**Supplemental Table 3a.** Multivariable predictors of renal replacement therapy for MAP threshold of 55 - 64 mmHg. C-statistic = 0.920; Hosmer-Lemeshow p-value = 0.067

|  |  |  |
| --- | --- | --- |
| **Predictor** | **Adjusted OR (95% CI)** | **P Value** |
| Demographic  Age > 65  Female sex | 0.79 (0.56 – 1.11)  0.82 (0.59 – 1.15) | 0.168  0.252 |
| Medical History  Active endocarditis  Congestive heart failure  LVEF < 35%  Hypertension  Diabetes  Smoking history  Peripheral arterial disease  Glomerular filtration rate  > 60  30 – 60  < 30  Obesity  Anemia  Redo  Emergent surgery  Preoperative shock | 1.19 (0.54 – 2.66)  1.93 (1.41 – 2.63)  1.19 (0.88 – 1.62)  1.21 (0.85 – 1.73)  1.04 (0.76 – 1.43)  1.19 (1.07 – 1.33)  1.23 (0.83 – 1.82)  (Reference)  2.39 (1.69 – 3.36)  8.99 (5.03 – 16.1)  1.96 (1.42 – 2.69)  1.59 (1.16 – 2.19)  1.84 (1.26 – 2.69)  2.80 (1.90 – 4.13)  1.87 (1.15 – 3.06) | 0.666  <0.001  0.264  0.290  0.793  0.002  0.311  <0.001  <0.001  0.004  0.002  <0.001  0.012 |
| Intraoperative  Fluid balance > 3L  Type of operation  CABG only  Single valve  Combined valve(s) ± CABG  CPB duration (per 10 minutes)  Lowest hematocrit  0.21 – 0.25  < 0.21  > 0.25  RBC transfusion  MAP 55 – 64 mmHg  Pre-CPB  During  Post-CPB  Vasopressor use  Pre-CPB  During  Post-CPB  Inotrope use  Pre-CPB  Post-CPB | 1.00 (1.00 – 1.00)  (Reference)  1.05 (0.60 – 1.83)  1.59 (1.07 – 2.34)  1.00 (1.00 – 1.01)  (Reference)  1.32 (0.68 – 2.57)  1.25 (0.88 – 1.78)  1.12 (1.05 – 1.19)  0.98 (0.89 – 1.07)  1.06 (1.01 – 1.12)  1.12 (1.06 – 1.18)  1.36 (0.97 – 1.92)  1.09 (0.76 – 1.56)  0.89 (0.62 – 1.28)  1.15 (0.79 – 1.67)  1.37 (0.95 – 1.97) | 0.092  0.037  0.004  0.387  0.001  0.603  0.032  <0.001  0.074  0.632  0.528  0.472  0.095 |
| Postoperative  New onset atrial fibrillation | 4.19 (3.06 – 5.76) | <0.001 |

**Supplemental Table 3b.** Multivariable predictors of renal replacement therapy for MAP threshold of 65 - 74 mmHg. C-statistic = 0.916; Hosmer-Lemeshow p-value = 0.051

|  |  |  |
| --- | --- | --- |
| **Predictor** | **Adjusted OR (95% CI)** | **P Value** |
| Demographic  Age > 65  Female sex | 0.79 (0.56 – 1.10)  0.82 (0.59 – 1.14) | 0.160  0.229 |
| Medical History  Active endocarditis  Congestive heart failure  LVEF < 35%  Hypertension  Diabetes  Smoking history  Peripheral arterial disease  Glomerular filtration rate  > 60  30 – 60  < 30  Obesity  Anemia  Redo  Emergent surgery  Preoperative shock | 1.12 (0.51 – 2.44)  1.85 (1.36 – 2.52)  1.16 (0.86 – 1.57)  1.22 (0.86 – 1.74)  1.09 (0.79 – 1.49)  1.19 (1.07 – 1.32)  1.19 (0.80 – 1.77)  (Reference)  2.49 (1.77 – 3.51)  9.17 (5.11 – 16.43)  1.99 (1.45 – 2.73)  1.53 (1.11 – 2.11)  1.85 (1.26 – 2.70)  2.69 (1.83 – 3.96)  1.80 (1.10 – 2.93) | 0.783  <0.001  0.337  0.258  0.606  0.002  0.384  <0.001  <0.001  0.009  0.002  <0.001  0.019 |
| Intraoperative  Fluid balance > 3L  Type of operation  CABG only  Single valve  Combined valve(s) ± CABG  CPB duration (per 10 minutes)  Lowest hematocrit  0.21 – 0.25  < 0.21  > 0.25  RBC transfusion  MAP 65 - 74 mmHg  Pre-CPB  During  Post-CPB  Vasopressor use  Pre-CPB  During  Post-CPB  Inotrope use  Pre-CPB  Post-CPB | 1.00 (1.00 – 1.00)  (Reference)  1.04 (0.60 – 1.82)  1.70 (1.15 – 2.53)  1.00 (1.00 – 1.01)  (Reference)  1.31 (0.67 – 2.57)  1.21 (0.86 – 1.72)  1.14 (1.07 – 1.22)  0.97 (0.91 – 1.05)  1.04 (0.98 – 1.09)  1.01 (0.96 – 1.07)  1.35 (0.96 – 1.88)  1.53 (0.81 – 1.65)  0.93 (0.65 – 1.35)  1.13 (0.78 – 1.64)  1.44 (1.00 – 2.06) | 0.044  0.012  0.001  0.456  <0.001  0.479  0.219  0.651  0.083  0.433  0.714  0.511  0.048 |
| Postoperative  New onset atrial fibrillation | 4.53 (3.32 – 6.18) | <0.001 |