

**eTable 1.** Count and percentage of total for missing baseline data.

<i>Patient Characteristics</i>	Missing count (%)
Patient Age	0 (0%)
Female	0 (0%)
Body Mass Index (kg/m <sup>2</sup> )	9 (0.03%)
Cerebrovascular Disease	82 (0.2%)
Stroke	1089 (3.3%)
Chronic Lung Disease	688 (2.1%)
Hypertension	10 (0.03%)
Diabetes	11 (0.03%)
Peripheral Arterial Disease	46 (0.1%)
Renal Failure (Hemodialysis)	21 (0.06%)
NYHA Class	507 (1.5%)
Ejection Fraction (%)	711 (2.1%)
Left Main Disease > 50%	9711 (29.1%)
Number of Disease Vessels	115 (0.3%)
Last Preoperative Hematocrit (%)	0 (0%)
Predicted Risk of Mortality (%)	0 (0%)
<i>Operative Characteristics</i>	
Cardiopulmonary Bypass Support	1 (0.003%)
Operative Status	6 (0.02%)
Cardiopulmonary Bypass Time (min)	73 (0.2%)
Aortic Cross Clamp Time (min)	8 (0.02%)
Lowest Intraoperative Hematocrit (%)	12,181 (36.5%)
Internal Mammary Artery (IMA) Use	25 (0.07%)

**eTable 2:** Count and percentage of total for missing outcomes data.

Outcome	Missing count (%)
Intraoperative PRBC transfusion	18 (0.05%)
Postoperative PRBC transfusion	7 (0.02%)
Atrial Fibrillation	13 (0.04%)
Stroke	22 (0.07%)
Cardiac Arrest	15 (0.04%)
Pneumonia	42 (0.1%)
Prolonged Mechanical Ventilation	16 (0.05%)
Renal Failure	16 (0.05%)
Hemodialysis	20 (0.06%)
Operative Mortality	34 (0.1%)
In-hospital Mortality	0 (0%)

**eTable 3.** Intraoperative and postoperative transfusion frequencies.

PRBC Units Transfused	Intraoperative	Postoperative	Total
0	29090 (87.1%)	24729 (74.0%)	22912 (68.6%)
1	1655 (5.0%)	3106 (9.3%)	2950 (8.8%)
2	1759 (5.3%)	3004 (9.3%)	3457 (10.4%)
3	437 (1.3%)	1013 (3.0%)	1442 (4.3%)
4+	452 (1.4%)	1552 (4.7%)	2625 (7.9%)

PRBC = packed red blood cell

**eTable 4.** Risk-adjusted impact of preoperative hematocrit and packed red blood cell transfusion on postoperative mortality.

Hematocrit Model	AOR	95% C.I.	p-value
Centered Hct	0.97	0.96-0.99	0.0001
Logit(PROM)	2.64	2.46-2.83	<0.0001
Year	0.95	0.92-0.97	0.0001
Intercept	0.93	0.70-1.24	0.637
PRBC Model	AOR	95% C.I.	p-value
PRBC transfusion	4.25	3.47-5.19	<0.0001
Logit(PROM)	2.22	2.07-2.39	<0.0001
Year	0.98	0.95-1.01	0.179
Intercept	0.22	0.15-0.31	<0.0001

Hct = hematocrit; PROM = predicted risk of mortality; PRBC = packed red blood cell; AOR = adjusted odds ratio; C.I. = confidence interval. Each model additionally accounts for hospital as a random effect.

**eTable 5.** Risk-adjusted impact of preoperative hematocrit and packed red blood cell transfusion on renal failure.

Hematocrit Model	AOR	95% C.I.	p-value
Centered Hct	0.94	0.93-0.96	<0.0001
Logit(PRORF)	2.62	2.45-2.80	<0.0001
Year	0.89	0.87-0.92	<0.0001
Intercept	0.53	0.41-0.69	<0.0001
Transfusion Model	AOR	95% C.I.	p-value
PRBC transfusion	6.29	5.24-7.56	<0.0001
Logit(PRORF)	2.30	2.16-2.46	<0.0001
Year	0.93	0.90-0.95	<0.0001
Intercept	0.13	0.10-0.18	<0.0001

Hct = hematocrit; PRORF = predicted risk of renal failure; PRBC = packed red blood cell; AOR = adjusted odds ratio; C.I. = confidence interval. Each model additionally accounts for hospital as a random effect.

**eTable 6.** Risk-adjusted impact of preoperative hematocrit and packed red blood cell transfusion on stroke.

<b>Hematocrit Model</b>	<b>AOR</b>	<b>95% C.I.</b>	<b>p-value</b>
Centered Hct	1.02	1.00-1.04	0.062
Logit(PROs)	2.60	2.26-2.98	<0.0001
Year	0.94	0.90-0.97	0.0002
Intercept	0.89	0.49-1.62	0.695
<b>Transfusion Model</b>	<b>AOR</b>	<b>95% C.I.</b>	<b>p-value</b>
PRBC transfusion	2.35	1.90-2.92	<0.0001
Logit(PROs)	1.97	1.72-2.27	<0.0001
Year	0.96	0.93-1.00	0.034
Intercept	0.18	0.09-0.34	<0.001

Hct = hematocrit; PROs = predicted risk of stroke; PRBC = packed red blood cell; AOR = adjusted odds ratio; C.I. = confidence interval. Each model additionally accounts for hospital as a random effect.