

Table S1 Distribution of the Models of Aortic Valve Prosthesis Used Between the Traditional and Y-Incision Aortic Annular Enlargement Technique Groups

Prosthesis Model	Traditional (n=103)	Y-Incision (n=103)
Mechanical		
Carbomedics Top Hat		
Size 27	1 (1.0)	6 (5.8)
On-X Aortic Valve		
Size 23	2 (1.9)	1 (1.0)
Size 25	2 (1.9)	1 (1.0)
Size 29	0 (0)	1 (1.0)
St Jude Medical Masters/Regent		
Size 19	1 (1.0)	0 (0)
Size 21	4 (3.9)	0 (0)
Size 23	2 (1.9)	1 (1.0)
Size 25	0 (0)	0 (0)
Size 27	0 (0)	3 (2.9)
Bioprosthetic		
Edwards Inspiris Resilia		
Size 21	3 (2.9)	0 (0)
Size 23	9 (8.7)	4 (3.9)
Size 25	1 (1.0)	0 (0)
Edwards Magna Ease		
Size 19	1 (1.0)	0 (0)
Size 21	9 (8.7)	0 (0)
Size 23	27 (26)	3 (2.9)
Size 25	25 (24)	17 (17)
Size 27	4 (3.9)	23 (22)
Size 29	2 (1.9)	30 (29)
Medtronic Aavalus		
Size 23	3 (2.9)	0 (0)
Size 25	5 (4.9)	3 (2.9)
Size 27	2 (1.9)	10 (9.7)

Table S2 Causes of death

Days after surgery	Group	Cause of death
Operative deaths		
8	Traditional	Exacerbation of pre-existing right heart failure
13	Traditional	Septic shock with multi-organ failure
22	Traditional	Septic shock with multi-organ failure
31	Traditional	Septic shock with multi-organ failure
43	Traditional	Septic shock with multi-organ failure
2	Y-Incision	Fatal cardiac arrhythmia
5	Y-Incision	Septic shock with multi-organ failure
54	Y-Incision	Septic shock with multi-organ failure
Late deaths		
994	Traditional	Unknown
1494	Traditional	Unknown