Summary descriptive tables

|  | **All** | | | | | **Derivation** | | | **Validation** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Alive** | **Dead** | **OR** | **p.overall** | **N** | **Alive** | **Dead** | **p.overall** | **Alive** | **Dead** | **p.overall** |
|  | ***N=7030*** | ***N=1462*** |  |  |  | ***N=5498*** | ***N=1279*** |  | ***N=1532*** | ***N=183*** |  |
| Age: |  |  |  | <0.001 | 8492 |  |  | <0.001 |  |  | <0.001 |
| <40 years | 1842 (26.2%) | 74 (5.06%) | Ref. |  |  | 1124 (20.4%) | 45 (3.52%) |  | 718 (46.9%) | 29 (15.8%) |  |
| 40-49 years | 778 (11.1%) | 77 (5.27%) | 2.46 [1.75;3.48] |  |  | 563 (10.2%) | 62 (4.85%) |  | 215 (14.0%) | 15 (8.20%) |  |
| 50-59 years | 967 (13.8%) | 155 (10.6%) | 3.99 [2.97;5.39] |  |  | 756 (13.8%) | 120 (9.38%) |  | 211 (13.8%) | 35 (19.1%) |  |
| 60-69 years | 1091 (15.5%) | 257 (17.6%) | 5.86 [4.46;7.78] |  |  | 921 (16.8%) | 221 (17.3%) |  | 170 (11.1%) | 36 (19.7%) |  |
| 70-79 years | 1135 (16.1%) | 378 (25.9%) | 8.29 [6.37;10.9] |  |  | 1025 (18.6%) | 342 (26.7%) |  | 110 (7.18%) | 36 (19.7%) |  |
| 80-89 years | 927 (13.2%) | 362 (24.8%) | 9.71 [7.44;12.8] |  |  | 832 (15.1%) | 337 (26.3%) |  | 95 (6.20%) | 25 (13.7%) |  |
| 90+ years | 290 (4.13%) | 159 (10.9%) | 13.6 [9.99;18.7] |  |  | 277 (5.04%) | 152 (11.9%) |  | 13 (0.85%) | 7 (3.83%) |  |
| Sex: |  |  |  | <0.001 | 8489 |  |  | <0.001 |  |  | 0.028 |
| Female | 3558 (50.6%) | 603 (41.3%) | Ref. |  |  | 2794 (50.8%) | 528 (41.3%) |  | 764 (49.9%) | 75 (41.0%) |  |
| Male | 3471 (49.4%) | 857 (58.7%) | 1.46 [1.30;1.64] |  |  | 2703 (49.2%) | 749 (58.7%) |  | 768 (50.1%) | 108 (59.0%) |  |
| C-reactive protein | 31.0 [6.00;98.0] | 52.0 [13.0;140] | 1.00 [1.00;1.00] | <0.001 | 5481 | 33.0 [7.00;102] | 49.0 [12.0;137] | <0.001 | 20.0 [5.00;71.2] | 94.5 [24.0;162] | <0.001 |
| Grade of surgery: |  |  |  | <0.001 | 8435 |  |  | <0.001 |  |  | 0.250 |
| Major | 5100 (73.0%) | 1155 (79.6%) | Ref. |  |  | 4023 (73.7%) | 1020 (80.3%) |  | 1077 (70.6%) | 135 (75.0%) |  |
| Minor | 1884 (27.0%) | 296 (20.4%) | 0.69 [0.60;0.80] |  |  | 1435 (26.3%) | 251 (19.7%) |  | 449 (29.4%) | 45 (25.0%) |  |
| Anaesthesia: |  |  |  | <0.001 | 8492 |  |  | 0.039 |  |  | 0.001 |
| General | 5159 (73.4%) | 1142 (78.1%) | Ref. |  |  | 4123 (75.0%) | 995 (77.8%) |  | 1036 (67.6%) | 147 (80.3%) |  |
| Regional | 1871 (26.6%) | 320 (21.9%) | 0.77 [0.67;0.89] |  |  | 1375 (25.0%) | 284 (22.2%) |  | 496 (32.4%) | 36 (19.7%) |  |
| Speciality: |  |  |  | <0.001 | 8435 |  |  | <0.001 |  |  | <0.001 |
| Abdominal surgery | 2920 (41.8%) | 526 (36.3%) | Ref. |  |  | 2236 (41.0%) | 430 (33.8%) |  | 684 (44.8%) | 96 (53.3%) |  |
| Cardiothoracic surgery | 265 (3.79%) | 78 (5.38%) | 1.63 [1.23;2.15] |  |  | 217 (3.98%) | 72 (5.66%) |  | 48 (3.15%) | 6 (3.33%) |  |
| Head and neck surgery | 662 (9.48%) | 173 (11.9%) | 1.45 [1.19;1.76] |  |  | 579 (10.6%) | 152 (12.0%) |  | 83 (5.44%) | 21 (11.7%) |  |
| Obstetric | 772 (11.1%) | 18 (1.24%) | 0.13 [0.08;0.21] |  |  | 448 (8.21%) | 15 (1.18%) |  | 324 (21.2%) | 3 (1.67%) |  |
| Orthopaedic surgery | 2222 (31.8%) | 645 (44.5%) | 1.61 [1.42;1.83] |  |  | 1870 (34.3%) | 591 (46.5%) |  | 352 (23.1%) | 54 (30.0%) |  |
| Other surgery | 143 (2.05%) | 11 (0.76%) | 0.43 [0.21;0.79] |  |  | 108 (1.98%) | 11 (0.87%) |  | 35 (2.29%) | 0 (0.00%) |  |
| Haemoglobin (g/dl) | 120 [102;136] | 111 [95.0;129] | 0.99 [0.99;0.99] | <0.001 | 8352 | 119 [101;135] | 111 [96.0;130] | <0.001 | 123 [108;139] | 106 [90.0;125] | <0.001 |
| White cell count (10^9/L) | 9.60 [6.92;13.3] | 10.0 [7.20;14.7] | 1.01 [1.01;1.02] | 0.001 | 8319 | 9.41 [6.90;13.1] | 9.70 [7.00;13.9] | 0.087 | 10.0 [7.00;14.0] | 13.2 [8.67;18.3] | <0.001 |
| Preoperative respiratory support: |  |  |  | <0.001 | 8392 |  |  | <0.001 |  |  | <0.001 |
| None | 4783 (68.9%) | 737 (50.8%) | Ref. |  |  | 3595 (66.4%) | 662 (52.2%) |  | 1188 (78.0%) | 75 (41.0%) |  |
| Supplemental oxygen | 1500 (21.6%) | 448 (30.9%) | 1.94 [1.70;2.21] |  |  | 1244 (23.0%) | 383 (30.2%) |  | 256 (16.8%) | 65 (35.5%) |  |
| Ventilation | 657 (9.47%) | 267 (18.4%) | 2.64 [2.23;3.11] |  |  | 578 (10.7%) | 224 (17.7%) |  | 79 (5.19%) | 43 (23.5%) |  |
| Indication for surgery: |  |  |  | <0.001 | 8489 |  |  | <0.001 |  |  | 0.624 |
| Benign | 4114 (58.5%) | 754 (51.6%) | Ref. |  |  | 3065 (55.8%) | 623 (48.7%) |  | 1049 (68.5%) | 131 (71.6%) |  |
| Cancer | 1096 (15.6%) | 231 (15.8%) | 1.15 [0.97;1.35] |  |  | 917 (16.7%) | 210 (16.4%) |  | 179 (11.7%) | 21 (11.5%) |  |
| Trauma | 1818 (25.9%) | 476 (32.6%) | 1.43 [1.25;1.63] |  |  | 1514 (27.5%) | 445 (34.8%) |  | 304 (19.8%) | 31 (16.9%) |  |
| Urgency of surgery: |  |  |  | <0.001 | 8491 |  |  | <0.001 |  |  | 0.001 |
| Elective | 1436 (20.4%) | 193 (13.2%) | Ref. |  |  | 1132 (20.6%) | 176 (13.8%) |  | 304 (19.8%) | 17 (9.29%) |  |
| Emergency | 5593 (79.6%) | 1269 (86.8%) | 1.69 [1.43;2.00] |  |  | 4365 (79.4%) | 1103 (86.2%) |  | 1228 (80.2%) | 166 (90.7%) |  |
| Timing of SARS-CoV-2 diagnosis: |  |  |  | <0.001 | 8491 |  |  | <0.001 |  |  | <0.001 |
| Postoperative | 3015 (42.9%) | 836 (57.2%) | Ref. |  |  | 2645 (48.1%) | 769 (60.1%) |  | 370 (24.2%) | 67 (36.6%) |  |
| Preoperative | 4014 (57.1%) | 626 (42.8%) | 0.56 [0.50;0.63] |  |  | 2852 (51.9%) | 510 (39.9%) |  | 1162 (75.8%) | 116 (63.4%) |  |
| Current smoker: |  |  |  | 0.042 | 8488 |  |  | 0.002 |  |  | 0.073 |
| Non-smoker | 6326 (90.0%) | 1340 (91.8%) | Ref. |  |  | 4922 (89.5%) | 1180 (92.4%) |  | 1404 (91.7%) | 160 (87.4%) |  |
| Smoker | 702 (9.99%) | 120 (8.22%) | 0.81 [0.65;0.99] |  |  | 575 (10.5%) | 97 (7.60%) |  | 127 (8.30%) | 23 (12.6%) |  |
| Respiratory comorbidity: |  |  |  | <0.001 | 8488 |  |  | <0.001 |  |  | <0.001 |
| No respiratory disease | 6136 (87.3%) | 1189 (81.4%) | Ref. |  |  | 4710 (85.7%) | 1033 (80.9%) |  | 1426 (93.1%) | 156 (85.2%) |  |
| Respiratory disease | 892 (12.7%) | 271 (18.6%) | 1.57 [1.34;1.82] |  |  | 787 (14.3%) | 244 (19.1%) |  | 105 (6.86%) | 27 (14.8%) |  |
| Revised Cardiac Risk Index: |  |  |  | <0.001 | 8488 |  |  | <0.001 |  |  | <0.001 |
| 0 | 2334 (33.2%) | 332 (22.7%) | Ref. |  |  | 1734 (31.5%) | 305 (23.9%) |  | 600 (39.2%) | 27 (14.8%) |  |
| 1 | 3161 (45.0%) | 557 (38.2%) | 1.24 [1.07;1.44] |  |  | 2481 (45.1%) | 471 (36.9%) |  | 680 (44.4%) | 86 (47.0%) |  |
| 2 | 1085 (15.4%) | 370 (25.3%) | 2.40 [2.03;2.84] |  |  | 889 (16.2%) | 320 (25.1%) |  | 196 (12.8%) | 50 (27.3%) |  |
| 3 | 334 (4.75%) | 136 (9.32%) | 2.86 [2.25;3.62] |  |  | 294 (5.35%) | 121 (9.48%) |  | 40 (2.61%) | 15 (8.20%) |  |
| 4+ | 114 (1.62%) | 65 (4.45%) | 4.01 [2.84;5.61] |  |  | 99 (1.80%) | 60 (4.70%) |  | 15 (0.98%) | 5 (2.73%) |  |
| ASA grade: |  |  |  | <0.001 | 8449 |  |  | <0.001 |  |  | <0.001 |
| Grade 1 | 1033 (14.8%) | 33 (2.27%) | Ref. |  |  | 624 (11.4%) | 26 (2.05%) |  | 409 (26.7%) | 7 (3.83%) |  |
| Grade 2 | 2415 (34.5%) | 248 (17.1%) | 3.21 [2.21;4.81] |  |  | 1801 (33.0%) | 210 (16.5%) |  | 614 (40.1%) | 38 (20.8%) |  |
| Grade 3 | 2591 (37.0%) | 695 (47.9%) | 8.40 [5.87;12.4] |  |  | 2219 (40.6%) | 616 (48.5%) |  | 372 (24.3%) | 79 (43.2%) |  |
| Grade 4-5 | 958 (13.7%) | 476 (32.8%) | 15.5 [10.8;23.1] |  |  | 821 (15.0%) | 417 (32.9%) |  | 137 (8.94%) | 59 (32.2%) |  |