4-17) | 29 (20-38)\*\* | 9 (5-29) | 27 (25-41) |
| AIS Head & Neck ≥ 3, n (%) | 0 (0-1) | 0 (0-2) | 4 (0-5)\*\* | 0 (0-0) | 0 (0-5) |
| AIS Thorax ≥ 3, n (%) | 0 (0-3) | 0 (0-3) | 3 (1-4)\*\* | 0 (0-3) | 3 (0-4) |
| AIS Abdo/pelvis ≥ 3, n (%) | 0 (0-2) | 0 (0-0) | 0 (0-2) | 0 (0-2) | 0 (0-1) |
| AIS Extremity ≥ 3, n (%) | 1 (0-2) | 1 (0-2) | 2 (0-3) | 2 (0-3) | 0 (0-4) |
| **Fluid & Blood product totals** |  |  |  |  |  |
| Pre-baseline crystalloid, ml | 0 (0-0) | 0 (0-250)^^ | 225 (0-500)\* | 0 (0-450) | 500 (250-1500) |
| Pre-baseline PRBC, units | 0 (0-0) | 0 (0-0) | 0 (0-0) | 0 (0-0) | 0 (0-0) |
| 12hr Crystalloid, ml | 100 (0-2075) | 250 (0-1500) | 1500 (400-2900)\* | 0 (0-2000) | 1250 (500-4900) |
| 12hr PRBC, units | 0 (0-0) | 0 (0-0) | 0 (0-4)\*\* | 0 (0-20) | 11 (4-20)**++** |
| **Outcomes** |  |  |  |  |  |
| Massive Transfusion, n (%) | 0 (0%) | 0 (0%) | 2 (4%) | 2 (29%) | 4 (50%)**+** |
| VTE, n (%) | 0 (0%) | 0 (0%) | 1 (2%) | 0 (0%) | 0 (0%) |
| Critical Care LOS (survivors) | 0 (0-0) | 0 (0-0) | 5 (1-12)\*\* | 0 (0-0) | 10 (8-11) |
| Hospital LOS (survivors) | 7 (2-15) | 7 (2-13) | 24 (14-45)\*\* | 6 (1-12) | 39 (38-39) |
| 24hr mortality, n (%) | 1 (2%) | 1 (2%) | 6 (13%)\* | 1 (13%) | 5 (71%)**+** |
| 28-day mortality, n (%) | 2 (3%) | 2 (4%) | 15 (33%)\*\* | 2 (25%) | 5 (71%) |
| Time to death, days | 2 (1-2) | 3 (1-11) | 1 (0-6) | 2 (0-3) | 0 (0-0)**+** |

All values are median with interquartile range unless specified. Continuous data compared with Mann-Whitney U-test. Categorical data compared with Fisher’s exact test. ^p<0.05, ^^p<0.001, MLNORMAL vs MLLOW + DDLOW. \*p<0.05, \*\*p<0.001, MLLOW + DDHIGH vs MLLOW + DDLOW. +p<0.05, ++p<0.001, MLHIGH + DDHIGH vs MLLOW + DDHIGH. GCS, Glasgow coma score. SBP, systolic blood pressure. BD, base deficit. INR, international normalized ratio. ML, maximum lysis. ISS, injury severity score. AIS, abbreviated injury score. PRBC, packed red blood cells. VTE, venous thromboembolism. LOS, length of stay in days

**Supplemental Table 2: Coagulation profiles in the extended biomarker subgroup.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of Patients | **MLNORMAL**68 | **MLLOW + DDLOW**51 | **MLLOW + DDHIGH**45 | **MLHIGH + DDLOW**8 | **MLHIGH + DDHIGH**7 |
|  |  |  |  |  |  |
| Fibrinogen, g/L | 2.2 (1.7-2.7) | 2.1 (1.7-2.5) | 1.6 (1.1-2.0)\*\* | 1.8 (0.7-2.5) | 0.7 (0.5-1.2)+ |
| Prothrombin Fragments 1+2, pmol/L | 694 (335-1457) | 818 (393-1420) | 4924 (2966-8293)\*\* | 492 (432-1149) | 4491 (1789-11738) + |
| α2 antiplasmin, u/dL | 103 (90-114) | 93 (102-116) | 71 (53-93)\*\* | 108 (31-140) | 51 (10-59)+ |
| Plasminogen Activator Inhibitor-1, ng/ml | 18.3 (10.5-26.1) | 24.9 (14.3-58.0)^ | 30.2 (19.2-49.3) | 18.3 (9.2-35.3) | 25.35 (15.6-44.2) + |
| Tissue plasminogen activator, ng/ml | 11.1 (7.1-16.6) | 17.5 (8.4-23.5)^ | 15.4 (10.5-26.5) | 9.5 (5.5-27.8) | 51.0 (23.6-84.8)+ |
| Plasmin-antiplasmin complex, ng/ml | 2544 (1716-4690) | 1536 (1012-3053)^ | 16094 (9539-20261)\*\* | 2231 (1309-6849) | 33816 (14587-37768)+ |
| Urinary plasminogen activator, pg/ml | 126 (0-233) | 104 (0-249) | 134 (33-212) | 12 (0-221) | 81 (0-215) + |
| S100A10, pg/ml | 50 (0-185) | 9 (0-187) | 1333 (128-2553)\*\* | 25 (0-322) | 1281 (308-2869)+ |
|  |

Mann-Whitney U-test for all comparisons. ^p<0.05, ^^p<0.001, MLNORMAL vs MLLOW + DDLOW. \*p<0.05, \*\*p<0.001, MLLOW + DDHIGH vs MLLOW + DDLOW.+p<0.05, ++p<0.001, MLHIGH + DDHIGH vs MLLOW + DDHIGH.