

## **SUPPLEMENTAL MATERIAL**

### **SUPPLEMENTAL TABLES**

**Supplemental Table 1: Perioperative outcomes stratified by STAT categories**

	STAT Mortality Category				<i>P</i>
	1	2	3	4/5	
In-hospital mortality	0.2% (14)	0.6% (43)	1.5% (24)	3.2% (84)	<0.0001
Operative mortality	0.3% (18)	0.7% (49)	1.6% (25)	3.3% (88)	<0.0001
Cardiopulmonary bypass time (minutes)	70 (IQR: 49-99)	110 (IQR: 74-162)	122 (IQR: 80-192)	154 (IQR: 108-218)	<0.0001
Operating room time (hours)	4.7 (IQR: 3.5-5.9)	5.9 (IQR: 4.5-7.5)	6.9 (IQR: 5.6-8.9)	7.5 (IQR: 5.7-9.7)	<0.0001
Length of stay (days)	4.0 (IQR: 3.0-5.0)	5.0 (IQR: 3.0-6.0)	5.0 (IQR: 4.0-7.0)	9.0 (IQR: 5.0-15.0)	<0.0001
Major complication	3.1% (222)	6.1% (427)	7.6% (122)	14.9% (395)	<0.0001
<i>Arrhythmia requiring pacemaker</i>	0.8% (47)	1.9% (116)	1.3% (19)	3.4% (83)	<0.0001
<i>New mechanical circulatory support</i>	0.3% (16)	0.6% (38)	1.4% (20)	2.8% (69)	<0.0001
<i>Renal failure requiring permanent dialysis</i>	0.1% (5)	0.1% (8)	0.3% (5)	1.0% (24)	<0.0001
<i>Renal failure requiring temporary dialysis</i>	0.0% (1)	0.3% (16)	0.6% (9)	1.3% (33)	<0.0001
<i>Neurological deficit at discharge</i>	0.2% (12)	0.5% (33)	0.8% (11)	1.8% (44)	<0.0001
<i>Phrenic nerve injury or diaphragm hemiparesis</i>	0.1% (7)	0.3% (18)	0.7% (10)	0.6% (15)	<0.0001
<i>Reoperation for bleeding</i>	1.3% (78)	1.8% (110)	3.0% (44)	4.9% (120)	<0.0001
<i>Unplanned cardiac operation</i>	0.9% (62)	1.7% (115)	2.0% (32)	3.4% (91)	<0.0001
<i>Unplanned interventional catheterization procedure</i>	0.2% (11)	0.5% (38)	1.0% (16)	2.0% (54)	<0.0001
<i>Unplanned non-cardiovascular procedure</i>	0.3% (20)	0.8% (56)	0.9% (15)	2.7% (71)	<0.0001
Composite outcome	5.4% (383)	9.5% (660)	14.7% (236)	34.2% (906)	<0.0001
Prolonged length of stay	2.0% (145)	4.5% (313)	10.0% (161)	27.5% (728)	<0.0001
Wound infection or dehiscence	66 (0.9%)	72 (1.0%)	21 (1.3%)	53 (2.0%)	0.0001

**Supplemental Table 2: Multivariate model of operative mortality with BMI modeled as a continuous variable**

Risk Factor	Unadjusted		Adjusted	
	OR (95% CI)	p	OR (95% CI)	p
<b>CDC BMI (per 10% increase)</b>	<b>0.98 (0.94,1.03)</b>	<b>0.40</b>	<b>1.00 (0.96,1.04)</b>	<b>0.95</b>
Age (per 5 years)			1.13 (1.00,1.29)	0.06
Female sex			0.93 (0.68,1.27)	0.65
Race				
White			1	n/a
Black			1.40 (0.93,2.10)	0.11
Other			0.93 (0.61,1.41)	0.74
Previous cardiothoracic operations			1.50 (1.06,2.13)	0.02
Presence of non-cardiac anatomic abnormalities			1.53 (0.63,3.71)	0.34
Presence of Syndromes/chromosomal abnormalities			1.42 (0.96,2.10)	0.08
STAT mortality category				
STAT 1			1	n/a
STAT 2			2.59 (1.50,4.48)	0.0007
STAT 3			5.05 (2.70,9.46)	<.0001
STAT 4/5			9.98 (5.91,16.86)	<.0001
Preoperative mechanical circulatory support			1.24 (0.62,2.48)	0.55
Preoperative persistent shock			1.93 (0.82,4.57)	0.13
Preoperative mechanical ventilation			5.25 (2.95,9.35)	<0.0001
Preoperative renal failure or need for dialysis			2.02 (1.10,3.72)	0.02
Preoperative neurological deficit/stroke/intracranial hemorrhage			2.14 (1.25,3.68)	0.006
Preoperative diabetes mellitus			1.57 (0.57,4.32)	0.39
Any other preoperative factor			1.94 (1.39,2.70)	<0.0001