SUPPLEMENTAL MATERIALS

The early and long-term outcomes of coronary artery bypass grafting added to aortic valve replacement compared to isolated aortic valve replacement in elderly patients: A systematic review and meta-analysis.

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PRISMA 2009 Flow Diagram



Figure 1. Study selection according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), presented as a flow diagram.

Abel 2013 0.70 0.66 - 0.75 0.000 74120 Argawal 2015 0.64 0.56 - 0.74 0.000 12708 Bose 2007 0.70 0.66 - 0.75 0.000 74432 Brunvand 2001 0.70 0.66 - 0.75 0.000 74406 Budniak 2014 0.70 0.66 - 0.75 0.000 74460 Chiappini 2004 0.71 0.66 - 0.75 0.000 74437 Davis 2014 0.70 0.66 - 0.75 0.000 74437 Dell'Amore 2011 0.70 0.66 - 0.75 0.000 74215 Dimagli 2020 0.71 0.66 - 0.75 0.000 74386 Ennker 2018 0.71 0.66 - 0.75 0.000 74386 Floothi 2008 0.70 0.66 - 0.75 0.000 74386 Florath 2010 0.70 0.66 - 0.75 0.000 74308 Florath 2010 0.70 0.66 - 0.75 0.000 74308 Formica 2020 0.70 0.66 - 0.75 0.000 74307 Folkmann 2010 0.70 0.66 - 0.75 0.000 74383
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Huber 2007 0.70 0.66 - 0.75 0.000 74425
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Kesavan 2011 0.70 0.66 - 0.75 0.000 74227
Kolh 2007 0.71 0.66 - 0.76 0.000 74280
Krane 2011 0.70 0.66 - 0.75 0.000 73900
Kuo 2017 0.70 0.66 - 0.75 0.000 74122
Lam 2004 0.70 0.66 - 0.75 0.000 74442
Langanay 2012 0.71 0.66 - 0.76 0.000 73355
Likosky 2009 0.70 0.66 - 0.75 0.000 73110
Litmathe 2003 0.70 0.66 - 0.75 0.000 74217
Maillet 2009 0.71 0.66 - 0.75 0.000 74416
Maslow 2010 0.70 0.66 - 0.75 0.000 74239
Melby 2007 0.70 0.66 - 0.75 0.000 74255
Mitchell 2013 0.70 0.66 - 0.75 0.000 74433
Ngaage 2007 0.70 0.66 - 0.75 0.000 74313
Nikolaidis 2011 0.70 0.66 - 0.75 0.000 74155
Raja 2003 0.70 0.66 - 0.75 0.000 74318
Roberts 2007 0.70 0.66 - 0.75 0.000 74304
Salsano 2016 0.70 0.66 - 0.75 0.000 74445
Sasaki 2013 0.70 0.66 - 0.75 0.000 74343
Takagi 2020 0.70 0.66 - 0.75 0.000 74471
Thulin 2000 0.70 0.66 - 0.75 0.000 74281
Unic 2005 0.70 0.66 - 0.75 0.000 74260
Urso 2007 0.70 0.66 - 0.75 0.000 74400
Wang 2016 0.70 0.66 - 0.75 0.000 74303
Yamane 2011 0.70 0.66 - 0.75 0.000 74376

Figure 2A. Forest plot of the leave-one-out analysis comparing the early-term effect of coronary artery bypass grafting combined with aortic valve replacement versus isolated aortic valve replacement . *ES: odd ratio*.

	ES	95% CI	Sig.	Ν	
Brunvand 2001	0.95	0.87 - 1.03	0.234	6770	→
Chiappini 2004	0.95	0.87 - 1.04	0.266	6749	—
Dell'Amore 2011	0.96	0.88 - 1.04	0.298	6579	\
Ennker 2018	0.95	0.86 - 1.04	0.260	6158	♦
Florath 2010	0.98	0.91 - 1.05	0.575	6371	\
Folkmann 2010	0.95	0.87 - 1.04	0.266	6710	\
Formica 2020	0.95	0.87 - 1.04	0.267	6462	
Grau 2014	0.95	0.87 - 1.03	0.234	6671	\
Huber 2007	0.95	0.88 - 1.04	0.273	6789	
Kesavan 2011	0.95	0.87 - 1.04	0.290	6591	—
Krane 2011	0.97	0.90 - 1.05	0.491	6264	\
Kuo 2017	0.94	0.87 - 1.02	0.135	6486	\
Likosky 2009	0.94	0.85 - 1.03	0.168	5474	♦
Maslow 2010	0.94	0.86 - 1.03	0.178	6603	→
Melby 2007	0.95	0.88 - 1.01	0.116	6619	\
Nikolaidis 2011	0.96	0.88 - 1.04	0.314	6519	•
Roberts 2007	0.94	0.87 - 1.02	0.132	6668	\
Salsano 2016	0.95	0.87 - 1.04	0.262	6807	
Sasaki 2013	0.95	0.88 - 1.04	0.274	6707	
Takagi 2020	0.95	0.88 - 1.03	0.252	6835	\
Thulin 2000	0.95	0.87 - 1.03	0.224	6645	♦
Wang 2016	0.95	0.87 - 1.04	0.268	6667	→
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Figure 2B. Forest plot of the leave-one-out analysis comparing the long-term effect of coronary artery bypass grafting combined with aortic valve replacement versus isolated aortic valve replacement . *ES: odd ratio*.



Funnel plots for pubblication bias assesment.

A. No publication bias was reported related to the early mortality. Egger's linear regression test: p=0.06; Begg and Mazumdar's test: p=0.15.



B. No publication bias was reported related to the long-term survival. Egger's linear regression test: p = 0.27; Begg and Mazumdar's linear regression test: p = 0.19.



C. No publication bias was reported related to long-term survival of studies reporting a maximum follow-up of ten years or more. Egger's linear regression test: p=0.83; Begg and Mazumdar's test: p=0.90.



D. No publication bias was reported related to postoperative atrial fibrillation. Egger's linear regression test: p=0.96; Begg and Mazumdar's test: p=0.58.



E. No publication bias was reported related to postoperative acute renal failure. Egger's linear regression test: p=0.33; Begg and Mazumdar's test: p=0.29.



F. No publication bias was reported related to need for postoperative dyalisis. Egger's linear regression test: p = 0.53; Begg and Mazumdar's test: p > 0.99.



G. No publication bias was reported related to postoperative intra-aortic balloon pump usage. Egger's linear regression test: p = 0.67; Begg and Mazumdar's test: p = 0.88.



H. No publication bias was reported related to length of hospital stay. Egger's linear regression test: p=0.42; Begg and Mazumdar's test: p=0.32.



I. No publication bias was reported related to prolonged mechanical ventilation (> 48 hours). Egger's linear regression test: p = 0.76; Begg and Mazumdar's test: p = 0.21.



L. No publication bias was reported related to re-thoracothomy for postoperative bleeding/tamponade. Egger's linear regression test: p = 0.93; Begg and Mazumdar's test: p = 0.89.



M. No publication bias was reported related to postoperative stroke. Egger's linear regression test: p=0.89; Begg and Mazumdar's test: p=0.78.



N. Funnel plot to assess publication bias. No publication bias was reported related to postoperative pneumonia. Egger's linear regression test: p = 0.64; Begg and Mazumdar's test: p = 0.57.