Table S1. Mortality in the total population (TP) and in subgroups with (+) and without (-) traumatic brain injury (TBI) in university and emergency hospitals.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | All hospitals | University Hospitals | | SE | 95% CI | | Emergency Hospitals | | SE | 95% CI | | Diff | CI difference | | p-value | NNT | NNT CI | |
| TP | 6690 |  | 4485 | - | - |  | - | 2205 | - | - | - | - | - | - | - |  |  |  |
| OD | 1048 |  | 686 | - | - | - |  | 362 | - | - | - | - | - | - | - |  |  |  |
| ED | 1051 | 744 |  |  |  |  | 307 |  |  |  |  |  |  |  |  |  |  |  |
| OMR(O) | 0.157 |  | 0.153 | 0.005 | 0.142 | 0.167 |  | 0.164 | 0.008 | 0.149 | 0.180 | -0.011 | -0.030 | 0.007 | 0.235 | -89 | -33 | 133 |
| EMR(E) | - |  | 0.166 | 0.006 | 0.155 | 0.177 |  | 0.139 | 0.007 | 0.125 | 0.154 | 0.027 | 0.009 | 0.045 | 0.005 |  |  |  |
| O/ E ratio | - |  | 0.922 | - | - | - |  | 1.180 | - | - | - | - | - | - | - |  |  |  |
| RAMR | - |  | 0.144 | 0.004 | 0.137 | 0.152 |  | 0.185 | 0.006 | 0.173 | 0.197 | -0.040 | -0.054 | -0.027 | 0.001 | -25 | -18 | -38 |
| TP + TBI | 2985 |  | 2113 | - | - | - |  | 872 | - | - | - | - | - | - | - |  |  |  |
| OD | 704 |  | 468 | - | - | - |  | 236 | - | - | - | - | - | - | - |  |  |  |
| ED | 687 | 499 |  |  |  |  | 188 |  |  |  |  |  |  |  |  |  |  |  |
| OMR (O) | 0.236 |  | 0.221 | 0.009 | 0.218 | 0.254 |  | 0.271 | 0.015 | 0.241 | 0.030 | -0.049 | -0.084 | -0.015 | 0.004 | -20 | -12 | -68 |
| EMR (E) | - |  | 0.236 | 0.009 | 0.218 | 0.254 |  | 0.216 | 0.014 | 0.188 | 0.243 | 0.020 | -0.012 | 0.053 | 0.228 |  |  |  |
| O/E ratio | - |  | 0.938 | - | - | - |  | 1.254 | - | - | - | - | - | - | - |  |  |  |
| RAMR | - |  | 0.221 | 0.007 | 0.208 | 0.234 |  | 0.296 | 0.011 | 0.274 | 0.318 | -0.075 | -0.100 | -0.049 | 0.001 | -13 | -10 | -20 |
| TP - TBI | 3705 |  | 2372 | - | - | - |  | 1333 | - | - | - | - | - | - | - |  |  |  |
| OD | 344 |  | 218 | - | - | - |  | 126 | - | - | - | - | - | - | - |  |  |  |
| ED | 364 | 245 |  |  |  |  | 119 |  |  |  |  |  |  |  |  |  |  |  |
| OMR (O) | 0.093 |  | 0.092 | 0.006 | 0.081 | 0.104 |  | 0.095 | 0.008 | 0.079 | 0.110 | -0.003 | -0.022 | 0.017 | 0.792 | -382 | -45 | 59 |
| EMR (E) | - |  | 0.103 | 0.006 | 0.091 | 0.116 |  | 0.089 | 0.008 | 0.074 | 0.104 | 0.014 | -0.005 | 0.034 | 0.1603 |  |  |  |
| O/E ratio | - |  | 0.890 | - | - | - |  | 1.062 | - | - | - | - | - | - | - |  |  |  |
| RAMR | - |  | 0.083 | 0.004 | 0.075 | 0.090 |  | 0.099 | 0.006 | 0.087 | 0.111 | -0.016 | -0.030 | -0.002 | 0.027 | -62 | -33 | -557 |

OD: Observed deaths. ED: Expected deaths. OMR: Observed mortality ratio. EMR: Expected mortality ratio. RAMR: risk-adjusted mortality ratio.

RAMR: risk-adjusted mortality ratio. NNT0: number needed to treat to save one life based on mean difference. P-values are for university vs emergency hospitals.

Table S2. Mortality in the multiple blunt trauma (MB) subset and in subgroups with (+) and without (-) traumatic brain injury (TBI) treated in university and emergency hospitals (EH).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | All hospitals | University Hospitals | | SE | 95% CI | | Emergency Hospitals | | SE | 95% CI | | Diff | CI difference | | p-value | NNT | NNT CI | |
| MB | 2638 |  | 1827 | - | - |  | - | 811 | - | - | - | - | - | - | - |  |  |  |
| OD | 274 |  | 171 | - | - | - |  | 103 | - | - | - | - | - | - | - |  |  |  |
| ED | 314 | 223 |  |  |  |  | 91 |  |  |  |  |  |  |  |  |  |  |  |
| OMR(O) | 0.104 |  | 0.094 | 0.007 | 0.091 | 0.117 |  | 0.127 | 0.012 | 0.104 | 0.150 | -0.033 | -0.060 | -0.007 | 0.010 | -30 | -71 | 145 |
| EMR(E) | - |  | 0.122 | 0.008 | 0.107 | 0.137 |  | 0.112 | 0.011 | 0.091 | 0.134 | 0.010 | -0.017 | 0.036 | 0.520 |  |  |  |
| O/ E ratio | - |  | 0.767 | - | - | - |  | 1.131 | - | - | - | - | - | - | - |  |  |  |
| RAMR | - |  | 0.080 | 0.005 | 0.070 | 0.090 |  | 0.117 | 0.008 | 0.102 | 0.133 | -0.038 | -0.056 | -0.019 | 0.001 | -26 | -18 | -52 |
| MB + TBI | 1250 |  | 930 | - | - | - |  | 320 | - | - | - | - | - | - | - |  |  |  |
| OD | 154 |  | 98 | - | - | - |  | 56 | - | - | - | - | - | - | - |  |  |  |
| ED | 165 | 124 |  |  |  |  | 41 |  |  |  |  |  |  |  |  |  |  |  |
| OMR (O) | 0,123 |  | 0.105 | 0.010 | 0.103 | 0.143 |  | 0.175 | 0.021 | 0.133 | 0.217 | -0.070 | -0.116 | -0.024 | 0.001 | -14 | -9 | -42 |
| EMR (E) | - |  | 0.134 | 0.011 | 0.112 | 0.155 |  | 0.129 | 0.019 | 0.092 | 0.166 | 0.005 | -0.038 | 0.047 | 0.828 |  |  |  |
| O/E ratio | - |  | 0.789 | - | - | - |  | 1.359 | - | - | - | - | - | - | - |  |  |  |
| RAMR | - |  | 0.097 | 0.008 | 0.081 | 0.114 |  | 0.167 | 0.014 | 0.139 | 0.196 | -0.070 | -0.103 | -0.038 | 0.001 | -14 | -10 | -27 |
| MB - TBI | 1388 |  | 897 | - | - | - |  | 491 | - | - | - | - | - | - | - |  |  |  |
| OD | 120 |  | 73 | - | - | - |  | 47 | - | - | - | - | - | - | - |  |  |  |
| ED | 149 | 99 |  |  |  |  | 50 |  |  |  |  |  |  |  |  |  |  |  |
| OMR (O) | 0,086 |  | 0.081 | 0.009 | 0.069 | 0.104 |  | 0.096 | 0.013 | 0.070 | 0.122 | -0.014 | -0.046 | 0.017 | 0.363 | -70 | -22 | 58 |
| EMR (E) | - |  | 0.110 | 0.010 | 0.089 | 0.130 |  | 0.102 | 0.014 | 0.075 | 0.128 | 0.008 | -0.025 | 0.042 | 0.628 |  |  |  |
| O/E ratio | - |  | 0.740 | - | - | - |  | 0.943 | - | - | - | - | - | - | - |  |  |  |
| RAMR | - |  | 0.064 | 0.006 | 0.052 | 0.076 |  | 0.082 | 0.009 | 0.064 | 0.099 | -0.018 | -0.039 | 0.004 | 0.107 | -57 | -26 | 263 |

OD: Observed deaths. ED: Expected deaths. OMR: Observed mortality ratio. EMR: Expected mortality ratio. RAMR: risk-adjusted mortality ratio.

RAMR: risk-adjusted mortality ratio. NNT0: number needed to treat to save one life based on mean difference. P-values are for university vs emergency hospitals.

Table S3. Mortality in the penetrating truncal trauma (PEN) subset treated in university and emergency hospitals.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | All hospitals | University Hospitals | | SE | 95% CI | | Emergency Hospitals | | SE | 95% CI | | Diff | CI difference | | p-value | NNT | NNT CI | |
| PEN | 375 |  | 273 | - | - |  | - | 102 | - | - | - | - | - | - | - |  |  |  |
| OD | 75 |  | 60 | - | - | - |  | 15 | - | - | - | - | - | - | - |  |  |  |
| ED | 63 | 53 |  |  |  |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
| OMR(O) | 0.200 |  | 0.220 | 0.025 | 0.151 | 0.249 |  | 0.147 | 0.035 | 0.078 | 0.216 | 0.073 | -0.012 | 0.157 | 0.117 | 14 | -85 | 6 |
| EMR(E) | - |  | 0.194 | 0.024 | 0.147 | 0.241 |  | 0.098 | 0.029 | 0.040 | 0.155 | 0.096 | 0.022 | 0.171 | 0.039 |  |  |  |
| O/ E ratio | - |  | 1.134 | - | - | - |  | 1.505 | - | - | - | - | - | - | - |  |  |  |
| RAMR | - |  | 0.227 | 0.014 | 0.199 | 0.254 |  | 0.301 | 0.042 | 0.218 | 0.384 | -0.074 | -0.162 | 0.013 | 0.096 | -13 | -6 | 75 |

OD: Observed deaths. ED: Expected deaths. OMR: Observed mortality ratio. EMR: Expected mortality ratio. RAMR: risk-adjusted mortality ratio.

NNT0: number needed to treat to save one life based on mean difference. P-values are for university vs emergency hospitals.

Table S4. Mortality in the severe traumatic brain injury (STBI) subset treated in university and emergency hospitals.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | All hospitals | University Hospitals | | SE | 95% CI | | Emergency Hospitals | | SE | 95% CI | | Diff | CI difference | | p-value | NNT | NNT CI | |
| STBI | 850 |  | 640 | - | - |  | - | 210 | - | - | - | - | - | - | - |  |  |  |
| OD | 422 |  | 302 | - | - | - |  | 120 | - | - | - | - | - | - | - |  |  |  |
| ED | 417 | 312 |  |  |  |  | 105 |  |  |  |  |  |  |  |  |  |  |  |
| OMR(O) | 0.496 |  | 0.472 | 0.020 | 0.433 | 0.511 |  | 0.571 | 0.034 | 0.504 | 0.638 | -0.100 | -0.177 | -0.022 | 0.012 | -10 | -6 | -45 |
| EMR(E) | - |  | 0.487 | 0.020 | 0.448 | 0.525 |  | 0.501 | 0.035 | 0.433 | 0.569 | -0.014 | -0.092 | 0.064 | 0.718 |  |  |  |
| O/ E ratio | - |  | 0.970 | - | - | - |  | 1.141 | - | - | - | - | - | - | - |  |  |  |
| RAMR | - |  | 0.481 | 0.015 | 0.452 | 0.511 |  | 0.566 | 0.026 | 0.515 | 0.618 | -0.085 | -0.145 | -0.025 | 0.005 | -12 | -7 | -40 |

OD: Observed deaths. ED: Expected deaths. OMR: Observed mortality ratio. EMR: Expected mortality ratio. RAMR: risk-adjusted mortality ratio.

NNT1: number needed to treat to save one life based on mean difference. P-values are for university vs emergency hospitals.