**Supplemental Table 3. Mortality according to Proportion of Time Spent in Transgression tICP cohort**

\*Significant after Holm correction for multiple comparisons.

|  |  |  |
| --- | --- | --- |
| **Transgression****Parameter** | **Full Model Includes all Transgressions EXCEPT PbtO2, Temperature;****N=428** | **Final Model after Backward Selection, using α=0.05 as criteria for removal** |
|  | **p-value** | **OR (95% CI)** | **p-value** | **OR (95% CI)** |
| PaO2 | 0.4226 | 0.344 (0.083, 1.425) |  |  |
|  |  | 0.351 (0.088, 1.407) |  |  |
|  |  | 0.307 (0.079, 1.201) |  |  |
|  |  | 0.538 (0.138, 2.094) |  |  |
| Glucose (high) | 0.0283 | 0.638 (0.148, 2.740) | 0.0293\* | 0.549 (0.142, 2.126) |
|  |  | 0.438 (0.112, 1.703) |  | 0.603 (0.187, 1.945) |
|  |  | 2.959 (0.904, 9.692) |  | 2.258 (0.832, 6.126) |
|  |  | 3.317 (0.823, 13.367) |  | 2.843 (0.948, 8.529) |
| Glucose (low) | 0.2229 | 0.116 (0.010, 1.284) |  |  |
|  |  | 0.601 (0.091, 3.965) |  |  |
|  |  | 0.147 (0.014, 1.513) |  |  |
|  |  | 0.501 (0.074, 3.408) |  |  |
| CPP | 0.0290 | 2.970 (0.493, 17.895) |  |  |
|  |  | 6.332 (1.289, 31.113) |  |  |
|  |  | 13.284 (2.203, 80.087) |  |  |
|  |  | 23.430 (3.164, 173.485) |  |  |
| INR | 0.2551 | 1.547 (0.213, 11.215) |  |  |
|  |  | 3.451 (0.746, 15.957) |  |  |
|  |  | 3.895 (0.883, 17.171) |  |  |
|  |  | 2.220 (0.330, 14.914) |  |  |
| Platelets | 0.8005 | 2.310 (0.119, 44.763) |  |  |
|  |  | 1.846 (0.106, 32.175) |  |  |
|  |  | 1.042 (0.097, 11.141) |  |  |
|  |  | 6.939 (0.201, 239.457) |  |  |
| O2 |  |  |  |  |
| Hemoglobin | 0.0372 | 0.332 (0.045, 2.457) | 0.0220\* | 0.265 (0.049, 1.427) |
|  |  | 0.557 (0.129, 2.397) |  | 0.454 (0.124, 1.654) |
|  |  | 0.721 (0.172, 3.018) |  | 0.646 (0.184, 2.276) |
|  |  | 4.783 (1.301, 17.590) |  | 3.160 (1.103, 9.048) |
| ICP | 0.1152 | 0.205 (0.039, 1.081) | <0.0001\* | 0.518 (0.136, 1.969) |
|  |  | 0.422 (0.091, 1.943) |  | 1.273 (0.375, 4.319) |
|  |  | 0.506 (0.094, 2.734) |  | 2.190 (0.656, 7.310)) |
|  |  | 1.315 (0.281, 6.146) |  | 8.511 (2.846, 25.452) |
| MAP (65) | 0.0045\* | 0.433 (0.123, 1.519) | 0.0133\* | 0.579 (0.202, 1.657) |
|  |  | 0.042 (0.008, 0.229) |  | 0.122 (0.031, 0.475) |
|  |  | 0.240 (0.049, 1.188) |  | 0.815 (0.230, 2.886) |
|  |  | 0.100 (0.019, 0.533) |  | 0.285 (0.080, 1.022) |
| PbtO2 |  |  |  |  |
| SBP (high) | 0.0190 | 0.061 (0.011, 0.348) | 0.0071\* | 0.073 (0.015, 0.350) |
|  |  | 0.239 (0.052, 1.105) |  | 0.223 (0.060, 0.827) |
|  |  | 0.399 (0.119, 1.336) |  | 0.406 (0.150, 1.095) |
|  |  | 0.511 (0.137, 1.904) |  | 0.473 (0.159, 1.411) |
| SBP (low, 90) | 0.0649 | 0.527 (0.088, 3.161) | 0.0114\* | 0.399 (0.077, 2.073) |
|  |  | 0.797 (0.186, 3.412) |  | 0.770 (0.226, 2.620) |
|  |  | 2.019 (0.522, 7.800) |  | 1.721 (0.565, 5.241) |
|  |  | 5.563 (1.423 (21.739) |  | 6.147 (1.847, 20.452) |
| Temp (high) |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Temp (low) |  |  |  |  |