

Table 3S: Prediction models for severe or massive perioperative bleeding in cardiac surgery, found in the literature.

Variable	Karkouti et al ⁶		LVBT ²¹		Williams et al ⁸		Bedside Risk Score (BRS) – BRISc ²¹	
		points		Odds ratio		Odds ratio		points
Age	70-80 years >80 years	0.5 1	Age per 10 yr	1.22	-	-	60-69 years 70-79 years 80-89 years 90-99 years	3 6 9 12
Somatometric data	BSA: 1.5-1.9 m ² BSA <1.5 m ²	0.5 1	Weight per 10 kg	0.86	-	-	BSA: <1.5 m ² BSA: 1.5-1.59 m ² BSA: 1.6-1.69 m ² BSA: 1.7-1.79 m ² BSA: 1.80-1.89 m ² BSA: 1.90-1.99 m ² BSA: 2.00-2.09 m ² BSA: 2.10-2.19 m ² BSA: 2.20-2.29 m ² BSA: 2.30-2.39 m ² BSA: 2.40-2.49 m ² BSA: 2.50-2.59 m ² BSA: ≥2.60 m ²	12 11 10 9 8 7 6 5 4 3 2 1 0
Preoperative shock	Preoperative shock state	1	IABP used preoperatively	1.94	-	-	IABP or inotropes	4
Preoperative platelet count	PLT 100-150 x 10 ⁹ /L PLT <100 x 10 ⁹ /L	0.5 2			-	-	ADP _i (ADP inhibitors) without GPIIb/IIIa ADP _i + GPIIb/IIIa	6 10
Preoperative Hb	Hb 11-13 g/dL Hb <11 g/dL	0.5 1	Preoperative Hb in g/dL	0.71	Preoperative hemoglobin (per 1-g/dL increment)	0.543	-	-
Type of surgery	complex procedure	0.5	Major aortic procedure CABG only Valve only Other only CABG + valve CABG + other Valve + other CABG + valve + other	2.61 1 1.17 1.66 2.73 2.07 1.52 2.43	-	-	-	-
Status of operation	Non-elective surgery	0.5	Urgency × MI: No MI + not urgent MI + urgent MI + not urgent No MI + urgent	1 1.84 1.90 1.69	Emergency	4.02	Emergency (no resuscitation) Emergency – salvage (with resuscitation)	6 13
Surgeon	High blood loss surgeon	0.5			-	-		
Previous cardiac surgery	Re-do surgery	1	Previous cardiac surgery	2.25	-	-	Previous cardiovascular interventions	5
DHCA duration	Circulatory arrest: 0-30 min Circulatory arrest: > 30 min	0.5 2			-	-		
Duration of CPB	Duration: 120-180 min Duration: > 180 min	1 2.5	CPB used at any point	3.37	Duration of CPB (per 10-min increase)	1.15		
Lowest Hct in CPB	Hct: 18-22% Hct: <18%	0.5 1			-	-		
Gender	-	-	Female	1.12	-	-	White race Non-white race Male gender Female gender	0 2 5 0
Renal function	-	-	Chronic dialysis (Serum creatinine in Mmoles/L)/100	0.29 1.97	-	-	Serum Creatinine: < 1 mg/dL Serum Creatinine: 1-1.9 Serum Creatinine: 2.0-2.9 Serum Creatinine: 3.0-3.9 Serum Creatinine: 4.0-4.9 Serum Creatinine: ≥ 5.0 No Dialysis On dialysis	0 4 8 12 16 20 0 11
Previous neurological accident	-	-	Previous stroke	1.13	-	-		
Diabetes mellitus	-	-	Diabetic on medication	1.22	-	-	No Diabetes Mellitus Diabetes Mellitus	2 0
LV ejection fraction	-	-	EF category: Good (> 50%) Moderate (30 - 49%) Poor (< 30%)	1 1.18 1.05	-	-		
Preoperative MI	-	-	MI within 30 days from operation + urgent status	See: status of operation	-	-	Diseased vessels < 3 Diseased vessels ≥ 3	0 2
Total score		0-14						
Predictions	Score <2.5, Low risk (5%) Score: 2.5-4.5, Intermediate risk (27%) Score >4.5: High risk (58%)		Logistic		Logistic		Risk for re-operation BRS: 0-12 -> 1.25% approx. BRS: 13-14 -> 1.6% approx. BRS: 15 -> 1.7% approx. BRS: 16-17 -> 1.8% approx. BRS: 18 -> 1.9% approx. BRS: 19 -> 1.95% approx. BRS: 20 -> 2% approx. BRS: 21 -> 2.1% approx.	BRS: 22 -> 2.25% approx. BRS: 23 -> 2.4% approx. BRS: 24 -> 2.65% approx. BRS: 25-26 -> 2.8% approx. BRS: 27 -> 3% approx. BRS: 28-30 -> 3.6% approx. BRS: 31-34 -> 4.9% approx.

BSA: Body Surface Area, IABP: Intra-Aortic Balloon Pump, PLT: Platelets, ADP: Adenosine Di-Phosphate, GPIIb-IIIa: Glyco-Protein IIb-IIIa, Hb: Hemoglobin, CABG: Coronary Artery Bypass Grafting, MI: Myocardial Infarction, CPB: Cardio Pulmonary Bypass, Hct: Hematocrit, LV: Left Ventricle. EF: Ejection Fraction.