|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Supplementary Table 4: Result of ANOVA on the hematological data from the Murnau study.** | | | | |
| **Hematological marker** | **df** | **Chisq** | **p- value** | **Adjusted p- value** |
| Amylase | | | | |
| Time since injury | 1 | 3.223 | 7.26E-02 | 0.436 |
| AIS score\* | 3 | 13.76 | 3.24E-03 | **1.94E-02** |
| Age | 1 | 1.858 | 1.73E-01 | 1 |
| Neurological level | 1 | 0.03723 | 8.47E-01 | 1 |
| Sex | 1 | 1.837 | 1.75E-01 | 1 |
| Time since injury:AIS score\* | 3 | 2.344 | 5.04E-01 | 1 |
| Alkaline phosphatase | | | | |
| Time since injury | 1 | 73.15 | 1.20E-17 | **7.20E-17** |
| AIS score\* | 3 | 0.3792 | 9.45E-01 | 1 |
| Age | 1 | 7.145 | 7.52E-03 | **4.51E-02** |
| Neurological level | 1 | 1.315 | 2.51E-01 | 1 |
| Sex | 1 | 0.0007079 | 9.79E-01 | 1 |
| Time since injury:AIS score\* | 3 | 9.213 | 2.66E-02 | 0.160 |
| Calcium | | | | |
| Time since injury | 1 | 215.7 | 7.77E-49 | **4.66E-48** |
| AIS score\* | 3 | 23.69 | 2.90E-05 | **1.74E-04** |
| Age | 1 | 7.032 | 8.01E-03 | **4.81E-02** |
| Neurological level | 1 | 3.521 | 6.06E-02 | 0.364 |
| Sex | 1 | 0.0001348 | 9.91E-01 | 1 |
| Time since injury:AIS score\* | 3 | 18.72 | 3.12E-04 | **1.87E-03** |
| Cholinesterase | | | | |
| Time since injury | 1 | 18.71 | 1.52E-05 | **9.12E-05** |
| AIS score\* | 3 | 50.18 | 7.33E-11 | **4.40E-10** |
| Age | 1 | 9.535 | 2.02E-03 | **1.21E-02** |
| Neurological level | 1 | 0.7032 | 4.02E-01 | 1 |
| Sex | 1 | 2.013 | 1.56E-01 | 0.936 |
| Time since injury:AIS score\* | 3 | 16.59 | 8.59E-04 | **5.15E-03** |
| Creatinine | | | | |
| Time since injury | 1 | 93.6 | 3.87E-22 | **2.32E-21** |
| AIS score\* | 3 | 0.4491 | 9.30E-01 | 1 |
| Age | 1 | 24.18 | 8.79E-07 | **5.27E-06** |
| Neurological level | 1 | 0.8952 | 3.44E-01 | 1 |
| Sex | 1 | 40.93 | 1.58E-10 | **9.48E-10** |
| Time since injury:AIS score\* | 3 | 37.43 | 3.73E-08 | **2.24E-07** |
| CRP | | | | |
| Time since injury | 1 | 87.05 | 1.06E-20 | **6.36E-20** |
| AIS score\* | 3 | 36.65 | 5.46E-08 | **3.28E-07** |
| Age | 1 | 6.735 | 9.45E-03 | 0.057 |
| Neurological level | 1 | 0.7047 | 4.01E-01 | 1 |
| Sex | 1 | 0.02826 | 8.66E-01 | 1 |
| Time since injury:AIS score\* | 3 | 11.86 | 7.89E-03 | **4.73E-02** |
| Erythrocytes | | | | |
| Time since injury | 1 | 277.9 | 2.13E-62 | **1.28E-61** |
| AIS score\* | 3 | 98.31 | 3.59E-21 | **2.15E-20** |
| Age | 1 | 20.36 | 6.41E-06 | **3.85E-05** |
| Neurological level | 1 | 0.0322 | 8.58E-01 | 1 |
| Sex | 1 | 5.906 | 1.51E-02 | 0.091 |
| Time since injury:AIS score\* | 3 | 49.04 | 1.28E-10 | **7.68E-10** |
| Gamma GT | | | | |
| Time since injury | 1 | 0.9583 | 3.28E-01 | 1 |
| AIS score\* | 3 | 5.667 | 1.29E-01 | 0.774 |
| Age | 1 | 4.07 | 4.36E-02 | 0.262 |
| Neurological level | 1 | 9.592 | 1.95E-03 | **1.17E-02** |
| Sex | 1 | 1.049 | 3.06E-01 | 1 |
| Time since injury:AIS score\* | 3 | 10.61 | 1.40E-02 | 0.084 |
| Bilirubin | | | | |
| Time since injury | 1 | 16.55 | 4.74E-05 | **2.84E-04** |
| AIS score\* | 3 | 2.159 | 5.40E-01 | 1 |
| Age | 1 | 1.615 | 2.04E-01 | 1 |
| Neurological level | 1 | 3.612 | 5.73E-02 | 0.344 |
| Sex | 1 | 1.028 | 3.11E-01 | 1 |
| Time since injury:AIS score\* | 3 | 7.49 | 5.78E-02 | 0.347 |
| Total proteins | | | | |
| Time since injury | 1 | 222.5 | 2.60E-50 | **1.56E-49** |
| AIS score\* | 3 | 49.18 | 1.19E-10 | **7.14E-10** |
| Age | 1 | 21.47 | 3.60E-06 | **2.16E-05** |
| Neurological level | 1 | 0.07339 | 7.86E-01 | 1 |
| Sex | 1 | 2.779 | 9.55E-02 | 0.573 |
| Time since injury:AIS score\* | 3 | 21.51 | 8.23E-05 | **4.94E-04** |
| Glucose | | | | |
| Time since injury | 1 | 6.384 | 1.15E-02 | 0.069 |
| AIS score\* | 3 | 4.193 | 2.41E-01 | 1 |
| Age | 1 | 2.565 | 1.09E-01 | 0.654 |
| Neurological level | 1 | 2.464 | 1.16E-01 | 0.696 |
| Sex | 1 | 0.02721 | 8.69E-01 | 1 |
| Time since injury:AIS score\* | 3 | 1.9 | 5.93E-01 | 1 |
| Blood urea | | | | |
| Time since injury | 1 | 124.6 | 6.22E-29 | **3.73E-28** |
| AIS score\* | 3 | 7.555 | 5.62E-02 | 0.337 |
| Age | 1 | 55.91 | 7.57E-14 | **4.54E-13** |
| Neurological level | 1 | 5.754 | 1.64E-02 | 0.0984 |
| Sex | 1 | 21.4 | 3.73E-06 | **2.24E-05** |
| Time since injury:AIS score\* | 3 | 25.65 | 1.13E-05 | **6.78E-05** |
| Hemoglobin | | | | |
| Time since injury | 1 | 147.2 | 7.18E-34 | **4.31E-33** |
| AIS score\* | 3 | 89.68 | 2.57E-19 | **1.54E-18** |
| Age | 1 | 9.869 | 1.68E-03 | **1.01E-02** |
| Neurological level | 1 | 0.04225 | 8.37E-01 | 1 |
| Sex | 1 | 7.918 | 4.89E-03 | **2.93E-02** |
| Time since injury:AIS score\* | 3 | 27.61 | 4.39E-06 | **2.63E-05** |
| Hemoglobin per erythrocyte | | | | |
| Time since injury | 1 | 361.1 | 1.60E-80 | **9.60E-80** |
| AIS score\* | 3 | 1.675 | 6.42E-01 | 1 |
| Age | 1 | 13.19 | 2.81E-04 | **1.69E-03** |
| Neurological level | 1 | 0.1697 | 6.80E-01 | 1 |
| Sex | 1 | 0.5611 | 4.54E-01 | 1 |
| Time since injury:AIS score\* | 3 | 56.13 | 3.94E-12 | **2.36E-11** |
| Hematocrit | | | | |
| Time since injury | 1 | 216.8 | 4.45E-49 | **2.67E-48** |
| AIS score\* | 3 | 94.67 | 2.17E-20 | **1.30E-19** |
| Age | 1 | 11.48 | 7.03E-04 | **4.22E-03** |
| Neurological level | 1 | 0.114 | 7.36E-01 | 1 |
| Sex | 1 | 5.586 | 1.81E-02 | 0.109 |
| Time since injury:AIS score\* | 3 | 36.73 | 5.25E-08 | **3.15E-07** |
| INR | | | | |
| Time since injury | 1 | 12.84 | 3.39E-04 | **2.03E-03** |
| AIS score\* | 3 | 2.54 | 4.68E-01 | 1 |
| Age | 1 | 2.419 | 1.20E-01 | 0.720 |
| Neurological level | 1 | 0.3397 | 5.60E-01 | 1 |
| Sex | 1 | 0.09033 | 7.64E-01 | 1 |
| Time since injury:AIS score\* | 3 | 26.07 | 9.20E-06 | **5.52E-05** |
| Potassium | | | | |
| Time since injury | 1 | 32.34 | 1.29E-08 | **7.74E-08** |
| AIS score\* | 3 | 13.24 | 4.15E-03 | **2.49E-02** |
| Age | 1 | 1.391 | 2.38E-01 | 1 |
| Neurological level | 1 | 0.1689 | 6.81E-01 | 1 |
| Sex | 1 | 13.61 | 2.25E-04 | **1.35E-03** |
| Time since injury:AIS score\* | 3 | 18.97 | 2.78E-04 | **1.67E-03** |
| Lactate dehydrogenase | | | | |
| Time since injury | 1 | 128.7 | 7.93E-30 | **4.76E-29** |
| AIS score\* | 3 | 9.869 | 1.97E-02 | 0.118 |
| Age | 1 | 1.965 | 1.61E-01 | 0.966 |
| Neurological level | 1 | 18.09 | 2.11E-05 | **1.27E-04** |
| Sex | 1 | 0.1657 | 6.84E-01 | 1 |
| Time since injury:AIS score\* | 3 | 4.987 | 1.73E-01 | 1 |
| Leucocytes | | | | |
| Time since injury | 1 | 66.54 | 3.42E-16 | **2.05E-15** |
| AIS score\* | 3 | 3.131 | 3.72E-01 | 1 |
| Age | 1 | 0.182 | 6.70E-01 | 1 |
| Neurological level | 1 | 3.245 | 7.17E-02 | 0.430 |
| Sex | 1 | 0.0126 | 9.11E-01 | 1 |
| Time since injury:AIS score\* | 3 | 3.213 | 3.60E-01 | 1 |
| Lipase | | | | |
| Time since injury | 1 | 0.001317 | 9.71E-01 | 1 |
| AIS score\* | 3 | 7.532 | 5.67E-02 | 0.340 |
| Age | 1 | 5.545 | 1.85E-02 | 0.111 |
| Neurological level | 1 | 5.538 | 1.86E-02 | 0.112 |
| Sex | 1 | 1.136 | 2.87E-01 | 1 |
| Time since injury:AIS score\* | 3 | 3.155 | 3.68E-01 | 1 |
| MCHC | | | | |
| Time since injury | 1 | 172.8 | 1.81E-39 | **1.09E-38** |
| AIS score\* | 3 | 4.422 | 2.19E-01 | 1 |
| Age | 1 | 0.007757 | 9.30E-01 | 1 |
| Neurological level | 1 | 0.05589 | 8.13E-01 | 1 |
| Sex | 1 | 7.573 | 5.93E-03 | **3.56E-02** |
| Time since injury:AIS score\* | 3 | 17.56 | 5.42E-04 | **3.25E-03** |
| MCV | | | | |
| Time since injury | 1 | 75.56 | 3.54E-18 | **2.12E-17** |
| AIS score\* | 3 | 3.185 | 3.64E-01 | 1 |
| Age | 1 | 16.98 | 3.79E-05 | **2.27E-04** |
| Neurological level | 1 | 0.05478 | 8.15E-01 | 1 |
| Sex | 1 | 0.285 | 5.93E-01 | 1 |
| Time since injury:AIS score\* | 3 | 24.39 | 2.07E-05 | **1.24E-04** |
| Sodium | | | | |
| Time since injury | 1 | 49.09 | 2.44E-12 | **1.46E-11** |
| AIS score\* | 3 | 0.06465 | 9.96E-01 | 1 |
| Age | 1 | 5.331 | 2.09E-02 | 0.125 |
| Neurological level | 1 | 0.02334 | 8.79E-01 | 1 |
| Sex | 1 | 1.08 | 2.99E-01 | 1 |
| Time since injury:AIS score\* | 3 | 14.68 | 2.11E-03 | **1.27E-02** |
| Prothrombin time | | | | |
| Time since injury | 1 | 15.11 | 1.02E-04 | **6.12E-04** |
| AIS score\* | 3 | 19.7 | 1.96E-04 | **1.18E-03** |
| Age | 1 | 0.5323 | 4.66E-01 | 1 |
| Neurological level | 1 | 0.7483 | 3.87E-01 | 1 |
| Sex | 1 | 6.863 | 8.80E-03 | 0.053 |
| Time since injury:AIS score\* | 3 | 7.744 | 5.16E-02 | 0.310 |
| Quick test | | | | |
| Time since injury | 1 | 46.29 | 1.02E-11 | **6.12E-11** |
| AIS score\* | 3 | 4.358 | 2.25E-01 | 1 |
| Age | 1 | 4.302 | 3.81E-02 | 0.229 |
| Neurological level | 1 | 1.292 | 2.56E-01 | 1 |
| Sex | 1 | 0.8414 | 3.59E-01 | 1 |
| Time since injury:AIS score\* | 3 | 23.17 | 3.72E-05 | **2.23E-04** |
| Thrombocytes | | | | |
| Time since injury | 1 | 39.72 | 2.94E-10 | **1.76E-09** |
| AIS score\* | 3 | 5.785 | 1.23E-01 | 0.738 |
| Age | 1 | 5.92 | 1.50E-02 | 0.090 |
| Neurological level | 1 | 4.976 | 2.57E-02 | 0.154 |
| Sex | 1 | 0.6458 | 4.22E-01 | 0.253 |
| Time since injury:AIS score\* | 3 | 2.659 | 4.47E-01 | 0.268 |
| ASAT | | | | |
| Time since injury | 1 | 30.18 | 3.95E-08 | **2.37E-07** |
| AIS score\* | 3 | 11.32 | 1.01E-02 | 0.061 |
| Age | 1 | 0.01953 | 8.89E-01 | 1 |
| Neurological level | 1 | 0.2341 | 6.29E-01 | 1 |
| Sex | 1 | 0.6097 | 4.35E-01 | 1 |
| Time since injury:AIS score\* | 3 | 4.937 | 1.76E-01 | 1 |
| ALAT | | | | |
| Time since injury | 1 | 4.451 | 3.49E-02 | 0.209 |
| AIS score\* | 3 | 7.748 | 5.15E-02 | 0.309 |
| Age | 1 | 2.514 | 1.13E-01 | 0.678 |
| Neurological level | 1 | 8.075 | 4.49E-03 | **2.69E-02** |
| Sex | 1 | 0.5948 | 4.41E-01 | 1 |
| Time since injury:AIS score\* | 3 | 2.008 | 5.71E-01 | 1 |

\*ASIA impairment scale: A, no sensory or motor function is preserved; B, sensory function is preserved below the level of the injury, but there is no motor function; C, motor function is preserved below the neurological level, and more than half of the key muscles below the neurological level have a muscle grade of <3; D, motor function is preserved below the neurological level, and at least half of the key muscles below the neurological level have a muscle grade of >3.

Neurological level of injury is a binary variable defined as injury above/at T6 or below T6.

**Abbreviations:** CRP: C-reactive protein; Gamma GT: gamma-glutamyl transferase; INR: international normalised ratio; MCHC: mean corpuscular hemoglobin concentration; MCV: mean corpuscular volume; ASAT: aspartate aminotransferase; ALAT: alanine aminotransferase