**Supplementary Appendix:**

**Table 1:** Comparison of patients included in analysis with those missing values for temperature.

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristic ​** | **Overall****Cohort****n=703** | **Missing Temperature****Cohort****n=745** | **Standardized Difference\*\*** |
| Age, Median (IQR)​, y | 40.0 (27.0, 55.0) | 37.0 (25.0, 55.0) | 0.08 |
| Male, n (%) | 158 (22.5%) | 173 (23.2%) | 0.02 |
| Vital Sign, mean (SD) |  |  |  |
| Systolic Blood Pressure, mm Hg | 139.7 (28.6) | 135.8 (34.0) | 0.12 |
| Heart rate, beats/min | 92.7 (21.0) | 93.1 (24.0) | 0.02 |
| Baseline laboratory measures, median (IQR) |  |  |  |
| Hemoglobin, g/dL | 135.0 (121.0, 146.0) | 132.0 (118.0, 143.0) | 0.12 |
| Platelets, 109/L | 223.0 (185.0, 266.0) | 222.0 (183.0, 271.0) | 0.01 |
| INR | 1.07 (1.01, 1.16) | 1.09 (1.02, 1.20) | 0.17 |
| Referred from another center, n (%) | 288 (41.0%) | 94 (12.6%) | 0.67 |
| Injury Severity Score (ISS), median IQR​ | 19.0 (13.0, 27.0) | 19.0 (13.0, 29.0) | 0.01 |
| Length of Stay, median (IQR), days | 11.0 (6.0, 21.0) | 11.0 (5.0, 21.0) | 0.02 |
| Transfusion of > 6 RBC units, n (%) | 50 (7.1%) | 45 (6.0%) | 0.04 |

\*\*Standard Difference between Missing and Overall Cohort

**Table 2.** Multivariable model of association between temperature and transfusion among trauma patients requiring emergency surgery.

|  |  |
| --- | --- |
|  | **Receipt of Blood Product Transfusion** |
| **Characteristic ​** | **Adjusted OR (95% CI)** | ***P* Value** |
| Initial Core Temperature, (per 1 degree decrease) |  |  |
|  Trauma Bay, oC  | 1.30 (1.06-1.60) | 0.012 |
| Age, y (per 1 year increase) | 1.01 (1.00-1.02) | 0.13 |
| Male | 2.15 (1.28-3.62) | 0.004 |
| Vital Sign |  |  |
| Systolic Blood Pressure, mm Hg (per 5-unit decrease) | 1.08 (1.05-1.13) | <0.001 |
| Heart rate, beats/min (per 5-unit increase) | 1.11 (1.05-1.16) | <0.001 |
| Baseline laboratory measures |  |  |
|  Hemoglobin, g/dL (per 10 unit increase) | 0.63 (0.55-0.71) | <0.001 |
| Platelets, 109/L (per 50 unit increase) | 1.36 (1.15-1.60) | <0.001 |
| INR (per 0.1 unit increase) | 1.01 (0.95-1.08) | 0.69 |
| Injury Severity Score (ISS), (per 1 point increase)​ | 1.05 (1.02-1.06) | <0.001 |
| Referred from another centre | 0.56 (0.36-0.87) | 0.011 |

Abbreviations: CI, confidence interval; OR, odds ratio

No variables were found to be collinear.

Omnibus Likelihood Ratio (chi-square(df), p-value) 233.64 (10), p-value <0.001; c-statistic: 0.84.