

Figure S1 Study flow chart.

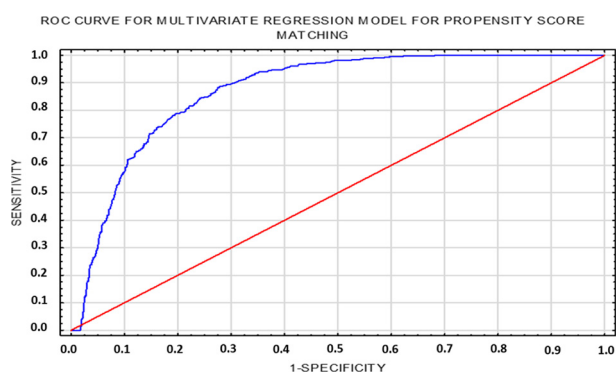


Figure S2 Roc curve for multivariate regression model for propensity score matching.

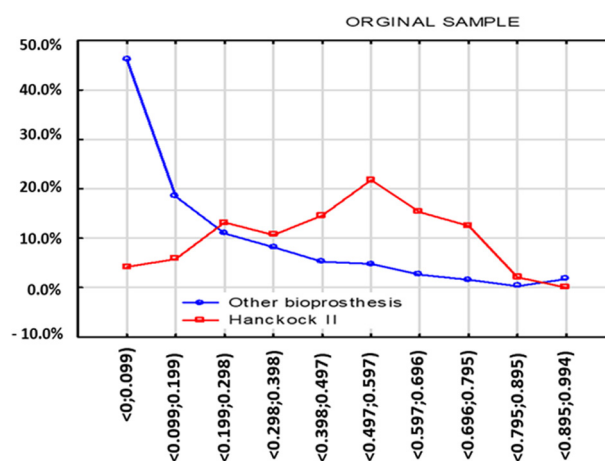


Figure S3 Unmatched model for sensitivity analysis for 5-year mortality.

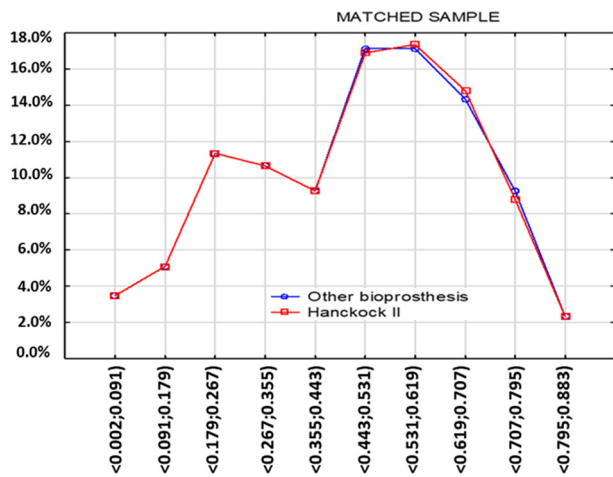


Figure S4 Matched model for sensitivity analysis for 5-year mortality.

Table S1 Sensitivity analysis for 5-year mortality: Hancock II [1] *vs.* Trifecta/Perimount/Magna matched for age, gender, EuroSCORE II, and postoperative iEOA [2]

Effect	DF	Wald's statistic	P
Constant	1	27.8157	0.000000
Gender	1	0.0913	0.762586
Age	1	139.0341	0.000000
iEOA	1	207.2948	0.000000
EuroSCORE II	1	7.4532	0.006333

Model statistics: AUC 0.872 ± 0.01 ; Hosmer-Lemeshow test $P=0.086$. iEOA, indexed effective orifice area; AUC, area under the curve.

Table S2 Paired analysis: Hancock II *vs.* Trifecta/Perimount/Magna matched for age, gender, EuroSCORE II [1], and postoperative iEOA [2]

	Hancock II <i>vs.</i> Trifecta/Perimount/Magna matched for age, gender, EuroSCORE II [1]		Hancock II <i>vs.</i> Trifecta/Perimount/Magna matched for postoperative iEOA [2]	
	Chi-square	P	Chi-square	P
Log-rank (Mantel-Cox)				
1			1.741	0.187
2	1.741	0.187		
Breslow (generalized Wilcoxon)				
1			2.563	0.109
2	2.563	0.109		
Tarone-Ware				
1			2.152	0.142
2	2.152	0.142		

iEOA, indexed effective orifice area.

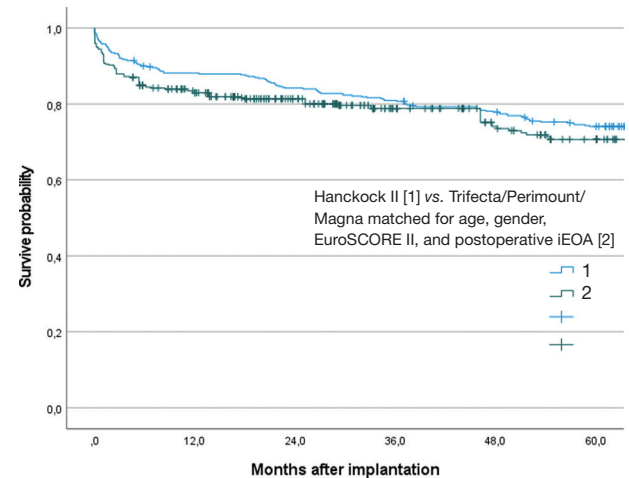


Figure S5 Mid-term survival probability after aortic valve replacement: Hancock II [1] *vs.* Trifecta/Perimount/Magna [2] matched for age, gender, EuroSCORE II, and postoperative iEOA.