**Supplemental Digital Content 9: Risk of Acute Kidney Injury Associated with Intraoperative Hypotension by Preoperative Risk Quartile, Adjusted for Intraoperative Estimated Blood Loss****

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| **Absolute Hypotension - Derivation Cohort** |
| Intraoperative Hypotension† – Absolute MAP Values | Quartile 1\*Low Preoperative Risk(N = 17,733) | Quartile 2\*Medium Preoperative Risk(N = 17,732) | Quartile 3\*High Preoperative Risk(N =17,732) | Quartile 4\*Highest Preoperative Risk(N = 17,732) |
| No Absolute Hypotension | (reference)n = 10,186 | (reference)n = 10,426 | (reference)n = 10,248 | (reference) n = 9,176 |
| MAP 60-64 mmHg | 0.87 (0.62-1.21)n = 3,840  | 1.02 (0.81-1.28)n = 3,646 | 1.16 (0.99-1.36)n = 3,710 | 1.06 (0.94-1.19)n = 3,900 |
| MAP 55-59 mmHg  | 0.93 (0.63-1.36)n = 2,441 | 1.13 (0.88-1.46)n = 2,366 | 1.18 (0.98-1.41)n = 2,367 | 1.34 (1.18-1.51)**Increased AKI**n = 2,794 |
| MAP 50-54 mmHg | 1.15 (0.67-1.98)n = 853 | 1.21 (0.83-1.77)n = 844 | 1.27 (0.97-1.67)n = 828 | 1.46 (1.23-1.73)**Increased AKI**n = 1,116 |
| MAP <50 mmHg | 1.23 (0.60-2.54)n = 413 | 1.63 (1.05-2.53)**Increased AKI**n = 450 | 1.58 (1.18-2.12)**Increased AKI**n = 579 | 1.88 (1.55-2.28)**Increased AKI**n = 746 |

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| **Relative Hypotension - Derivation Cohort** |
| Intraoperative Hypotension† – Relative MAP Values | Quartile 1\*Low Preoperative Risk(N = 17,733) | Quartile 2\*Medium Preoperative Risk(N = 17,732) | Quartile 3\*High Preoperative Risk(N =17,732) | Quartile 4\*Highest Preoperative Risk(N = 17,732) |
| No Relative Hypotension | (reference)n = 4,958 | (reference)n = 5,580 | (reference)n = 5,723 | (reference)n = 6,361 |
| MAP 20-30% Below Baseline | 1.17 (0.82-1.69)n = 4,710  | 0.99 (0.77-1.27)n = 4,504 | 1.00 (0.84-1.20)n = 4,504 | 0.85 (0.75-0.96)**Decreased AKI**n = 4,316 |
| MAP 30-40% Below Baseline | 1.07 (0.74-1.55)n = 4,832 | 1.07 (0.84-1.36)n = 4,567 | 1.12 (0.94-1.33)n = 4,422 | 0.89 (0.79-1.01)n = 3,962 |
| MAP > 40% Below Baseline | 1.61 (1.11-2.34)**Increased AKI**n = 3,233 | 1.42 (1.11-1.83)**Increased AKI**n = 3,081 | 1.30 (1.08-1.56)**Increased AKI**n = 3,083 | 1.08 (0.95-1.23)n = 3,093 |

*Values presented as adjusted odds ratio and 95% confidence interval.*

*\* Patients were stratified by risk of postoperative AKI using the full multivariable model.*

*† Color scale used only for adjusted odds ratios demonstrating statistically significant associations.*

*Regression within each quartile included all four blood pressure ranges, operative duration (log transformed), and intraoperative estimated blood loss (log transformed).*

*AKI = acute kidney injury; MAP = mean arterial pressure*