

**Supplementary Table S1.** Predictors associated with composite 30-day major postoperative complications in patients undergoing isolated tricuspid valve surgery.

Variables	Univariate	Multivariable	
	Hazard Ratio (95% CI)	<i>P</i> value	Hazard Ratio (95% CI) <i>P</i> value
<b>SII (<math>\geq 1423.12 \times 10^9/L</math>)</b>	4.96 (2.73–9.01)	<b>0.000</b>	2.63 (1.18–5.84) <b>0.018</b>
Sex (female)	1.06 (0.67–1.66)	0.809	
Age, yr	1.03 (1.01–1.05)	<b>0.003</b>	
Body mass index, kg/m <sup>2</sup>	0.96 (0.90–1.04)	0.328	
Diabetes	1.71 (1.01–2.88)	<b>0.046</b>	
Hypertension	1.63 (1.05–2.54)	<b>0.029</b>	
NYHA	1.73 (1.12–2.67)	<b>0.014</b>	
EuroSCORE	1.06 (1.03–1.10)	<b>0.001</b>	
Preoperative hematocrit, %	0.93 (0.88–0.96)	<b>0.001</b>	
Total bilirubin, mg/dl	1.06 (0.70–1.60)	0.790	
Serum albumin, g/dL	0.43 (0.29–0.62)	<b>0.001</b>	
Creatinine, mg/dL	0.96 (0.76–1.21)	0.718	
AST, IU/L	1.00 (0.98–1.03)	0.920	
ALT, IU/L	0.98 (0.96–1.01)	0.152	
ALP, IU/L	1.01 (1.00–1.01)	<b>0.020</b>	
Uric acid, mg/dL	1.09 (0.98–1.20)	0.095	
BNP, pg/mL	1.00 (1.00–1.01)	0.780	
CRP	1.39 (1.18–1.64)	<b>0.001</b>	
PLR	1.04 (1.03–1.06)	<b>0.001</b>	
NLR	1.33 (1.24–1.42)	<b>0.001</b>	
LVEF, %	0.98 (0.98–1.01)	0.106	

RV dysfunction	1.74 (1.10–2.73)	<b>0.017</b>
PASP, mmHg	0.99 (0.98–1.01)	0.293
Use of ACEI/ARB	1.82 (1.17–2.81)	<b>0.007</b>
Use of $\beta$ -blocker	1.74 (1.11–2.71)	<b>0.015</b>
Use of CCB	2.03 (1.30–3.17)	<b>0.002</b>
Use of Digoxin	1.34 (0.85–2.12)	0.210
Use of Diuretics	1.34 (1.85–2.16)	0.210

**Supplementary Table S2.** Predictors associated with composite 30-day major postoperative complications in patients undergoing isolated tricuspid valve surgery.

Variables	Univariate		Multivariable	
	Hazard Ratio (95% CI)	<i>P</i> value	Hazard Ratio (95% CI)	<i>P</i> value
<b>SII (<math>\geq 878.06 \times 10^9/L</math>)</b>	4.91 (2.95–8.16)	<b>0.000</b>	2.19 (1.05–4.54)	<b>0.036</b>
Sex (female)	1.06 (0.67–1.66)	0.809		
Age, yr	1.03 (1.01–1.05)	<b>0.003</b>		
Body mass index, kg/m <sup>2</sup>	0.96 (0.90–1.04)	0.328		
Diabetes	1.71 (1.01–2.88)	<b>0.046</b>		
Hypertension	1.63 (1.05–2.54)	<b>0.029</b>		
NYHA	1.73 (1.12–2.67)	<b>0.014</b>		
EuroSCORE	1.06 (1.03–1.10)	<b>0.001</b>		
Preoperative hematocrit, %	0.93 (0.88–0.96)	<b>0.001</b>		
Total bilirubin, mg/dl	1.06 (0.70–1.60)	0.790		
Serum albumin, g/dL	0.43 (0.29–0.62)	<b>0.001</b>		
Creatinine, mg/dL	0.96 (0.76–1.21)	0.718		
AST, IU/L	1.00 (0.98–1.03)	0.920		

ALT, IU/L	0.98 (0.96–1.01)	0.152
ALP, IU/L	1.01 (1.00–1.01)	<b>0.020</b>
Uric acid, mg/dL	1.09 (0.98–1.20)	0.095
BNP, pg/mL	1.00 (1.00–1.01)	0.780
CRP	1.39 (1.18–1.64)	<b>0.001</b>
PLR	1.04 (1.03–1.06)	<b>0.001</b>
NLR	1.33 (1.24–1.42)	<b>0.001</b>
LVEF, %	0.98 (0.98–1.01)	0.106
RV dysfunction	1.74 (1.10–2.73)	<b>0.017</b>
PASP, mmHg	0.99 (0.98–1.01)	0.293
Use of ACEI/ARB	1.82 (1.17–2.81)	<b>0.007</b>
Use of $\beta$ -blocker	1.74 (1.11–2.71)	<b>0.015</b>
Use of CCB	2.03 (1.30–3.17)	<b>0.002</b>
Use of Digoxin	1.34 (0.85–2.12)	0.210
Use of Diuretics	1.34 (1.85–2.16)	0.210

**Supplementary Table S3.** Predictors associated with composite 30-day major postoperative complications in patients undergoing isolated tricuspid valve surgery.

Variables	Univariate		Multivariable	
	Hazard Ratio (95% CI)	<i>P</i> value	Hazard Ratio (95% CI)	<i>P</i> value
<b>SII (<math>\geq 750 \times 10^9/L</math>)</b>	5.34 (3.37–8.47)	<b>0.000</b>	2.81 (1.37–5.76)	<b>0.005</b>
Sex (female)	1.06 (0.67–1.66)	0.809		
Age, yr	1.03 (1.01–1.05)	<b>0.003</b>		
Body mass index, kg/m <sup>2</sup>	0.97 (0.90–1.04)	0.328		
Diabetes	1.71 (1.01–2.88)	<b>0.046</b>		

Hypertension	1.63 (1.05–2.54)	<b>0.029</b>
NYHA	1.73 (1.12–2.67)	<b>0.014</b>
EuroSCORE	1.06 (1.03–1.10)	<b>0.001</b>
Preoperative hematocrit, %	0.93 (0.90–0.96)	<b>0.001</b>
Total bilirubin, mg/dl	1.17 (0.83–1.66)	0.365
Serum albumin, g/dL	0.52 (0.37–0.74)	<b>0.001</b>
Creatinine, mg/dL	0.96 (0.80–1.17)	0.737
AST, IU/L	1.00 (0.98–1.03)	0.920
ALT, IU/L	0.98 (0.96–1.01)	0.152
ALP, IU/L	1.05 (1.00–1.01)	<b>0.020</b>
Uric acid, mg/dL	1.09 (0.99–1.20)	0.095
BNP, pg/mL	1.00 (1.00–1.01)	0.200
CRP	1.39 (1.18–1.64)	<b>0.001</b>
PLR	1.04 (1.03–1.06)	<b>0.001</b>
NLR	1.33 (1.24–1.42)	<b>0.001</b>
LVEF, %	0.98 (0.95–1.01)	0.106
RV dysfunction	1.74 (1.10–2.73)	<b>0.017</b>
PASP, mmHg	0.99 (0.98–1.01)	0.293
Use of ACEI/ARB	1.82 (1.17–2.81)	<b>0.007</b>
Use of $\beta$ -blocker	1.74 (1.11–2.71)	<b>0.015</b>
Use of CCB	2.03 (1.30–3.17)	<b>0.002</b>
Use of Digoxin	1.34 (0.85–2.12)	0.210
Use of Diuretics	1.34 (1.85–2.16)	0.210

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**Supplementary Table S4.** Predictors associated with composite 30-day major postoperative complications in patients undergoing isolated tricuspid valve surgery.

Variables	Univariate	Multivariable	
	Hazard Ratio (95% CI)	<i>P</i> value	Hazard Ratio (95% CI) <i>P</i> value
<b>SII (<math>\geq 694.03 \times 10^9/L</math>)</b>	5.63 (3.60–8.80)	<b>0.000</b>	3.97 (1.72–9.19) <b>0.001</b>
Sex (female)	1.06 (0.67–1.66)	0.809	
Age, yr	1.03 (1.01–1.05)	<b>0.003</b>	
Body mass index, kg/m <sup>2</sup>	0.97 (0.90–1.04)	0.328	
Diabetes	1.71 (1.01–2.88)	<b>0.046</b>	
Hypertension	1.63 (1.05–2.54)	<b>0.029</b>	
NYHA	1.73 (1.12–2.67)	<b>0.014</b>	
EuroSCORE	1.06 (1.03–1.10)	<b>0.001</b>	
Preoperative hematocrit, %	0.93 (0.90–0.96)	<b>0.001</b>	
Total bilirubin, mg/dl	1.17 (0.83–1.66)	0.365	
Serum albumin, g/dL	0.52 (0.37–0.74)	<b>0.001</b>	
Creatinine, mg/dL	0.96 (0.80–1.17)	0.737	
AST, IU/L	1.00 (0.98–1.03)	0.920	
ALT, IU/L	0.98 (0.96–1.01)	0.152	
ALP, IU/L	1.05 (1.00–1.01)	<b>0.020</b>	
Uric acid, mg/dL	1.09 (0.99–1.20)	0.095	
BNP, pg/mL	1.00 (1.00–1.01)	0.200	
CRP	1.39 (1.18–1.64)	<b>0.001</b>	
PLR	1.04 (1.03–1.06)	<b>0.001</b>	
NLR	1.33 (1.24–1.42)	<b>0.001</b>	
LVEF, %	0.98 (0.95–1.01)	0.106	

RV dysfunction	1.74 (1.10–2.73)	<b>0.017</b>
PASP, mmHg	0.99 (0.98–1.01)	0.293
Use of ACEI/ARB	1.82 (1.17–2.81)	<b>0.007</b>
Use of $\beta$ -blocker	1.74 (1.11–2.71)	<b>0.015</b>
Use of CCB	2.03 (1.30–3.17)	<b>0.002</b>
Use of Digoxin	1.34 (0.85–2.12)	0.210
Use of Diuretics	1.34 (1.85–2.16)	0.210

**Supplementary Table S5.** Predictors associated with composite 30-day major postoperative complications in patients undergoing isolated tricuspid valve surgery.

Variables	Univariate		Multivariable	
	Hazard Ratio (95% CI)	<i>P</i> value	Hazard Ratio (95% CI)	<i>P</i> value
<b>SII (<math>\geq 551 \times 10^9/L</math>)</b>	4.28 (2.76–6.62)	<b>0.000</b>	2.12 (1.11–4.08)	<b>0.024</b>
Sex (female)	1.06 (0.67–1.66)	0.809		
Age, yr	1.03 (1.01–1.05)	<b>0.003</b>		
Body mass index, kg/m <sup>2</sup>	0.96 (0.90–1.04)	0.328		
Diabetes	1.71 (1.01–2.88)	<b>0.046</b>		
Hypertension	1.63 (1.05–2.54)	<b>0.029</b>		
NYHA	1.73 (1.12–2.67)	<b>0.014</b>		
EuroSCORE	1.06 (1.03–1.10)	<b>0.001</b>		
Preoperative hematocrit, %	0.93 (0.88–0.96)	<b>0.001</b>		
Total bilirubin, mg/dl	1.06 (0.70–1.60)	0.790		
Serum albumin, g/dL	0.43 (0.29–0.62)	<b>0.001</b>		
Creatinine, mg/dL	0.96 (0.76–1.21)	0.718		
AST, IU/L	1.00 (0.98–1.03)	0.920		

ALT, IU/L	0.98 (0.96–1.01)	0.152
ALP, IU/L	1.01 (1.00–1.01)	<b>0.020</b>
Uric acid, mg/dL	1.09 (0.98–1.20)	0.095
BNP, pg/mL	1.00 (1.00–1.01)	0.780
CRP	1.39 (1.18–1.64)	<b>0.001</b>
PLR	1.04 (1.03–1.06)	<b>0.001</b>
NLR	1.33 (1.24–1.42)	<b>0.001</b>
LVEF, %	0.98 (0.98–1.01)	0.106
RV dysfunction	1.74 (1.10–2.73)	<b>0.017</b>
PASP, mmHg	0.99 (0.98–1.01)	0.293
Use of ACEI/ARB	1.82 (1.17–2.81)	<b>0.007</b>
Use of $\beta$ -blocker	1.74 (1.11–2.71)	<b>0.015</b>
Use of CCB	2.03 (1.30–3.17)	<b>0.002</b>
Use of Digoxin	1.34 (0.85–2.12)	0.210
Use of Diuretics	1.34 (1.85–2.16)	0.210

**Supplementary Table S6.** Predictors associated with composite 30-day major postoperative complications in patients undergoing isolated tricuspid valve surgery.

Variables	Univariate		Multivariable	
	Hazard Ratio (95% CI)	<i>P</i> value	Hazard Ratio (95% CI)	<i>P</i> value
<b>SII (<math>\geq 326.26 \times 10^9/L</math>, median)</b>	2.54 (1.58–4.09)	<b>0.000</b>	2.13 (1.17–3.89)	<b>0.014</b>
Sex (female)	1.06 (0.67–1.66)	0.809		
Age, yr	1.03 (1.01–1.05)	<b>0.003</b>		
Body mass index, kg/m <sup>2</sup>	0.96 (0.90–1.04)	0.328		
Diabetes	1.71 (1.01–2.88)	<b>0.046</b>		

Hypertension	1.63 (1.05–2.54)	<b>0.029</b>
NYHA	1.73 (1.12–2.67)	<b>0.014</b>
EuroSCORE	1.06 (1.03–1.10)	<b>0.001</b>
Preoperative hematocrit, %	0.93 (0.88–0.96)	<b>0.001</b>
Total bilirubin, mg/dl	1.06 (0.70–1.60)	0.790
Serum albumin, g/dL	0.43 (0.29–0.62)	<b>0.001</b>
Creatinine, mg/dL	0.96 (0.76–1.21)	0.718
AST, IU/L	1.00 (0.98–1.03)	0.920
ALT, IU/L	0.98 (0.96–1.01)	0.152
ALP, IU/L	1.01 (1.00–1.01)	<b>0.020</b>
Uric acid, mg/dL	1.09 (0.98–1.20)	0.095
BNP, pg/mL	1.00 (1.00–1.01)	0.780
CRP	1.39 (1.18–1.64)	<b>0.001</b>
PLR	1.04 (1.03–1.06)	<b>0.001</b>
NLR	1.33 (1.24–1.42)	<b>0.001</b>
LVEF, %	0.98 (0.98–1.01)	0.106
RV dysfunction	1.74 (1.10–2.73)	<b>0.017</b>
PASP, mmHg	0.99 (0.98–1.01)	0.293
Use of ACEI/ARB	1.82 (1.17–2.81)	<b>0.007</b>
Use of $\beta$ -blocker	1.74 (1.11–2.71)	<b>0.015</b>
Use of CCB	2.03 (1.30–3.17)	<b>0.002</b>
Use of Digoxin	1.34 (0.85–2.12)	0.210
Use of Diuretics	1.34 (1.85–2.16)	0.210

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