**Supplemental Table 5. Poor Outcome 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=726** | **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 | 782 | 0.0062\* | 1.550 (0.986, 2.439) | 0.1941 | 1.495 (0.866, 2.583) |  |  |
|  |  |  | 1.989 (1.252, 3.159) |  | 1.822 (1.059, 3.135) |  |  |
|  |  |  | 1.414 (0.908, 2.203) |  | 1.164 (0.686, 1.974) |  |  |
|  |  |  | 2.182 (1.334, 3.569) |  | 1.643 (0.887, 3.042) |  |  |
| Glucose (high) | 823 | <0.0001\* | 1.363 (0.865, 2.148) | 0.0015\* | 1.116 (0.661, 1.884) | <0.0001\* | 1.273 (0.780, 2.076) |
|  |  |  | 1.368 (0.855, 2.190) |  | 1.121 (0.646, 1.946) |  | 1.221 (0.735, 2.029) |
|  |  |  | 2.459 (1.535, 3.937) |  | 2.022 (1.151, 3.552) |  | 1.998 (1.203, 3.317) |
|  |  |  | 5.260 (3.028, 9.137) |  | 3.399 (1.787, 6.466) |  | 3.970 (2.203, 7.155) |
| Glucose (low) | 823 | 0.7973 | 0.879 (0.475, 1.627) | 0.4888 | 0.617 (0.304, 1.251) |  |  |
|  |  |  | 1.152 (0.618, 2.147) |  | 1.031 (0.501, 2.124) |  |  |
|  |  |  | 1.208 (0.642, 2.270) |  | 1.057 (0.500, 2.234) |  |  |
|  |  |  | 0.744 (0.394, 1.407) |  | 0.590 (0.268, 1.300) |  |  |
| CPP | 444 | 0.0096 | 0.866 (0.461, 1.627) |  |  |  |  |
|  |  |  | 1.846 (0.971, 3.511) |  |  |  |  |
|  |  |  | 1.886 (1.008, 3.529) |  |  |  |  |
|  |  |  | 2.409 (1.250, 4.644) |  |  |  |  |
| INR | 769 | 0.0011\* | 1.248 (0.633, 2.463) | 0.5129 | 1.040 (0.456, 2.373) |  |  |
|  |  |  | 1.954 (0.982, 3.885) |  | 1.310 (0.616, 2.787) |  |  |
|  |  |  | 2.000 (1.027, 3.893) |  | 1.620 (0.725, 3.622) |  |  |
|  |  |  | 4.093 (1.871, 8.953) |  | 1.967 (0.758, 5.102) |  |  |
| Platelets | 823 | 0.2342 | 0.402 (0.106, 1.530) | 0.0329 | 0.135 (0.030, 0.599) |  |  |
|  |  |  | 2.235 (0.661, 7.559) |  | 0.941 (0.235, 3.763) |  |  |
|  |  |  | 0.614 (0.174, 2.168) |  | 0.272 (0.071, 1.042) |  |  |
|  |  |  | 2.297 (0.592, 8.909) |  | 0.448 (0.067, 2.989) |  |  |
| O2 | 829 | 0.0010\* | 0.699 (0.415, 1.179) | 0.0012\* | 0.449 (0.243, 0.831) | 0.0031\* | 0.546 (0.308, 0.968) |
|  |  |  | 0.756 (0.451, 1.266) |  | 0.447 (0.244, 0.816) |  | 0.537 (0.304, 0.946) |
|  |  |  | 1.535 (0.915, 2.575) |  | 0.934 (0.508, 1.715) |  | 1.038 (0.589, 1.829) |
|  |  |  | 2.630 (1.513, 4.571) |  | 2.024 (0.995, 4.118) |  | 2.124 (1.135, 3.972) |
| Hemoglobin | 822 | <0.0001\* | 1.049 (0.622, 1.769) | 0.0043\* | 1.050 (0.571, 1.929) | 0.0035\* | 0.970 (0.554, 1.699) |
|  |  |  | 1.902 (1.116, 3.241) |  | 1.797 (0.976, 3.307) |  | 1.698 (0.975, 2.958) |
|  |  |  | 1.839 (1.105, 3.062) |  | 1.917 (1.008, 3.646) |  | 1.530 (0.872, 2.687) |
|  |  |  | 3.452 (1.979, 6.021) |  | 3.275 (1.655, 6.479) |  | 2.927 (1.605, 5.335) |
| ICP | 448 | 0.0001\* | 1.798 (0.942, 3.430) |  |  |  |  |
|  |  |  | 2.181 (1.133, 4.200) |  |  |  |  |
|  |  |  | 2.068 (1.069, 4.001) |  |  |  |  |
|  |  |  | 5.507 (2.743, 11.056) |  |  |  |  |
| MAP (65) | 821 | 0.4288 | 1.181 (0.758, 1.838) | 0.0184 | 0.979 (0.574, 1.669) |  |  |
|  |  |  | 0.870 (0.559, 1.354) |  | 0.591 (0.338, 1.031) |  |  |
|  |  |  | 0.934 (0.597, 1.461) |  | 0.404 (0.223, 0.731) |  |  |
|  |  |  | 1.335 (0.847, 2.103) |  | 0.657 (0.356, 1.212) |  |  |
| PbtO2 |  |  |  |  |  |  |  |
| SBP (high) | 830 | 0.1032 | 1.756 (1.093, 2.822) | 0.6631 | 1.484 (0.850, 2.589) |  |  |
|  |  |  | 1.167 (0.718, 1.896) |  | 0.997 (0.567, 1.754) |  |  |
|  |  |  | 1.317 (0.817, 2.124) |  | 1.026 (0.587, 1.796) |  |  |
|  |  |  | 1.628 (0.988, 2.682 ) |  | 1.244 (0.689, 2.247) |  |  |
| SBP (low, 90) | 830 | 0.0272 | 1.102 (0.700, 1.734) | 0.1865 | 0.895 (0.521, 1.540) |  |  |
|  |  |  | 1.358 (0.855, 2.158) |  | 1.632 (0.909, 2.932) |  |  |
|  |  |  | 1.290 (0.815, 2.041) |  | 1.495 (0.837, 2.669) |  |  |
|  |  |  | 2.265 (1.375, 3.732) |  | 1.795 (0.898, 3.587) |  |  |
| Temp (high) | 829 | <0.0001\* | 1.063 (0.673, 1.678) |  |  |  |  |
|  |  |  | 1.605 (1.015, 2.536) |  |  |  |  |
|  |  |  | 1.853 (1.167, 2.941) |  |  |  |  |
|  |  |  | 3.643 (2.272, 5.842) |  |  |  |  |
| Temp (low) | 829 | <0.0001\* | 0.928 (0.548, 1.574) |  |  |  |  |
|  |  |  | 1.414 (0.842, 2.372) |  |  |  |  |
|  |  |  | 1.252 (0.744, 2.107) |  |  |  |  |
|  |  |  | 4.337 (2.429, 7.742) |  |  |  |  |