

**Appendix: Supplementary tables [posted as supplied by author]**

**Table A.** Subgroup analyses, adjusted according to primary hierarchical logistic regression model. Values are presented as odds ratio (95% confidence interval). Only selected variables besides the primary analysis are included for clarity; the remainder of the odds ratios were substantially similar among the different models. A, excluding patients transfused two or more units of blood. Outcome is the composite outcome of stroke, MI, and VT/VF. B, including only day-of-surgery transfusions as the primary predictor, and excluding all patients who received a transfusion on postoperative day 1. C, limiting prediction to individual outcomes. D, primary hierarchical logistic regression model as presented in the manuscript, for comparison.

Population		A	B	C			D
Day-of-surgery transfusions only		Day-of-surgery transfusions only	Excluding transfusion of ≥2 units	All patients			All patients
Outcome		Composite	Composite	Stroke	MI	VT/VF	Composite
N (outcome)		7,680	7,828	2,879	1,139	4,269	8,044
RBC use	1 unit	<b>2.64 (2.05 to 3.39)</b>	<b>2.03 (1.55 to 2.66)</b>	<b>1.85 (1.30 to 2.62)</b>	<b>2.36 (1.37 to 4.04)</b>	<b>2.85 (2.17 to 3.74)</b>	<b>2.33 (1.90 to 2.86)</b>
	2 units	<b>2.31 (1.84 to 2.92)</b>	N/A	<b>1.76 (1.32 to 2.36)</b>	<b>2.98 (1.94 to 4.57)</b>	<b>2.76 (2.19 to 3.48)</b>	<b>2.37 (2.00 to 2.81)</b>
	3 units	<b>2.94 (1.89 to 4.57)</b>		<b>3.22 (1.92 to 5.37)</b>	<b>4.14 (1.99 to 8.58)</b>	<b>3.19 (2.05 to 4.95)</b>	<b>3.13 (2.28 to 4.31)</b>
	4+ units	<b>4.37 (3.18 to 6.01)</b>		<b>3.89 (2.55 to 5.92)</b>	<b>4.32 (2.29 to 8.15)</b>	<b>5.47 (4.05 to 7.39)</b>	<b>4.87 (3.86 to 6.14)</b>
Cerebrovascular disease		<b>8.16 (7.54 to 8.83)</b>	<b>8.17 (7.55 to 8.84)</b>	<b>27.2 (24.8 to 29.9)</b>	1.24 (0.85 to 1.80)	<b>1.60 (1.33 to 1.92)</b>	<b>8.20 (7.58 to 8.87)</b>
CAD or MI history		<b>2.04 (1.94 to 2.15)</b>	<b>2.05 (1.94 to 2.15)</b>	<b>1.13 (1.04 to 1.24)</b>	<b>5.82 (5.07 to 6.67)</b>	<b>2.33 (2.17 to 2.49)</b>	<b>2.05 (1.95 to 2.16)</b>

Abbreviations: MI, myocardial infarction. VT/VF, ventricular tachycardia or ventricular fibrillation. CAD, coronary artery disease. PNS, peripheral nervous system. Ortho, orthopedic surgery.

**Table B.** Sensitivity analysis to elucidate impact of unknown MSBOS values on propensity score model.

Variable	Hierarchical logistic regression	Propensity score matched					
		Without MSBOS		Including only patients with known MSBOS value		Reported propensity score model	
		Not transfused	Trans-fused	Not transfused	Trans-fused	Not transfused	Trans-fused
AUC ROC for propensity model	N/A	0.688		0.722		0.715	
Number of patients	1,583,819	41,421	41,421	37,178	37,178	41,421	41,421
Number of patients with stroke/MI	8,044	314 (0.76%)	496 (1.2%)	268 (0.72%)	414 (1.1%)	341 (0.82%)	496 (1.2%)
Adjusted odds ratios for stroke/MI**	1 unit	<b>2.33 (1.90 to 2.86)</b>	<b>2.05 (1.55 to 2.70)</b>	<b>1.85 (1.38 to 2.48)</b>		<b>1.71 (1.31 to 2.24)</b>	
	2 units	<b>2.37 (2.00 to 2.81)</b>	<b>2.04 (1.59 to 2.62)</b>	<b>1.94 (1.49 to 2.53)</b>		<b>1.73 (1.36 to 2.20)</b>	
	3 units	<b>3.13 (2.28 to 4.31)</b>	<b>2.64 (1.83 to 3.81)</b>	<b>2.48 (1.66 to 3.69)</b>		<b>2.24 (1.56 to 3.22)</b>	
	4+ units	<b>4.87 (3.86 to 6.14)</b>	<b>3.70 (2.74 to 4.99)</b>	<b>3.40 (2.44 to 4.74)</b>		<b>3.16 (2.36 to 4.23)</b>	

Univariate (chi squared) p-value comparing stroke/MI rate between those transfused and those not transfused was <0.001 for all three propensity score models. Abbreviations: MSBOS, maximum surgical blood ordering schedule. AUC ROC, area under the curve of the receiver operating characteristic curve. MI, myocardial infarction.