Supplemental Table 1 - Comparison of baseline characteristics and postoperative AKI status between patients included in the analysis and cases excluded due to missing creatinine levels 1-2 years after surgery.

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Study Patients** | **Excluded Patients** |  |
| **(N=15,621)** | **(N=17,366)** |
| **Factor** | **n missing** | **Statistics** | **n missing** | **Statistics** | **ASD\*** |
| **Baseline characteristics** |  |  |  |  |  |
| Age (years) | 31 | 57 ± 14 | 0 | 54 ± 15 | 0.20\* |
| Race (%) | 44 |   | 26 |   | 0.05 |
|      White |   | 11,967 (77) |   | 13,639 (79) |   |
|      Black |   | 3,302 (21) |   | 3,282 (19) |   |
|      Other |   | 308 (2) |   | 419 (2) |   |
| Female (%) | 31 | 9,284 (60) | 0 | 9,425 (54) | 0.11 |
| Body Mass Index (kg/m2) | 278 | 31 ± 9 | 590 | 30 ± 8 | 0.17 |
| ASA physical status | 31 |   | 0 |   | 0.21\* |
|      I |   | 194 (1) |   | 567 (3) |   |
|      II |   | 4,839 (31) |   | 7,046 (41) |   |
|      III |   | 9,439 (61) |   | 8,588 (50) |   |
|      IV-V |   | 1,118 (7) |   | 1,165 (7) |   |
| Risk Stratification Index (RSI) | 31 | -0.50 ± 1.6 | 0 | -0.30 ± 2.0 | 0.11 |
| **Medications (%)** |   |   |   |   |   |
| Aspirin | 0 | 1,453 (9) | 4 | 1,332 (8) | 0.06 |
| Non-steroidal anti-inflammatory agents | 0 | 1,669 (11) | 4 | 1,678 (10) | 0.04 |
| Calcium-channel blockers | 0 | 1,162 (7) | 4 | 951 (6) | 0.08 |
| Beta-blockers | 0 | 2,198 (14) | 4 | 1,973 (11) | 0.08 |
| Diuretics | 0 | 1,810 (11) | 4 | 1,326 (8) | 0.14 |
| Angiotensin converting enzyme Inhibitors | 0 | 1,440 (9) | 4 | 1,173 (7) | 0.09 |
| Angiotensin II receptor antagonists | 0 | 582 (4) | 4 | 409 (2) | 0.08 |
| Statins | 0 | 1,951 (13) | 4 | 1,594 (10) | 0.11 |
| Proton-pump inhibitors | 0 | 1,889 (12) | 4 | 1,734 (10) | 0.07 |
| Immunosuppressants | 0 | 94 (1) | 4 | 51 (0) | 0.04 |
| Steroids | 0 | 1,331 (9) | 4 | 1,724 (10) | 0.05 |
| Nephrotoxic antineoplastic agents | 0 | 103 (1) | 4 | 41 (0) | 0.06 |
| **Baseline comorbidities (%)** |   |   |   |   |   |
| History of myocardial infarction | 0 | 429 (3) | 0 | 309 (2) | 0.06 |
| History of congestive heart failure | 0 | 830 (5) | 0 | 493 (3) | 0.11 |
| History of peripheral vascular disease | 0 | 1,757 (11) | 0 | 1,171 (7) | 0.14 |
| History of stroke | 0 | 945 (6) | 0 | 706 (4) | 0.08 |
| Pulmonary circulation disease | 95 | 221 (1) | 106 | 223 (1) | <0.01 |
| Liver disease | 95 | 1,125 (7) | 106 | 711 (4) | 0.14 |
| Hypothyroidism | 95 | 1,809 (12) | 106 | 1,504 (9) | 0.09 |
| Hypertension | 95 | 8,198 (53) | 106 | 7,189 (42) | 0.22\* |
| Diabetes | 95 | 2,881 (19) | 106 | 2,217 (13) | 0.15 |
| Dyslipidemia | 95 | 5,414 (35) | 105 | 4,111 (24) | 0.24\* |
| Smoking | 1320 | 2,092 (15) | 2544 | 2,905 (20) | 0.13 |
| Obesity | 95 | 3,971 (26) | 106 | 3,432 (20) | 0.14 |
| Chronic obstructive pulmonary disease | 95 | 2,428 (16) | 106 | 2,145 (12) | 0.09 |
| Coronary artery disease | 0 | 652 (4) | 0 | 592 (3) | 0.04 |
| Atrial fibrillation | 0 | 880 (6) | 0 | 780 (5) | 0.05 |
| Acquired immune deficiency syndrome | 95 | 22 (0) | 106 | 27 (0) | <0.01 |
| Lymphoma | 95 | 242 (2) | 106 | 172 (1) | 0.05 |
| Metastatic cancer | 95 | 1,130 (7) | 106 | 1,490 (9) | 0.06 |
| Solid tumor without metastasis | 95 | 2,308 (15) | 106 | 2,441 (14) | 0.03 |
| Fluid and electrolyte disorders | 95 | 2,064 (13) | 106 | 2,443 (14) | 0.02 |
| **Preoperative** |   |   |   |   |   |
| Preoperative hemoglobin | 219 | 13.2 ± 1.9 | 198 | 13.2 ± 1.9 | 0.03 |
| Number of antihypertensive agents | 0 |   | 4 |   | 0.02 |
| 0 |   | 10,244 (66) |   | 12,028 (69) |   |
| 1 |   | 2,908 (19) |   | 2,777 (16) |   |
| 2 |   | 1,405 (9) |   | 1,491 (9) |   |
| 3 |   | 1,064 (7) |   | 1,066 (6) |   |
| **Surgery characteristics**  |   |   |   |   |   |
| Type of surgery | 0 |  | 0 |  | 0.15 |
|  Endoscopy / Other minor procedures |  | 2,765 (18) |   | 2,919 (17) |  |
|  Abdominal  |  | 2,593 (17) |   | 2,566 (15) |  |
|  Orthopedic |  | 2,537 (16) |   | 2,765 (16) |  |
|  Thoracic / vascular |  | 1,285 (8) |   | 1,289 (7) |  |
|  Neurosurgery |  | 1,239 (8) |   | 1,958 (11) |  |
|  Urology |  | 839 (5.5) |   | 1,075 (6) |  |
|  Spine |  | 837 (5.5) |   | 1,028 (6) |  |
|  General surgery |  | 830 (5) |   | 788 (5) |  |
|  Gynecology |  | 680 (4) |   | 908 (5) |  |
|  Others |  | 2,016 (13) |   | 2,070 (12) |  |
| Emergency surgery (%) | 31 | 839 (5) | 0 | 1,155 (7) | 0.06 |
| Duration of surgery (minutes) | 31 | 243 ± 120 | 0 | 241 ± 123 | 0.01 |
| Use of regional analgesia (%) | 31 | 1,846 (12) | 0 | 1,750 (10) | 0.05 |
|    Ephedrine (%) |  | 6,344 (41) | 0 | 6,578 (38) | 0.05 |
|    Phenylephrine (%) | 0 | 8,543 (55) | 0 | 9,309 (54) | 0.01 |
|    Epinephrine (%) | 0 | 535 (3) | 0 | 523 (3) | 0.03 |
|    Norepinephrine (%) | 0 | 163 (1) | 0 | 119 (1) | 0.04 |
|    Vasopressin (%) | 0 | 40 (0) | 0 | 40 (0) | <0.01 |
| Estimated blood loss (cc) | 0 | 100 [50, 300] | 0 | 100 [50, 300] | 0.02 |
| Red blood cell transfusion (%) | 0 | 0 [0, 0] | 0 | 0 [0, 0] | 0.01 |
| Fresh frozen plasma transfusion (%) | 0 | 0 [0, 0] | 0 | 0 [0, 0] | 0.01 |
| Platelets transfusion (%) | 0 | 0 [0, 0] | 0 | 0 [0, 0] | <0.01 |
| Colloids (L) | 0 | 0 [0, 0.5] | 0 | 0 [0, 0.5] | <0.01 |
| Crystalloids (L) | 0 | 2.4 [1.7, 3.3] | 0 | 2.4 [1.7, 3.3] | 0.02 |
| TWA MAP < 65 mmHg (mmHg) | 0 | 0.35 ± 0.67 | 2 | 0.41 ± 0.80 | 0.07 |
| **Postoperative** |   |   |   |   |   |
| Use of postoperative nephrotoxic antibiotics (aminoglycosides) (%) | 0 | 4,649 (30) | 4 | 4,518 (26) | 0.08 |
| Postoperative kidney status | 0 |   | 0 |   | 0.02 |
|      No AKI |   | 15,022 (96.2) |   | 16,762 (96.5) |   |
|      AKI stage I |   | 523 (3.3) |   | 524 (3.0) |   |
|      AKI stage II-III |   | 76 (0.5) |   | 80 (0.5) |   |

Data are provided as N (%), median [interquartile range], or mean±SD, as appropriate. AKI, acute kidney injury; ASA, American society of anesthesiologists; TWA MAP, time-weighted average mean arterial pressure.

\*ASD, absolute standardized difference. Variables with an ASD > 0.2 were considered unbalanced.