Cardiac surgery	Before Matching		After Matching			
	Control	IAD	Control	IAD	Risk Difference	P-value
Number	30,811	1,622	1,233	1,233		
RBC transfusion rate, %	76.7	40.6	60.6	38.4	-22.2	<0.001
FFP trans fusion rate, %	71.8	37.3	53.1	34.4	-18.7	<0.001
PLT transfusion rate, %	42.9	19.1	27.7	18.6	-9.1	<0.001

Aortic surgery	Before Matching		After Matching			
	Control	IAD	Control	IAD	Risk Difference	P-value
Number	3,983	284	197	197		
RBC transfusion rate, %	94.8	83.1	91.4	83.8	-7.6	0.037
FFP trans fusion rate, %	96	81.7	91.9	82.7	-9.2	0.016
PLT transfusion rate, %	88.8	78.2	76.6	76.1	-0.5	1

We evaluated the association between Intra-operative autologous blood donation (IAD) and reduction in perioperative blood transfusion in cardiovascular surgeries using administrative data. 32,433 cardiac surgery cases and 4,267 aortic surgery cases were included in this study, and multilevel propensity score matching was performed. The results showed that transfusion rate and volume could be reduced in IAD group in Japanese patients.