**Supplemental Table 2. Mortality according to Proportion of Time Spent in Transgression in Full Cohort**

\*Significant after Holm correction for multiple comparisons.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Transgression**  **Parameter** | **Simple Models include only one Transgression, Adjusted for Treatment, Severity, Gender, and Age** | | | **Full Model Includes all Transgressions EXCEPT CPP, ICP, PbtO2, Temperature;**  **N=752** | | **Final Model after Backward Selection, using α=0.05 as criteria for removal** | |
|  | **N Used\*** | **p-value** | **OR (95% CI)** | **p-value** | **OR (95% CI)** | **p-value** | **OR (95% CI)** |
| PaO2 | 811 | 0.0018\* | 0.425 (0.194, 0.928) | 0.3573 | 1.121 (0.401, 3.136) |  |  |
|  |  |  | 0.426 (0.193, 0.940) |  | 0.735 (0.275, 1.963) |  |  |
|  |  |  | 0.686 (0.352, 1.335) |  | 0.744 (0.292, 1.897) |  |  |
|  |  |  | 1.726 (0.955, 3.121) |  | 1.996 (0.776, 5.133) |  |  |
| Glucose (high) | 856 | <0.0001\* | 0.430 (0.143, 1.290) | 0.0003\* | 0.364 (0.100, 1.319) | 0.0003\* | 0.313 (0.091, 1.073) |
|  |  |  | 0.715 (0.304, 1.681) |  | 0.525 (0.182, 1.520) |  | 0.491 (0.179, 1.345) |
|  |  |  | 2.644 (1.373, 5.088) |  | 3.046 (1.263, 7.350) |  | 2.064 (0.945, 4.509) |
|  |  |  | 6.525 (3.574, 11.911) |  | 3.154 (1.284, 7.748) |  | 2.693 (1.284, 5.648) |
| Glucose (low) | 856 | 0.1563 | 0.140 (0.019, 1.049) | 0.0490 | 0.100 (0.009, 1.063) |  |  |
|  |  |  | 0.410 (0.133, 1.262) |  | 0.633 (0.175, 2.291) |  |  |
|  |  |  | 0.646 (0.216, 1.936) |  | 0.095 (0.015, 0.607) |  |  |
|  |  |  | 1.151 (0.480, 2.762) |  | 0.719 (0.187, 2.774) |  |  |
| CPP | 457 | <0.0001\* | 0.834 (0.270, 2.575) |  |  |  |  |
|  |  |  | 1.746 (0.656, 4.648) |  |  |  |  |
|  |  |  | 3.630 (1.485, 8.877) |  |  |  |  |
|  |  |  | 7.743 (3.205, 18.704) |  |  |  |  |
| INR | 798 | <0.0001\* | 0.593 (0.131, 2.683) | 0.0009\* | 1.075 (0.195, 5.910) | 0.0001\* | 0.858 (0.169, 4.364) |
|  |  |  | 2.604 (1.027, 6.604) |  | 4.253 (1.307, 13.840) |  | 5.005 (1.695, 14.778) |
|  |  |  | 5.791 (2.485, 13.494) |  | 3.984 (1.284, 12.361) |  | 3.920 (1.442, 10.653) |
|  |  |  | 25.903 (11.386, 58.928) |  | 9.693 (2.542, 36.965) |  | 7.735 (2.640, 22.662) |
| Platelets | 856 | <0.0001\* | 0.566 (0.067, 4.805) | 0.6942 | 0.358 (0.027, 4.824) |  |  |
|  |  |  | 3.929 (1.003, 15.387) |  | 0.939 (0.114, 7.706) |  |  |
|  |  |  | 3.044 (0.794, 11.670) |  | 1.336 (0.225, 7.937) |  |  |
|  |  |  | 24.256 (6.574, 89.497) |  | 5.121 (0.375, 69.851) |  |  |
| O2 | 862 |  | Quasi-complete separation of data points |  |  |  |  |
| Hemoglobin | 855 | <0.0001\* | 0.257 (0.075, 0.877) | 0.0018\* | 0.352 (0.065, 1.900) | 0.0006\* | 0.217 (0.049, 0.975) |
|  |  |  | 0.458 (0.168, 1.249) |  | 0.395 (0.111, 1.402) |  | 0.407 (0.132, 1.255) |
|  |  |  | 0.901 (0.390, 2.081) |  | 1.173 (0.358, 3.844) |  | 0.725 (0.248, 2.120) |
|  |  |  | 4.906 (2.727, 8.826) |  | 4.730 (1.846, 12.123) |  | 3.348 (1.515, 7.396) |
| ICP | 460 | <0.0001\* | 0.529 (0.194, 1.444) |  |  |  |  |
|  |  |  | 1.227 (0.501, 3.004) |  |  |  |  |
|  |  |  | 1.735 (0.711, 4.235) |  |  |  |  |
|  |  |  | 7.119 (3.179, 15.941) |  |  |  |  |
| MAP (65) | 853 | <0.0001\* | 0.477 (0.228, 0.998) | 0.1312 | 0.583 (0.219, 1.552) |  |  |
|  |  |  | 0.233 (0.092, 0.589) |  | 0.223 (0.068, 0.733) |  |  |
|  |  |  | 1.087 (0.579, 2.039) |  | 0.621 (0.229, 1.684) |  |  |
|  |  |  | 1.796 (1.000, 3.224) |  | 0.389 (0.137, 1.109) |  |  |
| PbtO2 | 152 |  |  |  |  |  |  |
| SBP (high) | 863 | 0.0031\* | 0.198 (0.075, 0.527) | 0.1101 | 0.216 (0.063, 0.735) |  |  |
|  |  |  | 0.302 (0.121, 0.753) |  | 0.494 (0.149, 1.640) |  |  |
|  |  |  | 0.619 (0.311, 1.233) |  | 1.005 (0.400, 2.527) |  |  |
|  |  |  | 0.791 (0.416, 1.503) |  | 1.002 (0.402, 2.495) |  |  |
| SBP (low, 90) | 863 | <0.0001\* | 0.141 (0.032, 0.616) | 0.0007\* | 0.181 (0.037, 0.883) | <0.0001\* | 0.187 (0.041, 0.852) |
|  |  |  | 0.426 (0.177, 1.025) |  | 0.396 (0.130, 1.209) |  | 0.322 (0.118, 0.876) |
|  |  |  | 0.874 (0.432, 1.768) |  | 0.573 (0.201, 1.639) |  | 0.645 (0.274, 1.519) |
|  |  |  | 5.523 (3.189, 9.567) |  | 3.591 (1.346, 9.580) |  | 3.072 (1.470, 6.421) |
| Temp (high) | 862 | 0.0001\* | 0.198 (0.079, 0.499) |  |  |  |  |
|  |  |  | 0.391 (0.193, 0.793) |  |  |  |  |
|  |  |  | 0.714 (0.371, 1.375) |  |  |  |  |
|  |  |  | 1.345 (0.751, 2.409) |  |  |  |  |
| Temp (low) | 862 |  | Quasi-complete separation of data points |  |  |  |  |