

**Supplemental Digital Content 4: Multivariate Analysis – Systolic Pressure Variation
Manually-Entered Model (N = 1,323)**

	Estimate, mmHg (95% CI)	P-Value
BMI $\geq$ 30	-0.06 (-0.32, 0.21)	0.684
Median Tidal Volume >8 mL/kg IBW	0.46 (0.15, 0.77)	0.004
Positioning Non-supine for majority of measurement period	0.74 (0.46, 1.01)	<0.001
MAP $>20\%$ below baseline for majority of measurement period	-0.04 (-0.27, 0.18)	0.701
Crystalloid equivalent fluid volume received >1000 mL	0.21 (-0.07, 0.49)	0.149
Median PIP > 16 cm H ₂ O	0.43 (0.16, 0.70)	0.002
Median PEEP > 5 cm H ₂ O	-0.20 (-0.58, 0.17)	0.285
Age > 57 years	-0.10 (-0.34, 0.14)	0.412
Preoperative ACE inhibitor/ARB	0.21 (-0.16, 0.59)	0.267
Preoperative Beta Blocker	-0.33 (-0.66, -0.01)	0.044
Preoperative Diuretic	-0.48 (-0.92, -0.04)	0.034

CI = confidence interval; BMI = body mass index; IBW = ideal body weight; PIP = peak inspiratory pressure; PEEP = positive end-expiratory pressure; ACE = angiotensin converting enzyme; ARB = angiotensin receptor blocker; MAP = mean arterial pressure