

Table 1. Study characteristics

		Pooled data	Range	Included studies (N)
Total patient number		5227	50 - 421	31
Surgical period		1992 - 2014		30
Mean age		65.4 years	47 – 73 years	30
Gender	Male	67.6%	30 – 85%	31
Etiology	Valve pathology			18
	Aortic stenosis	49.8%	3 – 100%	
	Aortic regurgitation	37.7%	0 – 92%	
	Stenosis & regurgitation	17.9%		
	Connective tissue disease	2.9%	0 – 32%	13
	Bicuspid aortic valve	28.0%	0 – 42.6%	14
Prior surgery	Cardiac	14.2%	0 – 39%	23
Other indications	Acute type A dissection	7.2%	0 – 24%	20
	Acute endocarditis	9.1%	1 – 11%	9
Valve type				
	Stentless	99.7%	95 – 100%	23
	Stented	92.8%	84 – 100%	5
	Mixed	50%	50 – 50%	2
Concomitant procedures	Aortic hemiarch repair	18.2%	0 – 44%	19
	Aortic arch repair	5.9%	3 – 21%	19
	CABG	28.9%	0 – 44%	19
	Mitral valve surgery	3.3%	0 – 17%	19
Re-exploration for bleeding		10.8%	1 – 28%	14
Early mortality		5.5%	0 – 16%	31

Causes of early mortality *	<i>Low cardiac output</i>	22.7%	1 – 44%
	<i>Multi-organ failure</i>	18.1%	13 – 100%
	<i>Hemorrhage</i>	7.5%	0 – 13%
	<i>Sepsis</i>	5.0%	6 – 25%
	<i>Myocardial infarction</i>	4.0%	0 – 100%
	<i>Unknown / unreported</i>	9.6%	10 – 55%

Table 1. Pooled pre-operative and peri-operative characteristics. CABG indicates coronary artery bypass grafting. * major causes of early mortality. Data indicate the pooled mean % of occurrence and the pooled range of occurrence. Included studies are publications reporting on the specific characteristic. The percentages mentioned are means of the reported variables in the studies that provided these variable numbers. The range indicates the lowest and the highest reported % of that specific variable within all studies, and N indicates the number of studies reporting on that specific variable.

