

Appendix A: Search Strategies

DIALOG MEDLINE[®]/EMBASE Search. Run on August 3, 2006

TOTAL = 3080

MEDLINE[®] = 1576

EMBASE = 1504 unique records

EMBASE terminology is in bold

s1

dt=randomized controlled trial OR randomized controlled trial/de OR randomized controlled trials/de OR random allocation/de

s2

(singl? or double? or trebl? or tripl?)(25n)(blind? or mask)/ti,ab

s3

single(w)blind(w)method/de or double(w)blind(w) method/de

s4

dt=clinical trial OR clinical trials! OR clin?(25n)trial?/ti,ab OR placebos/de OR placebo?/ti,ab OR random?/ti,ab OR research design/de OR clinical trial!

s5

s1 or s2 or s3 or s4

s6

(LT=animal OR animals/df) NOT (humans/df OR human/df)

S7

s5 NOT s6

s8

(angioplasty, balloon/de or balloon(w)angioplast?) or ((balloon(w)dilation OR balloon(w)dilatation) and coronary/ti,ab) OR atherectomy, coronary/de OR ((atherectom? OR atherectomy!) AND coronary)

S9

angioplasty, transluminal, percutaneous coronary/de OR (percutaneous AND coronary AND transluminal AND angioplast?)/ti,ab OR ptca/ti,ab

s10

transluminal coronary angioplasty/de OR pci/ti,ab or percutaneous(w)coronary(w)intervention?/ti,ab

Appendix A: Search Strategies (continued)

s11

percutaneous coronary intervention! OR stents! OR stent! or stent/ti,ab OR stenting/ti,ab or stents/ti,ab

s12

s8 OR s9 OR s10 OR s11

s13

coronary artery bypass! OR coronary(4w)bypass OR cabg OR coronary artery bypass surgery/de OR coronary artery bypass graft/de

s14

s7 AND s12 AND s13

OVID In-Process & Other Non-Indexed Citations and Ovid MEDLINE[®] Search. Formulated July 2006.

- 1 randomized controlled trial.pt.
- 2 controlled clinical trial.pt.
- 3 randomized controlled trials/
- 4 random allocation.de.
- 5 double blind method.de.
- 6 single blind method.de.
- 7 or/1-6
- 8 exp animal/ not human/
- 9 7 not 8
- 10 clinical trial.pt.
- 11 exp clinical trials/
- 12 (clin\$ adj25 trial\$.ti,ab.
- 13 placebos.de.
- 14 placebo\$.ti,ab.
- 15 random\$.ti,ab. OR ((singl\$ or double\$ or trebl\$ or tripl\$) adj25 (blind\$ or mask\$)).ti,ab.
- 16 research design.de.
- 17 or/10-16
- 18 17 not 8
- 19 18 not 9
- 20 exp coronary artery bypass/
- 21 (coronary adj4 bypass\$.tw.
- 22 cabg.tw.
- 23 or/20-22
- 24 atherectomy, coronary.de. or (atherectom\$ and coronary).mp.
- 25 (angioplasty, balloon.de. or "balloon angioplast\$.mp. or "balloon dilation".mp.) and coronary.mp.

Appendix A: Search Strategies (continued)

- 26 Angioplasty, Transluminal, Percutaneous Coronary.de. or (percutaneous and coronary and transluminal and angioplast\$).ab,ti. or ptca.mp.
- 27 (pci or "percutaneous coronary intervention\$").mp.
- 28 stent.de. or stents.ab,ti. or stenting.ab,ti. or stent.ab,ti.
- 29 or/24-28
- 30 23 and 29
- 31 9 or 19
- 32 30 and 31

REVISION: September 1, 2006 -- Added "internal mammary" to the CABG search (searches 20 – 22)

- 37 23 or "internal mammary".mp.
- 38 37 and 29
- 39 9 or 19
- 40 38 and 39

Cochrane Central Register of Controlled Trials Search

- 1 exp coronary artery bypass/
- 2 (coronary adj4 bypass\$).mp.
- 3 cabg.mp.
- 4 or/1-3
- 5 atherectomy, coronary.de. or (atherectom\$ and coronary).mp.
- 6 (angioplasty, balloon.de. or "balloon angioplast\$".mp. or "balloon dilation".mp.) and coronary.mp.
- 7 Angioplasty, Transluminal, Percutaneous Coronary.de. or (percutaneous and coronary and transluminal and angioplast\$).ab,ti. or ptca.mp.
- 8 (pci or "percutaneous coronary intervention\$").mp.
- 9 stent.de. or stents.mp. or stenting.mp. or stent.mp.
- 10 or/5-9
- 11 4 and 10

Methodology for Registry Searches:

DIALOG MEDLINE[®] Search. Run September 29 to October 6, 2006.

MEDLINE[®]=

OVID In-Process & Other Non-Indexed Citations and Ovid MEDLINE[®] Search 9-29-06 to 10-6-06. Search One and Search Three were the main searches, and Search Two was to verify Search One's results. Likewise, Searches Four and Five were to verify and catch anything that Search Three missed. All search results were downloaded into an EndNote 9 Library (N= 8119), which was deduplicated (N=4813). All articles in languages other than English were removed (N=4163). Then, a thorough search of abstracts and titles were reviewed to identify possible pertinent articles that met inclusion criteria for applicable registers (N=106), a list of which were sent to Stanford, who selected the final articles for inclusion.

I. Search One

1. *Coronary Disease/ or *Coronary Artery Bypass/ or *Surgical Procedures, Minimally Invasive/ or CABG.mp. or *Coronary Arteriosclerosis/
 2. stent\$.mp. or *Stents/
 3. ("registry" or "registries").mp. [mp=ti, ot, ab, name of substance word, subject heading word]
 4. 1 or 2
 5. 3 and 4
 6. limit 5 to english language
-

II. Search Two

1. coronary bypass.mp. [mp=ti, ot, ab, nm, hw]
2. (coronary adj4 bypas\$).mp.
3. cabg.mp.
4. 1 or 2 or 3
5. (atherectom\$ and coronary).mp. [mp=ti, ot, ab, nm, hw]
6. (angioplast\$ or balloon or dilation).mp.
7. coronary.mp.
8. 6 and 7
9. (pci or "percutaneous coronary").mp.
10. ptca.mp.
11. (stent or stents or stenting).mp. [mp=ti, ot, ab, nm, hw]
12. regist\$.mp. [mp=ti, ot, ab, nm, hw]
13. 4 or 5
14. 8 or 9 or 10 or 12
16. 12 and 13
17. 12 and 14
18. 16 and 17

III. Search Three

1. registr\$.mp. [mp=ti, ot, ab, nm, hw]
2. Cabg.mp.
3. (bypass adj5 registr\$).mp.
4. stent\$.mp.
5. coronary.mp.
6. percutaneous.mp.
7. (percutaneous adj5 regist\$).mp.
8. PTCA.mp.
9. PCI.mp.
10. (PTCA adj4 regist\$).mp.
11. 2 or 3 or 5
12. 4 or 5 or 6 or 7 or 8 or 9 or 10
13. 1 and 11
14. 1 and 12
15. 13 and 14
16. (duke adj5 registr\$).mp. [mp=ti, ot, ab, nm, hw]
17. (emory adj5 regist\$).mp.
18. (scott\$ adj5 regist\$).mp.
19. (northern adj3 "new england").mp.
20. (cleveland adj5 regist\$).mp.
21. (new york adj4 regist\$).mp.
22. BARI.mp.
23. (east adj2 regist\$).mp.
24. (awesome adj4 regist\$).mp.
25. 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24
26. 15 or 25

IV. Search Four

1. (stent adj5 registr\$).mp. [mp=ti, ot, ab, nm, hw]
2. (percutan\$ adj5 regist\$).mp.
3. (PTCA adj5 regist\$).mp.
4. (PCI adj5 regist\$).mp.
5. 1 or 2 or 3 or 4
6. (CABG adj4 regist\$).mp.
7. (bypass adj5 regist\$).mp.
8. (surgery adj2 regist\$).mp.
9. 6 or 7 or 8
10. (emory adj4 registry).mp.
11. (york adj3 registry).mp.
12. (duke adj3 registry).mp.]

Appendix A: Search Strategies (continued)

13. (awesome adj3 regist\$.mp.
 14. (england adj4 regist\$.mp.
 15. (cleveland adj4 regist\$.mp.
 16. 10 or 11 or 12 or 13 or 14 or 15
 17. 5 or 9 or 16
-

V. Search Five

1. "duke registry".mp. [mp=ti, ot, ab, nm, hw]
 2. "new york registry".mp.
 3. "northern new england registry".mp.
 4. BARI.mp.
 5. "Cleveland clinic registry".mp.
 6. "emory registry".mp.
 7. duke registry.mp.
 8. cleveland clinic.mp.
 9. cleveland clinic registry.mp.
 10. stent regist\$.ab,sh,ot,hw,tw,ti,kw,kf.
 11. "coronary bypass regist\$".ab,sh,ot,hw,ti,kw,kf.
 12. coronary bypass regist\$.ab,sh,ot,hw,ti,kw,kf.
 13. coronary regist\$.ab,sh,ot,hw,ti,kw,kf.
 14. CABG regist\$.ab,sh,ot,hw,ti,kw,kf.
 15. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
 16. 11 or 12 or 13 or 14
 17. 15 or 16
 18. limit 17 to english language
 19. registry.mp. [mp=ti, ot, ab, nm, hw]
 20. limit 19 to english language
 21. limit 20 to humans
 22. stent\$.mp. [mp=ti, ot, ab, nm, hw]
 23. 21 and 22
 24. 18 or 23
 25. limit 24 to humans
-

Appendix B: List of Excluded Studies

Acute myocardial infarction: pre-hospital and in-hospital management. The Task Force on the Management of Acute Myocardial Infarction of the European Society of Cardiology. <i>Eur Heart J</i> . 1996 Jan;17(1):43-63.	Not RCT
Alderman EL, Botas J. Selection of revascularization for patients with stable angina pectoris. <i>Coron Artery Dis</i> . 1993 Dec;4(12):1061-7.	Not RCT
Alexopoulos DK. Strategies for the invasive treatment of multivessel coronary artery disease. <i>HJC Hellenic Journal of Cardiology</i> . 2005 Jan-Feb;46(1):16-20.	Not RCT
Angelini G. AMIST A multicenter trial of minimally invasive bypass grafting versus angioplasty +/- stenting for single vessel disease of the left anterior descending coronary vessel. Http://www.cardiosource.com . 1999.	Other
Anonymous. Routine invasive strategy within 24 hours of thrombolysis versus ischemia-guided conservative approach for acute myocardial infarction with ST-segment elevation: a randomized controlled trial. <i>Indian Heart J</i> . 2004;56(4):358.	Other
Arterial Revascularization Therapies Study (ARTS). <i>Indian Heart J</i> . 2001 Mar-Apr;53(2):239.	Not RCT
Beatt KJ. RITA trial protocol. <i>Br Heart J</i> . 1990;64(1):105.	Not RCT
Berger PB, Sketch MH, Jr., Califf RM. Choosing between percutaneous coronary intervention and coronary artery bypass grafting for patients with multivessel disease: what can we learn from the Arterial Revascularization Therapy Study (ARTS)?[comment]. <i>Circulation</i> . 2004 Mar 9;109(9):1079-81.	Not RCT
Bhatt DL, Topol EJ. Debate: PCI or CABG for multivessel disease viewpoint: No clear winner in an unfair fight. <i>Current Controlled Trials in Cardiovascular Medicine</i> . 2001;2(6):260-2.	Not RCT
Borkon AM, Muehlebach GF, House J, et al. A comparison of the recovery of health status after percutaneous coronary intervention and coronary artery bypass. <i>Ann Thorac Surg</i> . 2002 Nov;74(5):1526-30; discussion 30.	Not RCT
Botas J, Stadius ML, Bourassa MG, et al. Angiographic correlates of lesion relevance and suitability for percutaneous transluminal coronary angioplasty and coronary artery bypass grafting in the Bypass Angioplasty Revascularization Investigation study (BARI). <i>Am J Cardiol</i> . 1996;77(10):805-14.	Not CER
Bourassa MG, Brooks MM, Mark DB, et al. Quality of life after coronary revascularization in the United States and Canada. <i>Am J Cardiol</i> . 2000;85(5):548-53.	Not CER
Brennan FJ. A randomized trial of multivessel stent versus coronary bypass.[comment]. <i>J Am Coll Cardiol</i> . 2001 Jul;38(1):286-7.	Not RCT
Burek KA, Sutton-Tyrrell K, Brooks MM, et al. Prognostic importance of lower extremity arterial disease in patients undergoing coronary revascularization in the Bypass Angioplasty Revascularization Investigation (BARI). <i>J Am Coll Cardiol</i> . 1999;34(3):716-21.	Not CER
Channer KS, English KM. Long-term results of RITA-1.[comment]. <i>Lancet</i> . 1999 Jan 23;353(9149):321.	Not RCT
Cishek MB, Gershony G. Roles of percutaneous transluminal coronary angioplasty and bypass graft surgery for the treatment of coronary artery disease. <i>Am Heart J</i> . 1996;131(5):1012-7.	Not RCT
Cohen HA, Zenati M. Integrated coronary revascularization. <i>J Invasive Cardiol</i> . 1999 Mar;11(3):184-90; discussion 90-1.	Not RCT
Detre KM, Lombardero MS, Brooks MM, et al. The effect of previous coronary-artery bypass surgery on the prognosis of patients with diabetes who have acute myocardial infarction. Bypass Angioplasty Revascularization Investigation Investigators. <i>N Engl J Med</i> . 2000 Apr 6;342(14):989-97.	Not CER
Drzewiecki J, Cisowski M, Bochenek A, et al. Direct stenting of anterior interventricular branch MIDCAB. <i>Kardiol Pol</i> . 2001;55(Suppl I):I-14 (O 25).	Other
Dunlap J. What is the protective effect of previous coronary artery bypass graft compared with percutaneous transluminal coronary angioplasty in patients with diabetes who suffer an acute myocardial infarction? <i>J Fam Pract</i> . 2000 Jul;49(7):599-600.	Not RCT

Appendix B: List of Excluded Studies (continued)

Elami A, Merin G, Van den Brand M, et al. Stented angioplasty or coronary artery bypass graft surgery for multivessel disease? <i>J Am Coll Cardiol.</i> 2002;40(11):2063-4.	Not RCT
Farquhar D. Bypass surgery or stenting for multivessel coronary artery disease? <i>Can Med Assoc J.</i> 2001 Jun 12;164(12):1742.	Not RCT
Filart RA, Ryan TJ. Comparison of coronary angioplasty with bypass surgery for multivessel disease. <i>Coron Artery Dis.</i> 1993 Dec;4(12):1039-47.	Not RCT
Frye RL, Sopko G, Detre KM. The BARI trial: baseline observations. The BARI Investigators. <i>Trans Am Clin Climatol Assoc.</i> 1992;104:26-30.	Not RCT
Galli M, Genovesi Ebert A. MISTRAL whispers: STEMI trials forecast storm, registries blow breeze. <i>Ital Heart J.</i> 2004 Feb;5(2):146-51.	Not RCT
Gavaliatsis IP, Sowton E. Angioplasty or bypass? The ongoing randomized trials on the occasion of publication of the RITA trial interim results. <i>Hellenic Journal of Cardiology.</i> 1993;34(4):340-4.	Not RCT
Goldsmith MF. Once again, CABG vs PTCA--trial results today. <i>JAMA.</i> 1994 Jan 26;271(4):257.	Not RCT
Gottlieb S. Bypass grafts protect diabetic patients better than angioplasty. <i>West J Med.</i> 2000;172(6):362.	Not RCT
Grines CL, O'Neill WW. Multivessel angioplasty versus bypass surgery. A case for PTCA. <i>Eur Heart J.</i> 1995 Jul;16 Suppl E:29-31.	Not RCT
Gunn J, Taggart DP. Revascularisation for acute coronary syndromes: PCI or CABG? <i>Heart.</i> 2003 Sep;89(9):967-70.	Not RCT
Hamm CW, Reimers J, Ischinger T, et al. Comparison of PTCA with bypass operations in patients with coronary multi-vessel disease: Results of the G.A.B.I. study. <i>Z Kardiol.</i> 1994;83(1).	Other
Hamm CW, Reimers J, Ischinger T, et al. Comparison of PTCA with bypass operations in patients with coronary multi-vessel disease: The acute results of the G.A.B.I. Study. <i>Z Kardiol.</i> 1993;82(1).	Other
Hampton JR. Education from RITA. Randomized Intervention Treatment of Angina. <i>Eur Heart J.</i> 1995 Jul;16(7):878-81.	Not RCT
Hampton JR. Lessons from the RITA trial: CABG vs PTCA for angina. <i>Primary Cardiology.</i> 1993;19(10):50-2.	Not RCT
Hampton JR. Long-term results of RITA-1. <i>Eur Heart J.</i> 1999 Jun;20(12):849-50.	Not RCT
Hartz AJ, Kuhn EM, Doorey AJ, et al. Coronary angioplasty compared with bypass grafting. <i>N Engl J Med.</i> 1995;332(13):888-90.	Not RCT
Hassan SA, Hlatky MA, Boothroyd DB, et al. Outcomes of noncardiac surgery after coronary bypass surgery or coronary angioplasty in the Bypass Angioplasty Revascularization Investigation (BARI). <i>Am J Med.</i> 2001 Mar;110(4):260-6.	Not CER
Haude M, Hopp HW, Rupprecht HJ, et al. Immediate stent implantation versus conventional techniques for the treatment of abrupt vessel closure or symptomatic dissections after coronary balloon angioplasty. <i>Am Heart J.</i> 2000;140(5):820.	Other
Hillis LD, Rutherford JD. Coronary angioplasty compared with bypass grafting. <i>N Engl J Med.</i> 1994;331(16):1086-7.	Not RCT
Hlatky MA, Boothroyd DB, Brooks MM, et al. Clinical correlates of the initial and long-term cost of coronary bypass surgery and coronary angioplasty. <i>Am Heart J.</i> 1999;138(2 Pt 1):376-83.	Not CER
Hodakowski GT, Craver JM, Jones EL, et al. Clinical significance of perioperative Q-wave myocardial infarction: the Emory Angioplasty versus Surgery Trial. <i>J Thorac Cardiovasc Surg.</i> 1996 Dec;112(6):1447-53; discussion 53-4.	Not CER
Hoye A. The CAPTIM study.[comment]. <i>Lancet.</i> 2003 Feb 22;361(9358):700; author reply 1.	Not RCT
Ivens K, Heering P, Leschke M, et al. Percutaneous coronary angioplasty (PTCA) or coronary artery bypass grafting (CABG)--which is the appropriate therapy of coronary artery disease in uraemic patients? <i>Nephrol Dial Transplant.</i> 1996 Oct;11(10):1949-51.	Not RCT
Jones RH, Kesler K, Phillips HR, 3rd, et al. Long-term survival benefits of coronary artery bypass grafting and percutaneous transluminal angioplasty in patients with coronary artery disease. <i>J Thorac Cardiovasc Surg.</i> 1996 May;111(5):1013-25.	Not RCT
Kapur A, Bartolini D, Beatt KJ. Has anything changed in multivessel coronary artery revascularization in diabetes since BARI? <i>Ital Heart J.</i> 2004 May;5(5):358-63.	Not RCT
Kappetein AP, Dawkins KD, Mohr FW, et al. Current percutaneous coronary intervention and coronary artery bypass grafting practices for three-vessel and left main coronary artery disease. Insights from the SYNTAX run-in phase. <i>Eur J Cardiothorac Surg.</i> 2006 Apr;29(4):486-91.	Other

Appendix B: List of Excluded Studies (continued)

Kapur A, Malik IS, Bagger JP, et al. The Coronary Artery Revascularisation in Diabetes (CARDia) trial: background, aims, and design. <i>Am Heart J.</i> 2005 Jan;149(1):13-9.	Other
Kelsey SF. Patients with diabetes did better with coronary bypass graft surgery than with percutaneous transluminal coronary angioplasty: was this BARI finding real? <i>Am Heart J.</i> 1999;138(5 Pt 1):S387-93.	Not RCT
King SB. The impact of performing a clinical trial on patient outcomes: lessons from the Emory Angioplasty vs. Surgery Trial. <i>Trans Am Clin Climatol Assoc.</i> 1995;107:68-77.	Not RCT
King SP, 3rd. Coronary angioplasty: long-term survival compared with coronary bypass surgery. <i>Trans Assoc Life Insur Med Dir Am.</i> 1989;72:88-94.	Not RCT
Kip KE, Bourassa MG, Jacobs AK, et al. Influence of pre-PTCA strategy and initial PTCA result in patients with multivessel disease: the Bypass Angioplasty Revascularization Investigation (BARI). <i>Circulation.</i> 1999 Aug 31;100(9):910-7.	Not CER
Klinke P, Sullivan J. Revascularization strategies in patients with stable angina pectoris. <i>Can J Cardiol.</i> 1997 Dec;13 Suppl D:23D-9D.	Not RCT
Legrand VM, Serruys PW, Unger F. Trial finds stenting for multivessel disease is less costly than bypass grafting, but more likely to require repeat revascularisation. <i>Evidence-Based Cardiovascular Medicine.</i> 2004;8(3):237-8.	Not RCT
Lewsey JD, Murray GD, Leyland AH, et al. Comparing outcomes of percutaneous transluminal coronary angioplasty with coronary artery bypass grafting; can routine health service data complement and enhance randomized controlled trials?. <i>Eur Heart J.</i> 1999 Dec;20(23):1731-5.	Not RCT
Little T, Lindsay Jr J. Percutaneous transluminal coronary angioplasty and coronary artery bypass graft surgery in octogenarians: Indications and outcome. <i>Heart Dis Stroke.</i> 1994;3(5):261-5.	Not RCT
Lombardero MS. Seven-year outcome in the bypass angioplasty revascularization investigation (BARI), by treatment and presence of diabetes. <i>Cardiovasc Rev Rep.</i> 2002;23(1):14-8.	Not RCT
Mark DB, Lam LC, Lee KL, et al. Effects of coronary angioplasty, coronary bypass surgery, and medical therapy on employment in patients with coronary artery disease. A prospective comparison study. <i>Ann Intern Med.</i> 1994 Jan 15;120(2):111-7.	Not RCT
Mock MB, Reeder GS, Schaff HV, et al. Percutaneous transluminal coronary angioplasty versus coronary artery bypass. Isn't it time for a randomized trial? <i>N Engl J Med.</i> 1985 Apr 4;312(14):916-9.	Not RCT
Morguet AJ, Figulla HR, Ruschewski W, et al. Comparison of PTCA and coronary bypass operation (CABG-Op) in triple vessel disease (3-VD). <i>Z Kardiol.</i> 1992;81(1).	Other
Parisi AF, Burt DM. Revascularization procedures in the treatment of single-vessel coronary disease. <i>Coron Artery Dis.</i> 1993 Dec;4(12):1053-60.	Not RCT
Patil CV, Nikolsky E, Boulous M, et al. Multivessel coronary artery disease: current revascularization strategies. <i>Eur Heart J.</i> 2001 Jul;22(14):1183-97.	Not RCT
Prete R, Turina MI. Choice of revascularization strategy for patients with coronary artery disease. <i>JAMA.</i> 2001 Feb 28;285(8):992-4.	Not RCT
Rankin JS, Harrell FE, Jr. Measuring the therapeutic efficacy of coronary revascularization: Implications for future management.[comment]. <i>J Thorac Cardiovasc Surg.</i> 2006 May;131(5):944-8.	Not RCT
Rihal CS, Yusuf S. Chronic coronary artery disease: drugs, angioplasty, or surgery? <i>BMJ.</i> 1996 Feb 3;312(7026):265-6.	Not RCT
Rodriguez A, Bernardi V, Navia J. Erratum: Argentine randomized study: Coronary angioplasty with stenting versus coronary bypass surgery in patients with multiple-vessel disease (ERACII): 30-Day and one-year follow-up results (Journal of the American College of Cardiology (2000) 37 (51-58)). <i>J Am Coll Cardiol.</i> 2001;37(3):973.	Not RCT
Rodriguez A, Rodriguez Alemparte M, Baldi J, et al. Survival may be similar in people with multiple vessel disease and significant proximal LAD stenosis receiving stents versus coronary artery bypass grafts. <i>Evidence-Based Cardiovascular Medicine.</i> 2003;7(2):73-4.	Not RCT
Rodriguez A. Argentine randomized study: coronary angioplasty with stenting vs coronary artery bypass surgery in patients with multiple vessel disease (eraci II): 30-day and long-term follow-up results. <i>Am Heart J.</i> 2000;139(2 (Pt 1)):362-3.	Not RCT
Rotman B, Eber B, Dusleag J, et al. Coronary revascularization: influence on ventricular arrhythmias. <i>Clin Cardiol.</i> 1990;13(1):11-3.	Not RCT

Appendix B: List of Excluded Studies (continued)

Runyan S, Dobie S. CABG compared with PTCA in heart disease. <i>J Fam Pract.</i> 1998 Feb;46(2):112-3.	Not RCT
Ryan TJ. Present-day PTCR versus CABG: a randomized comparison with a different focus and a new result.[comment]. <i>J Am Coll Cardiol.</i> 2001 Jan;37(1):59-62.	Not RCT
Schaff HV, Rosen AD, Shemin RJ, et al. Clinical and operative characteristics of patients randomized to coronary artery bypass surgery in the Bypass Angioplasty Revascularization Investigation (BARI). <i>Am J Cardiol.</i> 1995;75(9):18C-26C.	Not CER
Schofield PM. Indications for percutaneous and surgical revascularisation: how far does the evidence base guide us? <i>Heart.</i> 2003 May;89(5):565-70.	Not RCT
Schwartz L, Kip KE, Frye RL, et al. Coronary bypass graft patency in patients with diabetes in the Bypass Angioplasty Revascularization Investigation (BARI). <i>Circulation.</i> 2002 Nov 19;106(21):2652-8.	Not CER
Smith D. The CARDia trial protocol. <i>Heart.</i> 2003 Oct;89(10):1125-6.	Not RCT
Spodick DH. Percutaneous transluminal coronary angioplasty versus coronary artery bypass. <i>N Engl J Med.</i> 1985 Sep 26;313(13):824-5.	Not RCT
Starkey IR. The RITA trial.[comment]. <i>Lancet.</i> 1993 Apr 17;341(8851):1020.	Not RCT
Szygula-Jurkiewicz B, Wilczek K, Gorzkowska A, et al. <i>g. Pol Arch Med Wewn.</i> 2005 Jan;113(1):56-62.	Other
Szygula-Jurkiewicz B, Zembala M, Wilczek K, et al. Health related quality of life after percutaneous coronary intervention versus coronary artery bypass graft surgery in patients with acute coronary syndromes without ST-segment elevation. 12-Month follow up. <i>Eur J Cardiothorac Surg.</i> 2005;27(5):882-6.	Not RCT
Taggart DP. The RITA trial.[comment]. <i>Lancet.</i> 1993 Apr 17;341(8851):1020.	Not RCT
Takagi H, Kato T, Matsuno Y, et al. Minimally invasive direct coronary artery bypass versus stenting. <i>Eur J Cardiothorac Surg.</i> 2006;29(4):632.	Not RCT
Tu JV, Naylor CD, Pashos CL, et al. Coronary angiography and revascularization after acute myocardial infarction: which rate is right? <i>Eur Heart J.</i> 1998 Apr;19(4):529-30.	Not RCT
Vander Salm TJ, Kip KE, Jones RH, et al. What constitutes optimal surgical revascularization? Answers from the Bypass Angioplasty Revascularization Investigation (BARI). <i>J Am Coll Cardiol.</i> 2002 Feb 20;39(4):565-72.	Not CER
Vogt AR, Funk M, Remetz M. Comparison of symptoms, functional ability, and health perception of elderly patients with coronary artery disease managed with three different treatment modalities. <i>Cardiovasc Nurs.</i> 1994 Sep-Oct;30(5):33-8.	Not RCT
Wahrborg P. Percutaneous transluminal coronary angioplasty or coronary artery bypass grafting for coronary artery disease? <i>Scand Cardiovasc J.</i> 1997;31(4):201-11.	Not RCT
Whitlow PL, Dimas AP, Bashore TM, et al. Relationship of extent of revascularization with angina at one year in the Bypass Angioplasty Revascularization Investigation (BARI). <i>J Am Coll Cardiol.</i> 1999;34(6):1750-9.	Other
Whitlow PL. The Bypass Angioplasty Revascularization Investigation (BARI) trial: implications for clinical practice. <i>Cleve Clin J Med.</i> 1997 Jan;64(1):17-20.	Not RCT
Willerson JT. First-year results of CABRI (Coronary Angioplasty versus Bypass Revascularization Investigation). <i>Circulation.</i> 1996;93(5):847.	Not RCT
Williams DO, Baim DS, Bates E, et al. Coronary anatomic and procedural characteristics of patients randomized to coronary angioplasty in the Bypass Angioplasty Revascularization Investigation (BARI). <i>Am J Cardiol.</i> 1995 Mar 23;75(9):27C-33C.	Not CER
Wilson JM. Stents or surgery: The case for stents. <i>Tex Heart Inst J.</i> 2005;32(3):331-8.	Not RCT
Yokoyama Y, Chaitman BR, Hardison RM, et al. Association between new electrocardiographic abnormalities after coronary revascularization and five-year cardiac mortality in BARI randomized and registry patients. <i>Am J Cardiol.</i> 2000 Oct 15;86(8):819-24.	Not CER
Zamorski M. Bypass surgery vs angioplasty in multivessel CAD. <i>J Fam Pract.</i> 1997;44(6):527-8.	Not RCT

Appendix C: Additional Analyses and Evidence Tables

Appendix Table 1. RCT subject demographics

Trial	Intervention	Number subjects randomized at start of study	Number subjects received assigned therapy	Age (Mean)	Women %	White %	African American %	Other race %	Body Mass Index (mean)
AMIST ³⁶	PCI	50	48	Median 54.5	14	96			
	CABG	50	46	Median 58.8	30	98			
ARTS ³⁷	PCI	600	593	61.0	23				27.2
	CABG	605	579	61.0	24				27.4
AWESOME ⁵⁰	PCI	222	213	67.0					
	CABG	232	215	67.0					
BARI ⁵⁸	PCI	915	904	61.8	27	91	5		
	CABG	914	892	61.1	26	89	7		
CABRI ⁸⁷	PCI	541	522	60.3	22				26.1
	CABG	513	478	60.0	22				26.4
EAST ⁹⁴	PCI	198	196	61.8	25	93	7	0.5	
	CABG	194	193	61.4	27	94	6	0	
ERACI-I ¹⁰⁴	PCI	63	55	59.0	19				
	CABG	64	56	55.0	11				
ERACI-II ¹⁰⁶	PCI	225	222	62.5	23				28.8 % obese
	CABG	225	208	61.4	19				23.5 % obese
GABI ¹⁰⁹	PCI	182	176	65.0	21				
	CABG	177	161	65.0	20				
Groningen ¹¹²	PCI	51	51	61.0	25				
	CABG	51	48	60.0	22				
Lausanne ¹¹⁶	PCI	68	68	57.0	20				
	CABG	66	59	54.0	20				
Leipzig ¹¹⁸	PCI	110	110	62.5	28				28.2
	CABG	110	110	61.6	23				27.2
MASS-I ¹²¹	PCI	72		54.0	19				
	CABG	70		58.0	17				
MASS-II ¹²³	PCI	205	194	60.0	33				
	CABG	203	198	60.0	28				
Myoprotect I ¹²⁶	PCI	23	23	69.0	17				
	CABG	21	21	71.0	43				
Octostent ¹²⁷	PCI	138	131	60.3	30				BMI>30 : 17%
	CABG	142	136	58.9	28				BMI>30 : 15%
Poland ¹³⁰	PCI	50	50	53.3	16				BMI>30 : 26%
	CABG	50	50	54.1	18				BMI>30 : 20%

Appendix Table 1. RCT subject demographics (continued)

Trial	Inter- vention	Number subjects randomized at start of study	Number subjects received assigned therapy	Age (Mean)	Women %	White %	Afri- can Amer- -ican %	Other race %	Body Mass Index (mean)
RITA-1 ¹³²	PCI	510	493		17				
	CABG	501	490		21				
Seoul-Hong ³⁴	PCI	119		60.5	36				25.5
	CABG	70		61.4	36				26.6
Seoul-Kim ³⁵	PCI	50	49	61	40				
	CABG	50	49	63	30				
SIMA ¹³⁸	PCI	63	62	59.0	24				
	CABG	60	54	60.0	17				
SoS ¹³⁹	PCI	488	480	61.0	20				
	CABG	500	487	62.0	22				
Toulouse ¹⁴⁶	PCI	76	76	66.0	28				
	CABG	76	76	68.0	18				

PCI=percutaneous coronary intervention; CABG=coronary artery bypass graft; 1 study (EAST) reported data on number of patients working full time; 2 studies (MASS and MASS-II) reported data on % of patients employed; 1 study (RITA-1) reported on patients not working due to coronary disease; 1 (BARI) study reported data on education high school or less.

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 2. RCT subject clinical characteristics

Trial	Intervention	Diabetes %	HTN %	Hyperlipidemia %	Current smoking %	Ever smoking %	Prior stroke %	PVD %	Family history coronary disease %	Stable angina %	Unstable angina %	LVEF (mean)	Prior MI %	Heart failure (present) %
AMIST ³⁶	PCI										18			
	CABG										20			
ARTS ³⁷	PCI	19	45	58	28			6	39	57	37	61	44	
	CABG	16	45	58	26			5	42	60	35	60	42	
AWESOME ⁵⁰	PCI	29	67				9				100	47	70	
	CABG	34	69				14				100	44	71	
BARI ⁵⁸	PCI	19	49					9		32	63	57	54	9
	CABG	20	49					8		29	65	58	55	9
CABRI ⁸⁷	PCI	12	35	58	15	58	6‡	8		81	14	63	41	
	CABG	12	37	43	13	55	5‡	6		80	15	63	42	
EAST ⁹⁴	PCI	25	54	36	70	45						61	41	3
	CABG	21	52	38	21	42						62	41	4
ERACI-I ¹⁰⁴	PCI	11	52	56	62						76	59	51	
	CABG	11	58	61	70						89	62	48	
ERACI-II ¹⁰⁶	PCI	17	71	63	54			19			92		29	
	CABG	17	71	60	50			27			91		28	
GABI ¹⁰⁹	PCI	10	42	60		70†	5	8			13		46	
	CABG	15	39	61		67†	2	8			15		47	
Groningen ¹¹²	PCI	18		45	28	30				100			18	
	CABG	8		41	25	37				100			24	
Lausanne ¹¹⁶	PCI	12	46	50	59				50		12			
	CABG	12	41	52	52				48		8			
Leipzig ¹¹⁸	PCI	34	72	70	25			18				63	45	
	CABG	25	71	73	25			17				63	45	
MASS-I ¹²¹	PCI	15	34		36					100		77		
	CABG	18	30		37					100		74		
MASS-II ¹²³	PCI	23	61			27†						67	52	
	CABG	29	63			32†						67	41	

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 2. RCT subject clinical characteristics (continued)

Trial	Group	Diabetes %	HTN %	Hyper-lipidemia %	Current smoking %	Ever smoking %	Prior stroke %	PVD %	Family history coronary disease %	Stable angina %	Unstable angina %	LVEF (mean)	Prior MI %	Heart failure (present) %
Myoprotect I ¹²⁶	PCI	39	96								78	52		
	CABG	86	86								57	56		
Octostent ¹²⁷	PCI	9	33	59	25		1	7		50	22		25	
	CABG	14	31	6	19		2	7		46	24		23	
Poland ¹³⁰	PCI	8	52	78	52			40		90	10			
	CABG	6	56	76	48			44		92	8			
RITA-1 ¹³²	PCI									39	55			43
	CABG									38	55			42
Seoul-Hong ³⁴	PCI	37	50	55	40		3					50	53	22
	CABG	49	56	51	46		3					43	52	23
Seoul-Kim ³⁵	PCI	20	55	60	45		2			35	65	51	22	
	CABG	15	55	70	55		2			45	55	49	22	
SIMA ¹³⁸	PCI	11	44	60	56		2		35			48	67	2
	CABG	13	47	53	50		2		27			48	67	2
SoS ¹³⁹	PCI	14	43	53	16	53	1	6	48	43		57		44
	CABG	15	47	50	14	57	3	7	48	48		57		47
Toulouse ¹⁴⁶	PCI	15	41	36	51							<40 in 3		37
	CABG	12	43	36	54							<40 in 3		38

HTN=hypertension; PVD=peripheral vascular disease; LVEF=left ventricular ejection fraction; MI=myocardial infarction; PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting

† Current or former smoking; ‡ Prior stroke or transient ischemic attack

Octostent reported prior PCI among 4% and 5% of patients in the PCI and CABG arms, respectively.

AWESOME reported prior PCI among 17% and 22% of patients in the PCI and CABG arms, respectively.

AWESOME reported prior CABG among 30% and 32% of patients in the PCI and CABG arms, respectively.

AWESOME reported MI within the past 7 days for 35% and 32% among PCI and CABG arms, respectively

RITA-1 reported 36 and 33 asymptomatic patients in the PCI and CABG arms, respectively

Myoprotect I reported 10 patients each in PCI and CABG arms who underwent reoperation.

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 3. RCT interventions

Trial	Group	Complete revascularization achieved %	Vessels treated (mean)	Stents used (mean)	Type of stent used	PCI adjunctive treatment recommended				CABG procedures					
						ASA	Heparin	Glycoprotein 2b/3a Inhibitors	Other treatment	Bypass mode	Cardioplegia type	Incision Type	Arterial Grafts (% of patients)	Anastomoses (mean)	Bypass time (mean)
AMIST ³⁶	PCI					✓	✓		T						
	CABG					✓	✓		T						
ARTS ³⁷	PCI				BMS								93%		
	CABG													2.6	234
AWESOME ⁵⁰	PCI				Stents in 54%, type not specified			11%							
	CABG												76%	2.9	
BARI ⁵⁸	PCI		2.5												
	CABG										Blood 47%; Crystalloid: 60		82%	3.1	91
CABRI ⁸⁷	PCI	99	2.1*												
	CABG	97	2.8*												
EAST ⁹⁴	PCI														
	CABG														

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 3. RCT interventions (continued)

Trial	Group	Complete revascularization achieved %	Vessels treated (mean)	Stents used (mean)	Type of stent used	PCI adjunctive treatment recommended				CABG procedures					
						ASA	Heparin	Glyco-protein 2b/3a Inhibitors	Other treatment	Bypass mode	Cardioplegia type	Incision Type	Arterial Grafts (% of patients)	Surgical anastomoses (mean)	Bypass time (mean)
ERACI-I ¹⁰⁴	PCI	51	1.7	0	BMS (Gianturco Robin III)	✓	✓								
	CABG	88								Hypothermia: 100%	Blood: 100%		77%		
ERACI-II ¹⁰⁶	PCI	50		1.4		✓	✓	28%	T						
	CABG	85		0.08		✓	✓	✓	T				88%		
GABI ¹⁰⁹	PCI	86	1.9												
	CABG		2.2										37%		
Groningen ¹¹²	PCI				BMS	✓	✓		T						
	CABG					✓	✓		T	None: 100%		Median sternotomy: 2%; Midcab : 98%			
Lausanne ¹¹⁶	PCI					✓	✓								
	CABG					✓	✓			None: 100%	Crystalloid: 100%	Median sternotomy: 100%	100%		

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 3. RCT interventions (continued)

Trial	Group	Complete revascularization achieved %	Vessels treated (mean)	Stents used (mean)	Type of stent used	PCI adjunctive treatment recommended				CABG procedures					
						ASA	Heparin	Glyco-protein 2b/3a Inhibitors	Other treatment	Bypass mode	Cardioplegia type	Incision Type	Arterial Grafts (% of patients)	Surgical anastomoses (mean)	Bypass time (mean)
Leipzig ¹¹⁸	PCI		1.0	1.2	BMS (GFX, Pura-Vario, Inflow, Micro II, MAC, MAC Carbon, Sito)	✓	✓	2%	T/C						
	CABG		1.0					✓		None: 100%		Median sternotomy: 5%; Midcab 95%			
MASS-I ¹²¹	PCI		1.0			✓	✓								
	CABG		1.0			✓	✓			Hypothermia: 100%			100%		
MASS-II ¹²³	PCI		2.1												
	CABG									Normothermic: 100%	Blood: 100%		92%	3.3	
Myoprotect I ¹²⁶	PCI		1.0		Stent (PUVA or MAC)										
	CABG		2.6												

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 3. RCT interventions (continued)

Trial	Group	Complete revascularization achieved %	Vessels treated (mean)	Stents used (mean)	Type of stent used	PCI adjunctive treatment recommended				CABG procedures					
						ASA	Heparin	Glycoprotein 2b/3a Inhibitors	Other treatment	Bypass mode	Cardioplegia type	Incision Type	Arterial Grafts (% of patients)	Surgical anastomoses (mean)	Bypass time (mean)
Octostent ¹²⁷	PCI		1.5	1.4	Stent type not specified			12%							
	CABG								None: 100%		Median sternotomy: 67%; Midcab 30%	100%			
Poland ¹³⁰	PCI				BMS (Tristar, Tera, or Penta-Guidant)	✓	✓		T						
	CABG								None: 100%		Midcab : 100%				
RITA-1 ¹³²	PCI	81	1.6**	0	None										
	CABG	97	2.1†	0								74%	2.1		
Seoul-Hong ³⁴	PCI			1.2	Drug-coated stent (sirolimus n=115, paclitaxel n=28)		✓		T/C						
	CABG								None: 100%		Midcab : 100%				

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 3. RCT interventions (continued)

Trial	Group	Complete revascularization achieved %	Vessels treated (mean)	Stents used (mean)	Type of stent used	PCI adjunctive treatment recommended				CABG procedures					
						ASA	Hep-arin	Glyco-protein 2b/3a Inhibi-tors	Other treat-ment	Bypass mode	Cardio-plegia type	Inci-sion Type	Arterial Grafts (% of patients)	Surgical anas-tamoses (mean)	Bypass time (mean)
Seoul-Kim ³⁵	PCI					✓	✓		T						
	CABG									None: 100%		Midcab : 100%			
SIMA ¹³⁸	PCI														
	CABG									None: 6; Hypo-thermia: 47		98%			
SoS ¹³⁹	PCI		2.7	median : 2	BMS										
	CABG									None: 16				2.8	70 (median)
Toulouse ¹⁴⁶	PCI	84	2.0												
	CABG	92											58%	2.3	

RCT=randomized controlled trials; PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; BMS=bare metal stent; ASA=aspirin; R=recommended; T=Ticlopidine; C=Clopidogrel; MIDCAB=minimally-invasive coronary artery bypass grafting; * segments; ** angioplasties; † grafts; AWESOME recommended PCI adjunctive treatment but did not specify medication

Appendix Table 4. Procedural (30-day) complications from the RCTs

Trial	Intervention	Procedural Survival %*	Freedom from Procedural non-fatal MI %*	Other short-term complications*										
				Freedom from Stroke %	NI %**	CHF %	Respiratory failure ^a %	Renal failure %	PCI re-intervention %	Surgical re-intervention %	Local hematoma %	Pleural effusion %	Major adverse coronary event %	
AMIST ³⁶	PCI	100	100		1.0									
	CABG	100	100		3.0						2.0			
ARTS ³⁷	PCI	98.5	96.8	98.3						0.3	0.2			
	CABG	98.7	97.7	97.9							2.3			
AWESOME ⁵⁰	PCI	97	NR	99.1					1.8	2.3	4.1			
	CABG	95	NR	98.7					1.3	1.7	0.0			
BARI ⁵⁸	PCI	98.9	97.9	99.8		2.3	1.0	0.2						
	CABG	98.7	95.5	99.2		3.8	2.2	0.1						
CABRI ⁸⁷	PCI	98.7	NR											
	CABG	98.7	NR											
EAST ⁹⁴	PCI	99	97	99.5							0.0			
	CABG	99	89.7	98.5							1.5			
ERACI-I ¹⁰⁴	PCI	98.4	93.7		1.6					1.6				
	CABG	95.3	93.8		3.1						1.6			
ERACI-II ¹⁰⁶	PCI	99.1	91	100						1.8				3.6
	CABG	94.3	94.3	99.1										1.2
GABI ¹⁰⁹	PCI	98.9	97.8	100				1.1		2.7	0.0			
	CABG	97.7	92.1	98.9				9.6		0.6	3.4			
Groningen ¹¹²	PCI	100	90.2	98							0.0			
	CABG	96.1	98	100							2.0			
Lausanne ¹¹⁶	PCI	100	97.1											
	CABG	100	98.5											
Leipzig ¹¹⁸	PCI	100	98.2	100						1.8		2.0		
	CABG	98.2	96.4	99.1							2.7			

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 4. Procedural (30-day) complications from the RCTs (continued)

Trial	Group	Procedural Survival%*	Freedom from Procedural non-fatal MI %*	Other short-term complications*										
				Freedom from Stroke %	NI %**	CHF %	Respiratory failure ^a %	Renal failure %	PCI re-intervention %	Surgical re-intervention %	Local hematoma %	Pleural effusion %	Major adverse coronary event %	
MASS-I ¹²¹	PCI	100	97.2	100										
	CABG	100	98.6	100										
MASS-II ¹²³	PCI	97.6	99	99										
	CABG	97.5	99	97										
Myoprotect I ¹²⁶	PCI	91.3	NR											
	CABG	90.5	NR											
Octostent ¹²⁷	PCI	100	97.8	100						2.2	1.4			
	CABG	98.6	96.5	100						1.4	0.7			
Poland ¹³⁰	PCI	100	98							6.0		4.0	0.0	6.0
	CABG	100	100							0.0		0.0	4.0	0.0
RITA-1 ¹³²	PCI	99.2	96.5	99.8*		0.2*								
	CABG	98.8	97.6	99*		0.6*								
Seoul-Hong ³⁴	PCI	98.3	96.7	100						1.7		4.2	0.0	
	CABG	98.6	97.1	98.6						1.4		0.0	2.9	
Seoul-Kim ³⁵	PCI	100	96							2.0	2.0			4
	CABG	100	98						2	2.0	0.0			2
SIMA ¹³⁸	PCI	98.4	95.2	98.4										
	CABG	100	96.7											
SoS ¹³⁹	PCI	NR	96.1											
	CABG	NR	98.4											
Toulouse ¹⁴⁶	PCI	98.7	96.1											
	CABG	98.7	94.7				5.3							

RCTs=randomized controlled trials; MI=myocardial infarction; NI=nosocomial infection; CHF=congestive heart failure; PCI=percutaneous coronary intervention;

CABG=coronary artery bypass grafting; NR=not reported

* Percentage based on the number of subjects randomized at the start of the study.

** Wound infection

a=Respiratory failure or other pulmonary complication

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 5. BARI, EAST, AWESOME RCT/registry demographics

Study	Intervention	RCT/Registry	Number of subjects at start of study	Length of follow-up	Age (Mean)	Women %	White %	African-American %	Diabetes %
BARI	PCI	RCT	915	7 years	61.8	27	91	5	19
BARI	PCI	Registry	1189	7 years	61.0	26			15
BARI	CABG	RCT	914	7 years	61.4	26	89	7	20
BARI	CABG	Registry	625	7 years	62.5	26			19
EAST	PCI	RCT	198	8 years	61.8	25	93	7	25
EAST	PCI	Registry	168	3 years	60.3	24.4	92.8		19.2
EAST	CABG	RCT	194	8 years	61.4	27	94	6	21
EAST	CABG	Registry	270	3 years	62.6	18.9	96.3		21.6
AWESOME	PCI	RCT	222	5 years	67				29
AWESOME	PCI	Registry—Physician-Directed	651	5 years	66				31
AWESOME	PCI	Registry—Patient-Choice	207	5 years	66				32
AWESOME	CABG	RCT	232	5 years	67				34
AWESOME	CABG	Registry—Physician-Directed	692	5 years	69				36
AWESOME	CABG	Registry—Patient-Choice	95	5 years	68				22

RCT=randomized controlled trial; PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 6. BARI, EAST, AWESOME RCT/registry clinical characteristics

Study	Intervention	RCT/Registry	Hypertension %	Hyperlipidemia %	Prior MI %	Heart failure %	Current Smoking %	Stable angina %	Unstable Angina %	Ejection Fraction (mean)	Prior stroke %	Peripheral vascular disease %	Number diseased vessels (mean)
BARI	PCI	RCT	49		54	9		32	63	57.1		9	2.39
BARI	PCI	Registry	47		50	5	70	32	68			14	3.0
BARI	CABG	RCT	49		55	9		29	65	57.6		8	2.41
BARI	CABG	Registry	52		50	6	64	30	70			15	3.6
EAST	PCI	RCT	54	36	41	3	70			60.8			3.4
EAST	PCI	Registry	48.8		35.7	4.2	63.7	CCS III/IV=71.2.		60.9			
EAST	CABG	RCT	52	38	41	4	21			62			3.4
EAST	CABG	Registry	54.4		41.9	3.3	66.7	CCS III/IV=75.2.		59.7			
AWESOME	PCI	RCT	67		70				100	47	9		2.2
AWESOME	PCI	Registry—Physician-Directed	66		65	57	32				11		
AWESOME	PCI	Registry—Patient-Choice	64		61	60	36			46	9		
AWESOME	CABG	RCT	69		71				100	44	14		2.33
AWESOME	CABG	Registry—Physician-Directed	69		51	83	28			43	11		
AWESOME	CABG	Registry—Patient-Choice	66		54	47	33			45	7		

RCT=randomized controlled trial; MI=myocardial infarction; PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CCS=Canadian Cardiovascular Society

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 7. Survival in patients with or without diabetes

Trial	Subgroup	PCI				CABG			
		N randomized	1 year Survival (%)	N at 5 years	5 year Survival (%)	N randomized	1 year Survival (%)	N at 5 years	5 year Survival (%)
ARTS	DM	112	93.8			96	96.9		
	No DM	488	98.4			509	97.2		
AWESOME	DM	65	86.0		74.0	79	81.0		74.0
BARI	No DM or untreated DM	742		468	91.1	734		449	91.1
	Treated DM	173		69	65.5	180		93	80.5
EAST	DM	29		26	89.7	30		27	90.0
	No DM	169		148	87.6	164		150	91.5
ERACI-II	DM	39			90.0	39			89.8
	No DM	186			93.6	186			88.2
MASS-II	DM	56	94.6		89.3	59	93.2		91.5
	No DM	149	94.6		92.6	144	95.1		88.9

PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; DM=diabetes mellitus

Appendix Table 8. CABG volume-outcomes primary studies and coverage in previous reviews

Study (Author, Journal)	Citation Year	Sowden CABG	Kalant CABG	Halm CABG	Dudley CABG
Luft HS et al. ²²⁵	1979	YES	YES	NO	NO
Luft ²³¹	1980	NO (ex)	NO	NO	NO
Maerki SC et al. ²²⁶	1986	YES	NO (ex)	NO	NO
Sloan et al. ²³²	1986	NO (ex)	NO	NO	NO
Hughes RG et al. ²³³	1987	NO (ex)	YES (H&P)	NO	YES
Kelly JV et al. ²³⁴	1987	NO	YES	NO	NO
Luft HS et al. ²³⁵	1987	NO (ex)	NO (cited)	NO (cited)	YES
Riley G et al. ¹⁸³	1985	YES	YES	NO	NO
Rosenfeld et al. ²³⁶	1987	YES	NO	NO	NO
Rosenfeld K et al. ²³⁶	1987	NO (ex)	YES	NO	NO
Showstack JA et al. ²³⁷	1987	YES	YES	YES	YES
Hannan EL et al. ¹⁹⁷	1989	YES	YES (H&P)	YES (H&P)	YES
Hannan et al. ¹⁹⁹	1990	NO	NO (ex)	NO	NO
Hannan EL et al. ¹⁹⁸	1991	NO	NO	YES (H&P)	YES
Williams SV et al. ²³⁸	1991	NO (ex)	NO (ex)	NO	NO
Zelen J et al. ²³⁹	1991	NO (ex)	NO (ex)	NO	NO
Farley DE et al. ²⁴⁰	1992	NO (ex)	YES	YES	YES
Hannan EL et al. ¹⁹⁰	1994	YES	YES (H&P)	NO	NO (cited)
Grumbach K et al. ²⁴¹	1995	NO	YES	NO	NO
Hannan EL et al. ¹⁹⁵	1995	NO	YES (P)	YES	NO
Clark RE et al. ²¹¹	1996	NO	YES	NO	NO
Shroyer AL et al. ²⁴²	1996	NO	NO (cited)	YES	YES
Ghali WA et al. ²⁴³	1998	NO	YES	NO	NO
Sollano JA et al. ²⁰⁰	1999	NO	YES	NO	NO
Brown PP et al. ²⁴⁴	2001	NO	YES	NO	NO
Nallamothu BK et al. ²⁴⁵	2001	NO	NO (ex)	NO	NO
Birkmeyer JD et al. ¹⁷⁷	2002	NO	YES	NO	NO
Birkmeyer JD et al. ¹⁷⁸	2003	NO	NO	NO	NO
Hannan EL et al. ¹⁹⁴	2003	NO	NO	NO	NO
Rosenthal GE et al. ¹⁹²	2003	NO	NO	NO	NO
Birkmeyer JD et al. ²²⁷	2004	NO	NO	NO	NO
Peterson ED et al. ²¹⁰	2004	NO	NO	NO	NO
Wu C et al. ¹⁹¹	2004	NO	NO	NO	NO
Rathore et al. ²⁴⁶	2004	NO	NO	NO	NO
Carey JS et al. ²¹²	2005	NO	NO	NO	NO
Epstein AJ et al. ²²⁸	2005	NO	NO	NO	NO
Glance LG et al. ¹⁸⁹	2005	NO	NO	NO	NO
Welke ¹⁸⁵	2005	NO	NO	NO	NO

CABG=coronary artery bypass grafting

Table Notes:

- 1.) “NO (ex)” means that the article was identified in the review’s search, but excluded from the analysis, often because the data duplicated that of other studies included. “NO” means that the article was not reported in the systematic review. “YES” means that the article was included in the systematic review’s analysis for hospital volume, unless the YES is followed by “(P)” meaning that only provider volume was available. If the YES is followed by “(H&P)” both hospital and provider volume-outcomes results were reported in the review. NO (cite) means that the article was not included in the analysis, nor were exclusion reasons given, but the article was cited in the review.
- 2.) Shaded citations were not cited in any reviews and therefore were abstracted and provided in this report to supplement the previous systematic review findings.

Appendix Table 9. PCI volume-outcomes primary studies and coverage in previous reviews

Study (Author, Journal)	Citation Year	Halm	Dudley
Ritchie JL et al. ²⁴⁷	1993	YES	YES
Jollis JG et al. ¹⁷⁹	1994	YES	YES
Kimmel, SE et al. ²⁴⁸	1995	NO	YES
Phillips KA et al. ²⁴⁹	1995	YES	YES
Ellis SG et al. ²⁵⁰	1996	NO	NO
Ellis SG et al. ²⁵¹	1997	NO	NO
Hannan EL et al. ¹⁹⁶	1997	YES (H&P)	YES
Jollis JG et al. ¹⁸⁰	1997	YES (H&P)	YES
Kastrati A et al. ²⁵²	1998	NO	NO
McGrath PD et al. ²⁰⁵	1998	YES (P)	NO
Malenka DJ et al. ²⁰⁴	1999	YES (P)	NO
Maynard C et al. ²⁵³	1999	YES	NO
Ritchie JL et al. ¹⁸⁴	1999	NO	NO
Ritchie JL et al. ²⁵⁴	1999	YES	NO
Ho V ²⁵⁵	2000	YES	NO
Maynard C et al. ¹⁸¹	2000	NO	NO
McGrath PD et al. ¹⁸²	2000	YES (H&P)	NO
Ho V ²⁵⁶	2002	NO	NO
Kimmel SE et al. ²⁵⁷	2002	NO	NO
Watanabe CT et al. ²⁵⁸	2002	NO	NO
Brown DL et al. ²⁵⁹	2003	NO	NO
Birkmeyer JD et al. ²²⁷	2004	NO	NO
Epstein AJ et al. ²¹	2004	NO	NO
Harjai KJ et al. ²⁶⁰	2004	NO	NO
Carey JS et al. ²¹²	2005	NO	NO
Epstein AJ et al. ²²⁸	2005	NO	NO
Hannan EL et al. ¹⁹³	2005	NO	NO
Moscucci M et al. ²⁶¹	2005	NO	NO
Burton KR et al. ²⁰⁷	2006	NO	NO

PCI=percutaneous coronary intervention

Table Notes:

- 3.) “NO (ex)” means that the article was identified in the review’s search, but excluded from the analysis, often because the data duplicated that of other studies included. “NO” means that the article was not reported in the systematic review. “YES” means that the article was included in the systematic review’s analysis for hospital volume, unless the YES is followed by “(P)” meaning that only provider volume was available. If the YES is followed by “(H&P)” both hospital and provider volume-outcomes results were reported in the review. NO (cite) means that the article was not included in the analysis, nor were exclusion reasons given, but the article was cited in the review.
- 4.) Shaded citations were not cited in any reviews and therefore were abstracted and provided in this report to supplement the previous systematic review findings.

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 10. Basic finding from primary studies of PCI volume-outcomes in clinical registries

Citation	Population	Year(s)	# Pts	Hosp Vol Levels	Hosp Vol-Death*	Hosp Vol-CABG*	Dr Vol Levels	Dr Vol-Death*	Dr Vol-CABG*	Notes	
Primary Studies: National											
Kimmel S et al. ²⁴⁸	Society for Cardiac Angiography and Interventions Registry	1992**-1993	19,594	<200, 200-399, 400-599, 600+; AND <200 vs. 200+	yes [§]	yes		n/a	n/a	Hosp cutoff <200 vs. 400+. Sample restricted to cases of balloon angioplasty only.	
Primary Studies: Regional/State											
McGrath P et al. ²⁰⁵	Northern New England Cardiovascular Disease Study Group Coronary Angioplasty Reporting System (NY State Registry)	1990-1993	12,988		n/a	n/a	23-85, 89-144, 153-463	no	yes	All operators performed in high volume hospitals (>600 procedures per year).	
Malenka et al. ²⁰⁴		1994-1996	15,080		n/a	n/a	22-84, 88-129, 138-370	no	no		
Hannan E Racz et al. ¹⁹⁶		1991-1994	62,670	<400, 400-599, 600-799, 800-999, 1000+	yes	yes	<75, 75-124, 125-174, 175-249, 250+	yes	yes		Hosp cutoff <400. Dr cutoff <75.
Hannan E et al. ¹⁹³		1998-2000	107,713	400, 500, 600 cutoffs	yes	yes	75, 100, 125 cutoffs	no	yes		
Ellis S et al. ²⁵¹	Quality-controlled databases at 5 high-volume centers (Cleveland Clinic central data repository)	1993-1994	12,985		n/a	n/a	70-, 70-99, 100-142, 142-270, 270+	yes	yes	All at high volume hospitals (>1,000)	

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 10. Basic finding from primary studies of PCI volume-outcomes in clinical registries (continued)

Citation	Population	Year(s)	# Pts	Hosp Vol Levels	Hosp Vol-Death*	Hosp Vol-CABG*	Dr Vol Levels	Dr Vol-Death*	Dr Vol-CABG*	Notes
Burton K et al. ²⁰⁷	Scottish Coronary Revascularization Register	1997 -2003	17,417	<400, 400-750, 750+	no	n/a		n/a	n/a	Long-term f/up analysis
Harjai K et al. ²⁶⁰	William Beaumont Hospital Interventional Cardiology database	1999 -2001	12,293		n/a	n/a	92-, 93-140, >140	no	no	High-volume hospital
Moscucci M et al. ²⁶¹	Michigan regional	2002 only	18,504		n/a	n/a	1-33, 34-89, 90-139, 140-206, 207-582; AND 75 cutoff	no	yes (with other cardiac events)	
Primary Studies: Institutional										
Ellis S et al. ²⁵⁰	Cleveland Clinic Interventional Database (multicenter)	1990 -1996	4,860		n/a	n/a	25-75, 75+	n/a	n/a	Results by individual provider only, with one outlier per volume group.
Kastrati A et al. ²⁵²	Deutsches Herzzentrum Munchen database	1992 -1997	3,409		yes (with MI, CABG)	yes (with death, MI)	80-, 80-168, 169-298, 299-483, 483+	yes	yes	Dr. cutoff <70.

PCI=percutaneous coronary intervention; Pts=patients; Hosp=hospital; Vol=volume; Dr=physician; CABG=coronary artery bypass grafting; RA= Risk adjusted; AE= Adverse events; HCUP= Healthcare Cost and Utilization Project; N/A=not available

* Yes/No answers to whether risk adjusted mortality and same stay CABG outcomes are significantly associated with hospital and doctor volume.

**The first year of each data source is bolded, though analyses may vary by study in subsequent years. Common data sources are boxed. Study citation and their results are shaded in cases where there is overlap between studies (e.g., a common year from the same data source in more than one study).

§Yes and no bolded for answers without qualifiers related to risk adjustment (RA) or outcomes.

Appendix Table 11. Basic finding from primary studies of PCI volume-outcomes in administrative data

Citation	Population	Year(s)	# Pts	Hosp Vol Levels	Hosp Vol-Death*	Hosp Vol-Same Stay CABG*	Dr Vol Levels	Dr Vol-Death*	Dr Vol-Same Stay CABG*	Notes	
Primary Studies: National											
Jollis J et al. ¹⁷⁹	Medicare Provider Analysis and Review	1987**-1990	217,836	50-, 50-100, 100+	yes ^s	yes (not RA)	n/a	n/a	n/a	Association for hosp cutoff <200. Dr cutoff <75.	
Jollis, J et al. ¹⁸⁰											
Ritchie et al. ¹⁸⁴		1992 only	97,478	100-, 100-200, 200+	yes (with CABG)	yes (with death)	25-, 25-50, 50+	n/a	yes		
Maynard C et al. ¹⁸¹		1994 and 1996	165,657(1994) ; 201,869 (1996)	100-, 101-200, 200+	no - 1994 (not RA); no - 1997 (not RA)	yes - 1994 (not RA); no - 1996 (not RA)	n/a	n/a			
McGrath P et al. ¹⁸²		1996 only	201,869	100-, 101-200, 200+	yes (not RA)	yes (not RA)	n/a	n/a			
Ritchie J et al. ²⁵⁴		1997 only	167,208	80-, 80-160, 160+	yes	yes	30-, 30-60, 60+	no	n/a		Study reports stent analysis. Dr-Hosp interaction analysis.
Watanabe C et al. ²⁵⁸		1993-1994	163,527	200-, 201-400, 400+	yes	yes	n/a	n/a			
Epstein A et al. ²¹		HCUP Nationwide Inpatient Sample	1994 and 1997	202,584	201-, 201-400, 400+	no - 1994 (not RA); yes - 1997 (not RA)	n/a	n/a	n/a		Study reports stent analysis.
			1998-2000	362,748	5-199, 200-399, 400-999, 1000+	yes	n/a	n/a	n/a		Association for hosp cutoff <200 vs. 400-999.

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 11. Basic finding from primary studies of PCI volume-outcomes in administrative data (continued)

Citation	Population	Year(s)	# Pts	Hosp Vol Levels	Hosp Vol-Death*	Hosp Vol-Same Stay CABG*	Dr Vol Levels	Dr Vol-Death*	Dr Vol-Same Stay CABG*	Notes
Epstein A et al. ²²⁸		1998-2001	2,500,796	400-, 400+	yes	n/a		n/a	n/a	
Birkmeyer J et al. ²²⁷		2000 only	678,296	400 cutoff	yes	n/a		n/a	n/a	
Primary Studies: Regional/State										
Ho V. ²⁵⁵ and Ho V. ²⁵⁶		1984-1996	353,488	200-, 200-400, 400+	yes	n/a		n/a	n/a	Analysis divided into: 84-87, 88-92, 93-96. Association less clear in 93-96.
Phillips K et al. ²⁴⁹ and Ritchie et al. ²⁴⁷	California Office of Statewide Health Planning	1989 only	24,856	201-, 201-400, 400+	yes (with CABG)	yes (with death)		n/a	n/a	Association for hospital cutoff 200 or less vs. 201-400.
Maynard C et al. ²⁵³		1996 only	43,040	<200, 201-400, >400; AND stenting volumes: <85, 85-167, >167)	no	yes		n/a	n/a	
Brown L et al. ²⁵⁹		1997 only	44,276	200-, 200-400, 400+	yes	yes		n/a	n/a	
Carey J et al. ²¹²		1999-2001	153,755	600 cutoff	no	n/a		n/a	n/a	
Kimmel S et al. ²⁵⁷		Pennsylvania Health Care Cost Containment Council database	1994-1995	25,222	400-, 400-599, 600-899, 900+	no	yes		n/a	n/a

PCI=percutaneous coronary intervention; Pts=patients; Hosp=hospital; Vol=volume; Dr=physician; CABG=coronary artery bypass grafting; RA= Risk adjusted; AE= Adverse events; HCUP= Healthcare Cost and Utilization Project; N/A=not available

* Yes/No answers to whether risk adjusted mortality and same stay CABG outcomes are significantly associated with hospital and doctor volume.

**The first year of each data source is bolded, though analyses may vary by study in subsequent years. Common data sources are boxed. Study citation and their results are shaded in cases where there is overlap between studies (e.g., a common year from the same data source in more than one study).

§Yes and no bolded for answers without qualifiers related to risk adjustment (RA) or outcomes.

Appendix Table 12. Basic finding from primary studies of CABG volume-outcomes published since 2001

Citation	Population	Year(s)	# Pts	Hosp Vol Levels	Hosp Vol-Death*	Dr Vol Levels	Dr Vol-Death *
Clinical Databases: National							
Peterson E et al. ²¹⁰	Society of Thoracic Surgeons National Cardiac Database	2000-2001	267,089	150-, 151-300, 301-450, 450+	yes [§] (though not for <65 year subgroup)	10-85, 86-138, 139+	n/a
Clinical Databases: Regional/State							
Glance L et al. ¹⁸⁹	NY State Registry	1998-1999	36,930	Continuous variable	yes (though not for off-pump procedure)	OFF-PUMP: quartiles: 5-, 5-10, 11-31, 31+; ON-PUMP: 52-, 52-155, 156-273, 273+.	yes (but not for off-pump procedure)
Wu et al. ¹⁹¹	NY State Registry	1997-1999	57,150	Thresholds between 200-600 cases/yr (units of 100)	yes (especially for low risk patients with expected risk of in-hosp death <2%)	Thresholds between 50-150 cases/yr (units of 25)	yes
Hannan E et al. ¹⁹⁴	NY State CSRS database	1997-1999	57,150	Thresholds between 100-800 cases/yr (units of 100); The % of patients and # of hospitals with annual volumes on either side of each threshold were calculated.	yes	Thresholds between 25-200 cases/year (units of 25)	yes
Rosenthal G et al. ¹⁹²	Databases from NY State, Northeast Ohio and Dept. of Veterans Affairs Hospitals	1993-1996	73,209 total patients: 19,266 (VA) 44,247 (NY) 9,696 (OH)	500-, 501-1000, 1000+	yes (though potentially less so in VA patients where hospital volume varies less)		n/a

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 12. Basic finding from primary studies of CABG volume-outcomes published since 2001 (continued)

Citation	Population	Year(s)	# Pts	Hosp Vol Levels	Hosp Vol-Death*	Dr Vol Levels	Dr Vol-Death *
Nallamothu B et al. ²⁴⁵	Solucient EXPLORE database	1997	13,644	200-, 200+	yes (though only for moderate and high patient risk groups with predicted risk of 2-20% in-hospital death)		n/a
Administrative Databases: National							
Birkmeyer J et al. ¹⁷⁸	Medicare Claims Database	1998- 1999	474,108 (8 procedures)	314-, 314-628, 628+	yes	100-, 101-162, 162+	yes
Welke K et al. ¹⁸⁵	Medicare Provider and Analysis Review (MEDPAR) Part A data files	1996- 2001	948,093	quintiles: 125-, 125-204, 205-299, 300-449, 449+; AND Leapfrog volumes AND deciles	no		n/a
Rathore S et al. ²⁴⁶	HCUP National Inpatient Sample database	1998- 2000	228,738	12-249, 250-499, 500+	yes		n/a
Birkmeyer J et al. ²²⁷	HCUP Nationwide Inpatient Sample	2000 only	394,165 (CABG) 678,296 (PCI)	CABG: 450-, 450+/yr PCI: 400-, 400+/yr	yes		n/a
Epstein A et al. ²²⁸	HCUP Nationwide Inpatient Sample	1998- 2001	2,500,796 (PCI); 1,496,937 (CABG)	CABG: 450-, 450+/yr; PCI: 400-, 400+/yr	yes		n/a
Administrative Databases: Regional/State							
Carey JS et al. ²¹²	Discharge abstracts from the California Office of Statewide Health Planning	1999- 2001	82,353 (CABG) 153,755 (PCI)	CABG: 300-, 300+/yr PCI: 600-, 600+/yr	yes		n/a

CABG=coronary artery bypass grafting; Pts=patients; Hosp=hospital; vol=volume; Dr=physician; RA= Risk adjusted; AE= Adverse events; CSRS=cardiac surgery reporting system; HCUP= Healthcare Cost and Utilization Project

* Yes/No answers to whether risk adjusted mortality and same stay CABG outcomes are significantly associated with hospital and doctor volume.

**The first year of each data source is bolded, though analyses may vary by study in subsequent years. Common data sources are boxed. Study citation and their results are shaded in cases where there is overlap between studies (e.g., a common year from the same data source in more than one study).

§Yes and no bolded for answers without qualifiers related to risk adjustment (RA) or outcomes.

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 13: Volume distribution for PCI and CABG primary studies

Citation	Population	Hosp Volume Distribution*	Dr Volume Distribution*
Clinical Databases PCI: National			
Kimmel S et al. ²⁴⁸	Society for Cardiac Angiography and Interventions registry	LOW (<200 procedures/yr): 10.3% of patients; MEDIUM-LOW (200-399): 31.1%; MEDIUM-HIGH (400-599): 25.8%; HIGH (600+): 32.8%; (48 total hospitals/19,594 total patients)	Not Applicable**
Clinical Databases PCI: Regional/State			
McGrath P et al. ²⁰⁵	Northern New England Cardiovascular Disease Study Group (NNECVDSG) database	Not Applicable	LOW (23-85 procedures/yr): 18.8% of patients; MEDIUM (89-144): 28.2%; HIGH (153-463): 53% of patients; (12,088 total patients)
Malenka et al. ²⁰⁴	Northern New England Cardiovascular Disease Study Group (NNECVDSG) database	Not Applicable	LOW (22-84 procedures/yr): 31.9% of doctors/14.4% of patients; MEDIUM (88-129): 34%/27.9%; HIGH (138-370): 34%/57.7%; (47 total doctors / 15,080 total patients)
Hannan E L et al. ¹⁹³	Coronary Angioplasty Reporting System (CARS) of the NY State Registry	For annual hospital-volume threshold of 400: LOW (<400): 4-5 hospitals/2.3% of patients; HIGH (400+): 29-30 hospitals/97.7% of patients; For annual hospital-volume threshold of 500: LOW (<500): 6-7 hospitals/5.2% of patients, HIGH (500+): 27 hospitals/94.8% of patients; For annual hospital-volume threshold of 600: LOW (<600): 9-10 hospitals/9.8% of patients; HIGH (600+): 23-25 hospitals/90.2% of patients; (34 total hospitals/107,713 total patients)	LOW (75-/yr): 29.6%-30.8% of doctors; MEDIUM (100-/yr): 40.1%-40.7%; HIGH (125-/yr): 46.9%-51.87% (263 total doctors)
Hannan E et al. ¹⁹⁶	Coronary Angioplasty Reporting System (CARS) of the NY State Registry	LOW (<600 procedures/yr): 68.1% of hospitals; MEDIUM (600-999): 25.4%; HIGH (1000+): 6.5%;	LOW (<75 procedures/yr): 46.0% of doctors; MEDIUM (75-174): 38.0%; HIGH (175+): 16%; (608 total doctors)
Ellis S et al. ²⁵¹	Quality-controlled databases at 5 high-volume centers, central data analysis center at Cleveland Clinic	Not Applicable	Not Applicable
Burton K R et al. ²⁰⁷	Scottish Coronary Revascularization Register	LOW (<400 procedures/yr): 28% of patients; MEDIUM (400-750): 53% of patients; HIGH (>750): 19% of patients; (17,417 total patients)	Not Applicable

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 13: Volume distribution for PCI and CABG primary studies (continued)

Citation	Population	Hosp Volume Distribution*	Dr Volume Distribution*
Harjai K et al. ²⁶⁰	William Beaumont Hospital Interventional Cardiology database	Not Applicable	LOW (92- procedures/yr): 14.8% of patients; MEDIUM (93-140): 30.2%; HIGH (140+): 54.9% (28 total doctors / 12,293 total patients)
Moscucci M et al. ²⁶¹	Michigan regional	Not Applicable	LOW (1-33 procedures/yr): 2.2% of total patients; MEDIUM-LOW (34-89): 11.4%; MEDIUM (90-139): 16.8%; MEDIUM-HIGH (140-206): 27.9%; HIGH (207-582): 41.9% of total patients (165 total doctors / 18,504 total patients) ALSO: For 75 procedures/yr cutoff LOW (<75): 32.7% of doctors; HIGH (75+): 67.3% (165 total doctors)
Clinical Databases PCI: Institutional			
Ellis S et al. ²⁵⁰	Cleveland Clinic Interventional Database (multicenter)	Not Applicable	Not Available**
Kastrati A et al. ²⁵²	Deutsches Herzzentrum Munchen database	Not Applicable	LOW (<80 procedures/yr): 10% of doctors; MEDIUM-LOW (80-168): 30%; MEDIUM (169-298): 20%; MEDIUM-HIGH (299-483): 10%; HIGH (>483): 30%; (10 total doctors / 3,409 total patients)
Administrative Databases PCI: National			
Jollis J et al. ¹⁷⁹	Medicare Provider Analysis and Review files	Not Available	Not Applicable
Jollis, J et al. ¹⁸⁰	Medicare Provider Analysis and Review files	LOW (<100 procedures/yr): 16.3% of patients; MEDIUM (100-200): 30.2%; HIGH (>200): 53.5%; (984 total hospitals / 97,478 total patients)	LOW (<25 procedures/yr): 37.4% of patients; MEDIUM (25-50): 31.5%; HIGH (50+): 31.1%; (97,478 total patients)
Ritchie et al. ¹⁸⁴	Medicare Provider Analysis and Review files	LOW (100- procedures/yr): 9.6% of patients; MEDIUM (101-200): 21.7%; HIGH (200+): 68.7%; (122,220 total patients)	Not Applicable
Maynard, C et al. ¹⁸¹	Medicare Provider Analysis and Review files	LOW (100- procedures/yr): 34% of patients; MEDIUM (101-200): 32%; HIGH (200+): 34%; (996 total hospitals / 201,869 total patients)	Not Applicable
McGrath, PD et al. ¹⁸²	Medicare Provider Analysis and Review files	LOW (<80 procedures/yr): 5.0% of patients; MEDIUM (80-160 procedures/yr): 13.5%; HIGH (>160): 81.5%; (1,003 total hospitals / 167,208 total patients)	LOW (<30 procedures/yr): 20% of patients; MEDIUM (30-60): 30.8%; HIGH (>160): 49.2%; (6,534 total doctors / 167,208 total patients)

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 13: Volume distribution for PCI and CABG primary studies (continued)

Citation	Population	Hosp Volume Distribution*	Dr Volume Distribution*
Ritchie JL et al. ²⁵⁴	HCUP Nationwide Inpatient Sample	LOW (200- procedures/yr): 5.0% of patients; MEDIUM (201-400): 21%; HIGH (>400): 74%; (214 total hospitals / 163,527 total patients)	Not Applicable
Watanabe CT et al. ²⁵⁸	HCUP Nationwide Inpatient Sample	1994: LOW (<201 procedures/yr): 5.2% of patients; MEDIUM (201-400): 19.0%; HIGH (>400): 75.8%; (84,036 total patients) 1997: LOW (<201 procedures/yr): 4.2% of patients; MEDIUM (201-400): 11.3%; HIGH (>400): 84.5%; (118,558 total patients)	Not Applicable
Epstein et al. ²¹	HCUP Nationwide Inpatient Sample	LOW (5-199 procedures/yr): 4% of patients; MEDIUM (200-399): 12%; HIGH (400-999): 42%; VERY HIGH (1000+): 42% (362,748 total patients)	Not Applicable
Epstein AJ et al. ²²⁸	HCUP Nationwide Inpatient Sample	For annual hospital-volume threshold of 400: LOW (<400): 45.1% of hospital year groups/14.0% of patients; HIGH (400+): 54.9% of hospital year groups/86.0% of patients;	Not Applicable
Birkmeyer J et al. ²²⁷	HCUP Nationwide Inpatient Sample	Not Available	Not Applicable
Administrative Databases PCI: Regional/State			
Ho V. ²⁵⁵ and Ho V. ²⁵⁶	Discharge abstracts from the California Office of Statewide Health Planning	Not Available	Not Applicable
Phillips K et al. ²⁴⁹ and Ritchie et al. ²⁴⁷	Discharge abstracts from the California Office of Statewide Health Planning	FOR NON-AMI: LOW (>201 procedures/yr): 25.9% of patients; MEDIUM (201-400): 32.6%; HIGH (>400): 41.4% (20,064 total patients); FOR AMI: LOW (>201 procedures/yr): 36.4% of patients; MEDIUM (201-400): 36.5%; HIGH (>400): 27.1% (4,792 total patients)	Not Applicable
Maynard C et al. ²⁵³	Discharge abstracts from the California Office of Statewide Health Planning	Not Available	Not Applicable
Brown L et al. ²⁵⁹	Discharge abstracts from the California Office of Statewide Health Planning	LOW (<200 procedures/yr): 46% of patients; MEDIUM (200-400): 34%; HIGH (>400): 20%; (140 total hospitals/18,940 total patients)	Not Applicable

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 13: Volume distribution for PCI and CABG primary studies (continued)

Citation	Population	Hosp Volume Distribution*	Dr Volume Distribution*
Carey JS et al. ²¹²	Discharge abstracts from the California Office of Statewide Health Planning	For annual hospital-volume threshold of 600 procedures/yr: LOW (<600): 84.0% of hospitals; HIGH (600+): 16.0%; (IN CALIFORNIA)	Not Applicable
Kimmel S et al. ²⁵⁷	Pennsylvania Health Care Cost Containment Council database	LOW (<400 procedures/yr): 17.4% of patients; MEDIUM-LOW (400-599): 14.3%; MEDIUM-HIGH (600-899): 29.6%; HIGH (900+): 38.8%; (43 total labs / 25,222 total patients)	Not Applicable
Clinical Databases CABG: National			
Peterson E et al. ²¹⁰	Society of Thoracic Surgeons National Cardiac Database	LOW (<150 procedures/year): 22.3% of hospitals/ 6.3% of patients; MEDIUM-LOW (151-300): 34.4%/22.5%; MEDIUM-HIGH (301-450): 20.7%/23.1%; HIGH (450+): 22.6%/48.1% (439 total hospitals/267,089 total patients)	Not available
Clinical Databases CABG: Regional/State			
Glance L et al. ¹⁸⁹	NY State Registry	Not available	Not available
Wu et al. ¹⁹¹	NY State Registry	LOWEST (for 200 procedures/yr cutoff): 3-4 Low-Volume Hospitals (LVH per year), 29-30 High-Volume Hospitals (HVH) per year; LOW (300 cutoff): 5-7 LVH per year, 26-28 HVH per year; MEDIUM (400 cutoff): 10-14 LVH per year, 19-23 HVH per year; MEDIUM-HIGH (500 cutoff): 14-17 LVH per year, 16-19 HVH per year; HIGH (600 cutoff): 18-21 LVH per year, 12-15 HVH per year (57,150 patients)	For annual hospital volume of >600: LOW (125 cutoff): 38-41 doctors/year, HIGH (>125): 48-62; For annual hospital volume of <600: LOW (125-) 57-79, HIGH (>125): 21-26 (192 total doctors)
Hannan E et al. ¹⁹⁴	NY State CSRS database	LOW (<600 procedures/yr): 35.72% of patients, HIGH (more than 600 procedures/yr): 64.27% (57,150 total patients)	LOW (<125 procedures/year): 29.9% of patients; HIGH (>125 procedures/year): 70.1% (57,150 total patients)
Rosenthal G et al. ¹⁹²	Databases from NY State, Northeast Ohio and Dept. of Veterans Affairs Hospitals	VA: LOW (500- procedures/yr): 70% of hospitals, MEDIUM (501-1000): 30%, HIGH (1000+): 0% (43 total hospitals); NY State: LOW (500-): 16%, MEDIUM (501-1000): 19%, HIGH (1000+): 66% (32 total hospitals); NE Ohio: LOW (500-): 50%, MEDIUM (501-1000): 20%, and HIGH (1000+): 30% (10 total hospitals)	Not Applicable
Nallamothu B et al. ²⁴⁵	Solucient EXPLORE database	LOW (for 200 procedures/yr cutoff): 44.6% of hospitals/ 14.9% of patients; HIGH (200 cutoff): 55.4%/ 85.1% (13,644 total patients)	

Appendix Table 13: Volume distribution for PCI and CABG primary studies (continued)

Citation	Population	Hosp Volume Distribution*	Dr Volume Distribution*
Administrative Databases CABG: National			
Birkmeyer J et al. ¹⁷⁸	Medicare Claims Database	LOW (<314 procedures/year): 33.5% of patients; MEDIUM (314-628): 33.3%; HIGH (more than 628): 33.3% (220,592 total patients)	LOW (less than 100 procedures/yr): 56.2% of doctors; MEDIUM (101-162): 25.7%; HIGH (more than 162): 18.2% (4,790 total doctors)
Welke K et al. ¹⁸⁵	Medicare Provider and Analysis Review (MEDPAR) Part A data files	LOWEST (for 200 procedures/yr cutoff): 3-4 Low-Volume Hospitals (LVH per year), 29-30 High-Volume Hospitals (HVH) per year; LOW (300 cutoff): 5-7 LVH per year, 26-28 HVH per year; MEDIUM (400 cutoff): 10-14 LVH per year, 19-23 HVH per year; MEDIUM-HIGH (500 cutoff): 14-17 LVH per year, 16-19 HVH per year; HIGH (600 cutoff): 18-21 LVH per year, 12-15 HVH per year (57,150 patients)	For annual hospital volume of >600: LOW (125 cutoff): 38-41 doctors/year, HIGH (>125): 48-62; For annual hospital volume of <600: LOW (125-57-79, HIGH (>125): 21-26 (192 total doctors)
Rathore S et al. ²⁴⁶	National Inpatient Sample database	LOW (12-249 procedures/yr): 16% of patients; MEDIUM (250-499): 26%; HIGH (500+): 58% (393 total hospitals/228,738 total patients)	
Birkmeyer J et al. ²⁶²	HCUP Nationwide Inpatient Sample	LOW (<55 procedures/yr): 53.5% of patients; HIGH (55+ procedures/yr): 46.5% (307,030 total patients)	Not Applicable
Birkmeyer J et al. ²²⁷	HCUP Nationwide Inpatient Sample	Not Available	Not Applicable
Epstein A et al. ²²⁸	HCUP Nationwide Inpatient Sample	LOW (for 450 procedures/yr cutoff): 38.4% of patients; HIGH (450 cutoff): 61.6% (374,234 total patients)	Not Applicable
Administrative Databases CABG: Regional/State			
Carey JS et al. ²¹²	Discharge abstracts from the California Office of Statewide Health Planning	LOW (for 300 procedures/yr cutoff): 78.5% of hospitals; HIGH (300 cutoff): 21.5% (121 total hospitals)	Not Applicable

PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; Hosp=hospital; Dr=physician; HCUP=healthcare cost and utilization project

*When volume is distributed across two groups, they are referred to as LOW and HIGH. When volume is distributed across three groups, they are referred to as LOW, MEDIUM, and HIGH. When volume is distributed across four groups, they are referred to as LOW, MEDIUM-LOW, MEDIUM-HIGH, and HIGH. When volume is distributed across five groups, they are referred to as LOW, MEDIUM-LOW, MEDIUM, MEDIUM-HIGH, and HIGH. Volume cut-offs are shown in parentheses after each volume level. Total number of hospitals, doctors or patients is also given wherever available.

**Not Available signifies that the volume distribution information is not given. Not Applicable signifies that there was no analysis of either Hospital Volume or Doctor Volume.

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Table 14. Ongoing randomized trials comparing PCI with CABG

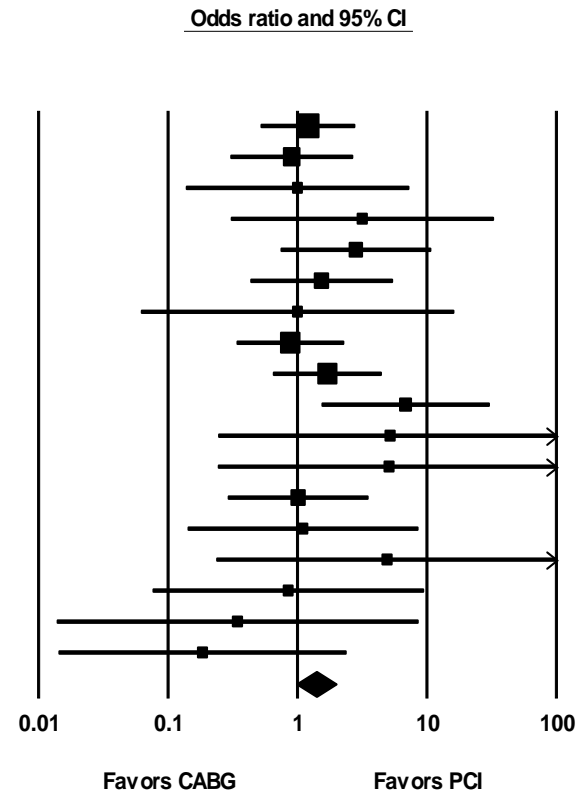
Trial Name	PI	Planned Sample Size	PCI Method	CABG Method	Population	Clinical Trials ID	References Available
CARDIA	Kapur	600	DES	CABG	Diabetics		Am Heart J 2005; 149: 13-19 (Protocol Published)
COMBAT	Park, Leon	1776			Left Main		
FREEDOM	Fuster	2400	DES	CABG	Diabetics	NCT00086450	
Leipzig	Schuler	200	DES	CABG	Left Main	NCT00176397	
Leipzig	Schuler	100	DES	MIDCAB LIMA	LAD Disease	NCT00299429	
LeMans	Buszman	105	DES 35%	CABG	Left Main		TCT 2005 abstract, see http://www.theheart.org/article/581205.do#
SYNTAX	Serruys	1800	DES	CABG	3-vessel, Left Main	NCT00114972	

PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; PI=primary investigator; DES=drug-eluting stents; MIDCABG=minimally-invasive coronary artery bypass grafting; LIMA=left internal mammary artery; LAD=left anterior descending

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Figure 1. Procedural survival (PCI/CABG odds ratio)

Study name	Statistics for each study				Survival / Total	
	Odds ratio	Lower limit	Upper limit	p-Value	PCI	CABG
BARI	1.204	0.518	2.801	0.666	905 / 915	902 / 914
CABRI	0.903	0.301	2.704	0.855	534 / 541	507 / 513
EAST	1.000	0.137	7.315	1.000	196 / 198	192 / 194
ERACI	3.166	0.304	33.005	0.335	62 / 63	61 / 64
GABI	2.824	0.737	10.824	0.130	179 / 182	169 / 177
RITA	1.533	0.430	5.467	0.510	506 / 510	495 / 501
Toulouse	1.000	0.061	16.285	1.000	75 / 76	75 / 76
ARTS	0.880	0.337	2.296	0.794	591 / 600	597 / 605
AWESOME	1.702	0.644	4.495	0.283	215 / 222	220 / 232
ERACI II	6.837	1.525	30.659	0.012	223 / 225	212 / 225
Groningen	5.202	0.244	111.093	0.291	51 / 51	49 / 51
Leipzig	5.092	0.242	107.297	0.295	110 / 110	108 / 110
MASS-II	1.010	0.288	3.544	0.987	200 / 205	198 / 203
Myoprotect	1.102	0.141	8.615	0.927	21 / 23	19 / 21
Octostent	4.929	0.234	103.598	0.305	138 / 138	140 / 142
Seoul-Hong	0.848	0.075	9.523	0.894	117 / 119	69 / 70
SIMA	0.344	0.014	8.619	0.516	62 / 63	60 / 60
SoS*	0.185	0.014	2.398	0.197	484 / 488	499 / 500
	1.386	0.977	1.966	0.067	4670 / 4729	4573 / 4658



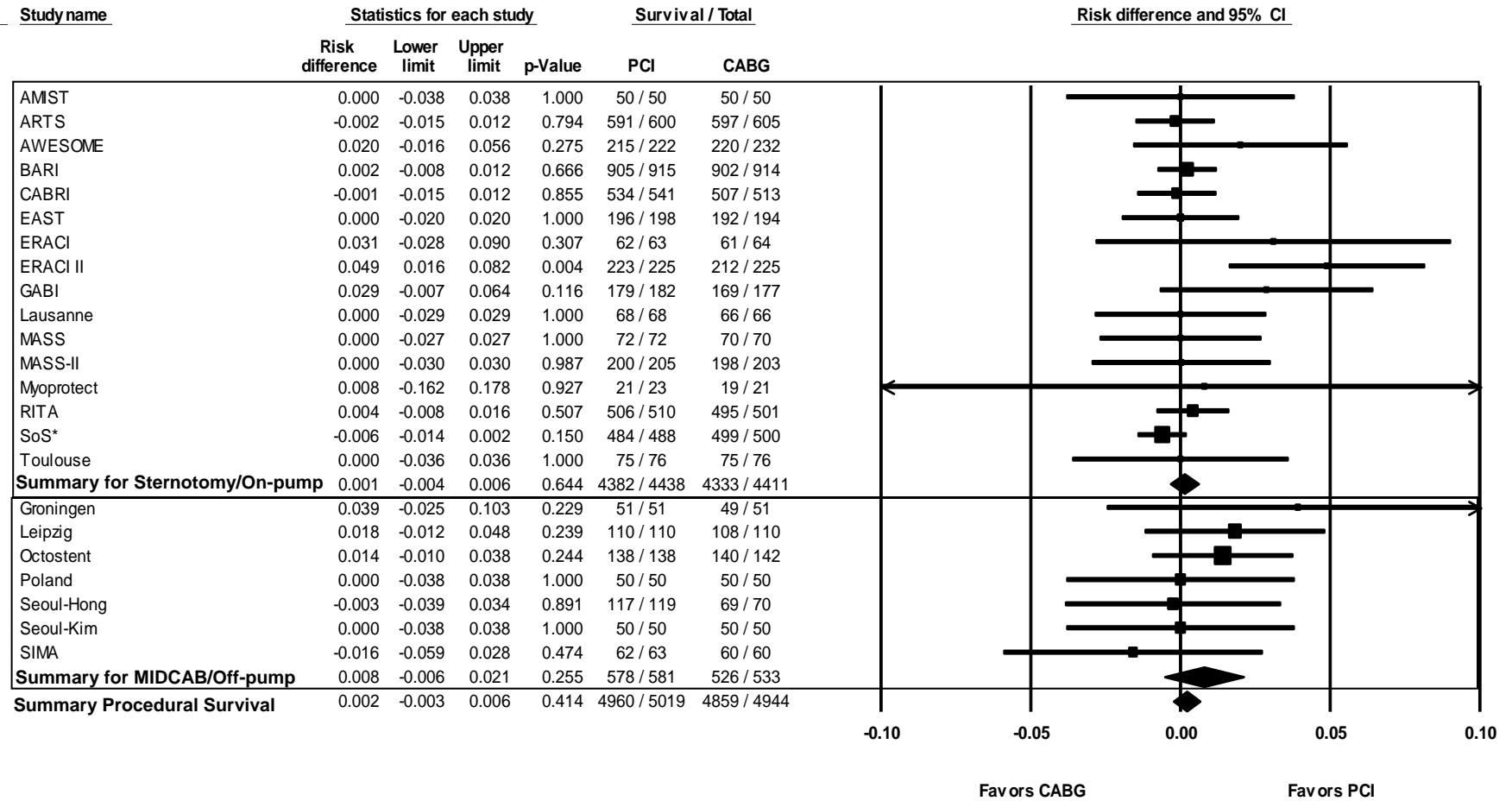
Heterogeneity Statistics: Q-value 13.4, P-value 0.7; I-squared 0.0.

Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.

Note: Five RCTs could not be included in this analysis that were included in Figure 3 (which presents the procedural survival difference) because they had no patients die in either arm. Thus, we could not calculate an odds ratio for these studies.

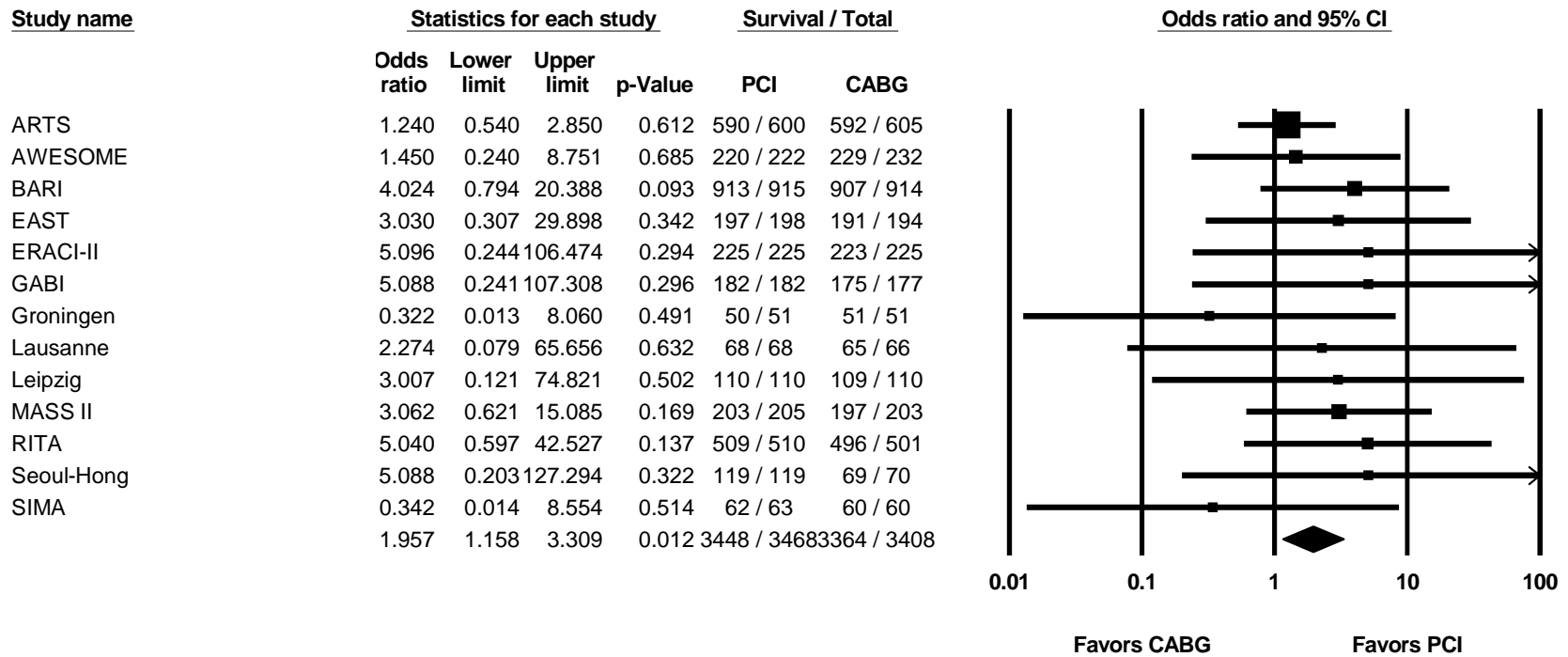
PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 2. Procedural survival by type of surgical procedure (PCI-CABG survival difference)



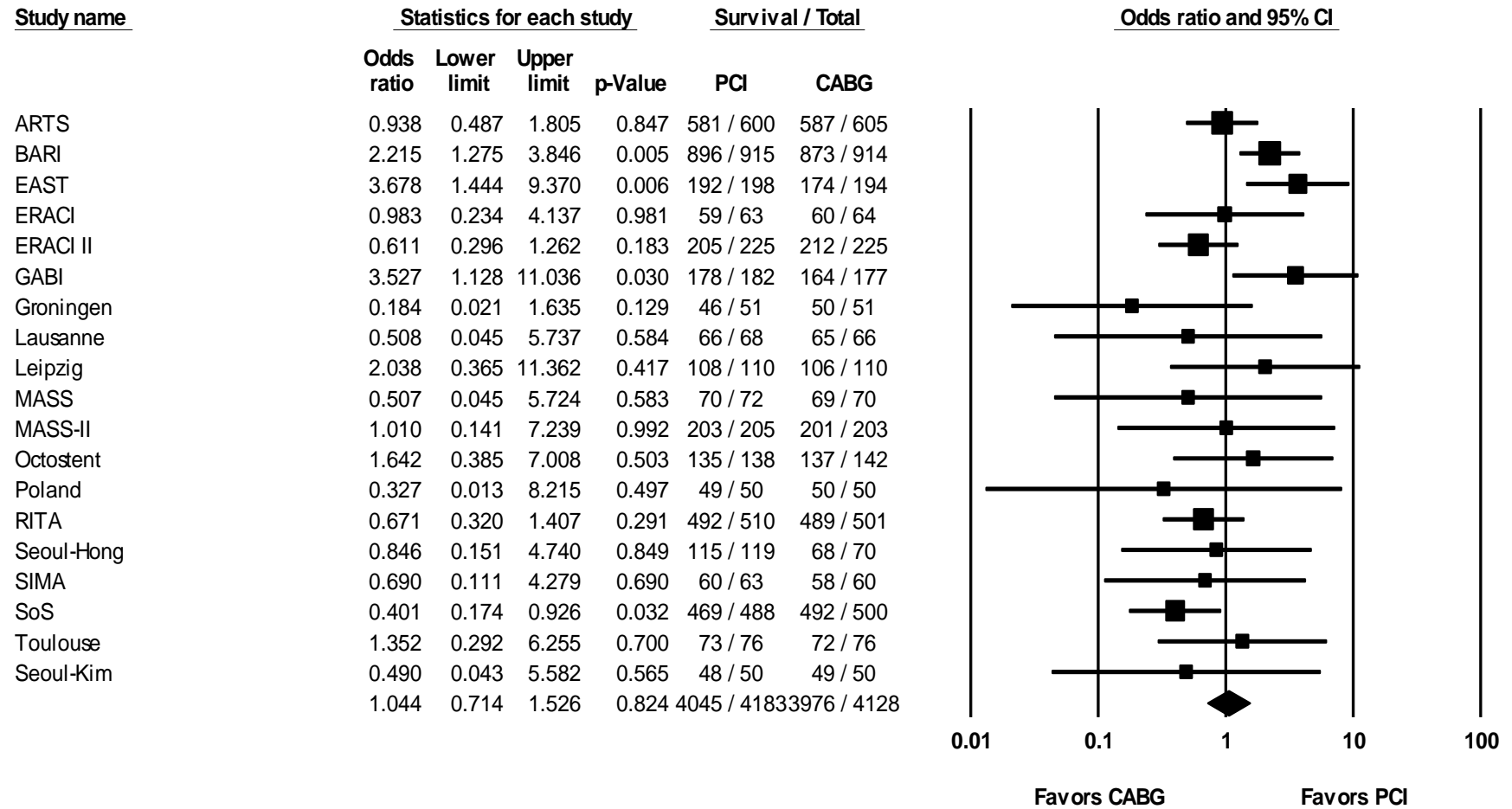
Sternotomy/Off-pump trials: Heterogeneity Statistics: Q-value 15.9, P-value 0.4; I-squared 5.8.
 MIDCAB/On-pump trials: Heterogeneity Statistics: Q-value 3.4, P-value 0.8; I-squared 0.
 Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.

Appendix Figure 3. Freedom from procedural stroke (PCI/CABG odds ratio)



Heterogeneity Statistics: Q-value 6.7, P-value 0.9; I-squared 0.0.
 PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

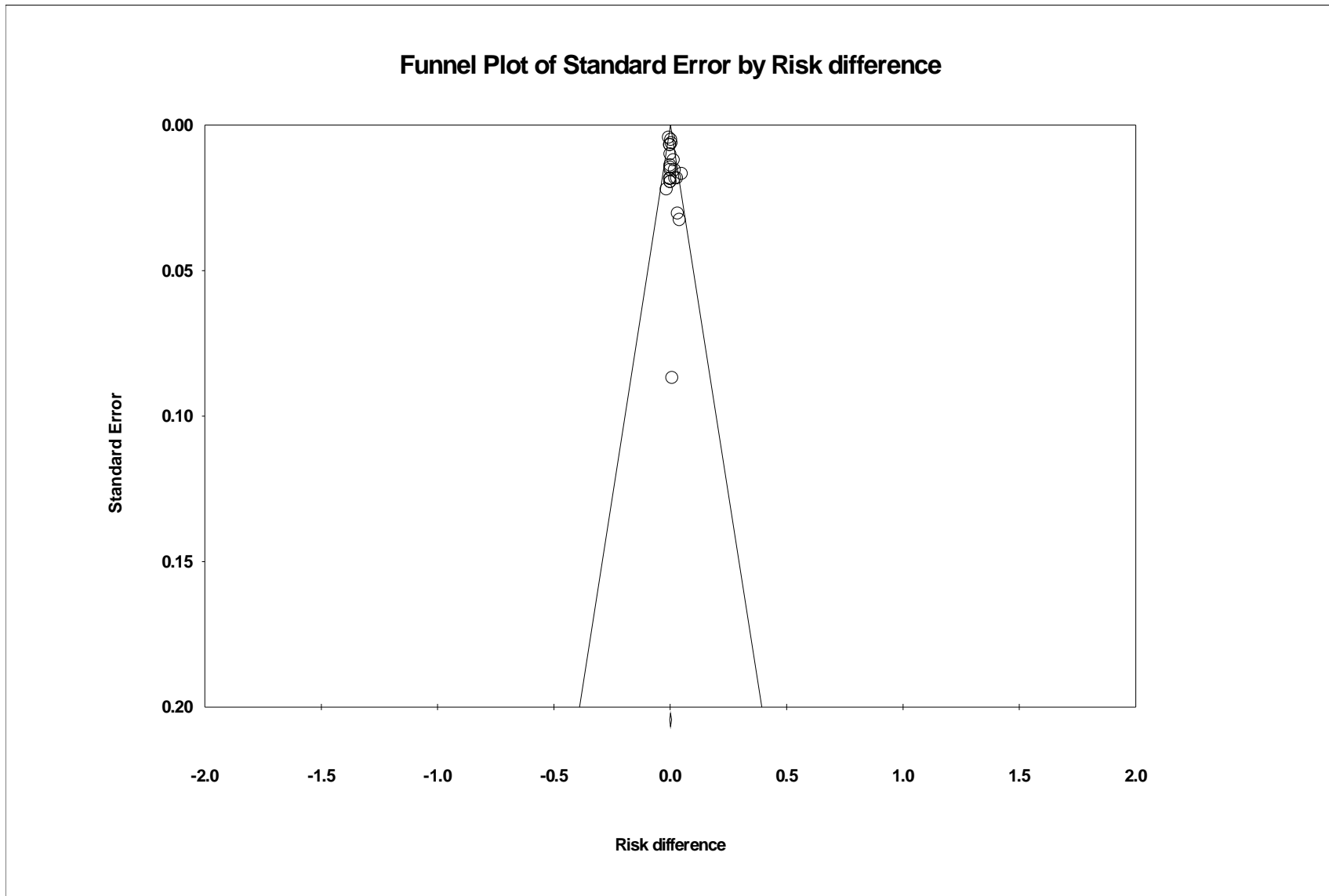
Appendix Figure 4. Freedom from procedural MI (PCI/CABG odds ratio)



Heterogeneity Statistics: Q-value 32.2, P-value 0.02; I-squared 44

MI=myocardial infarction; PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 5. Funnel plot for procedural survival analysis

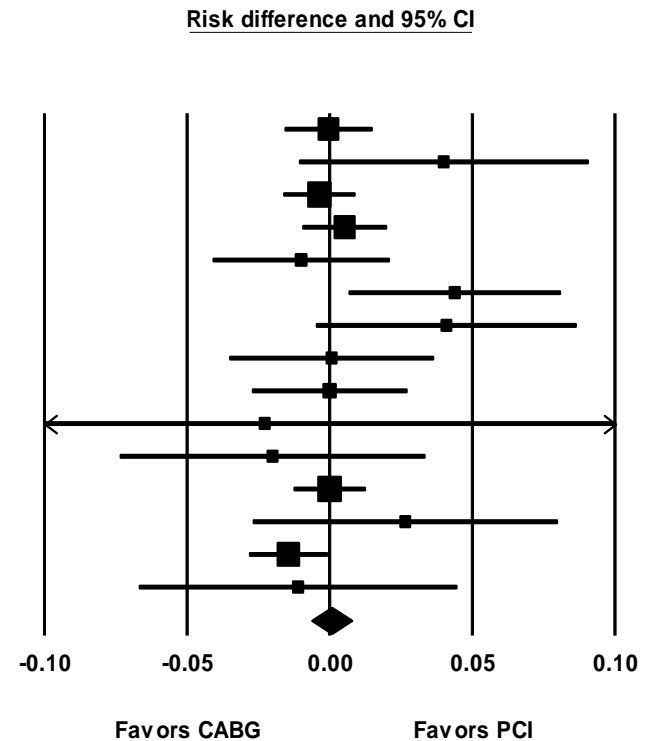


Appendix Figure 6. Forest plots for survival at 6 months using all studies (PCI-CABG survival difference)

Forest Plots for Survival Using All Studies

Survival at 6 Months

Study name	Statistics for each study				Survival / Total	
	Risk difference	Lower limit	Upper limit	p-Value	PCI	CABG
ARTS*	-0.000	-0.016	0.015	0.959	588 / 600	594 / 605
AWESOME	0.040	-0.011	0.091	0.123	202 / 215	197 / 219
BARI*	-0.004	-0.016	0.009	0.580	895 / 915	898 / 914
CABRI*	0.005	-0.010	0.020	0.489	527 / 534	498 / 507
EAST	-0.010	-0.041	0.021	0.529	188 / 194	187 / 191
ERACI II*	0.044	0.007	0.081	0.021	219 / 223	199 / 212
GABI	0.041	-0.005	0.087	0.080	153 / 156	125 / 133
Leipzig	0.001	-0.035	0.037	0.970	108 / 110	104 / 106
MASS	0.000	-0.027	0.027	1.000	71 / 71	70 / 70
Myoproduct	-0.023	-0.256	0.211	0.849	17 / 21	16 / 19
Poland	-0.020	-0.074	0.034	0.465	49 / 50	50 / 50
RITA*	-0.000	-0.013	0.013	1.000	501 / 506	490 / 495
Seoul-Hong	0.027	-0.027	0.080	0.332	114 / 116	66 / 69
SoS*	-0.014	-0.028	-0.001	0.041	478 / 488	497 / 500
Toulouse*	-0.011	-0.067	0.045	0.698	73 / 76	74 / 76
	0.000	-0.007	0.007	0.900	4184 / 4275	4064 / 4166

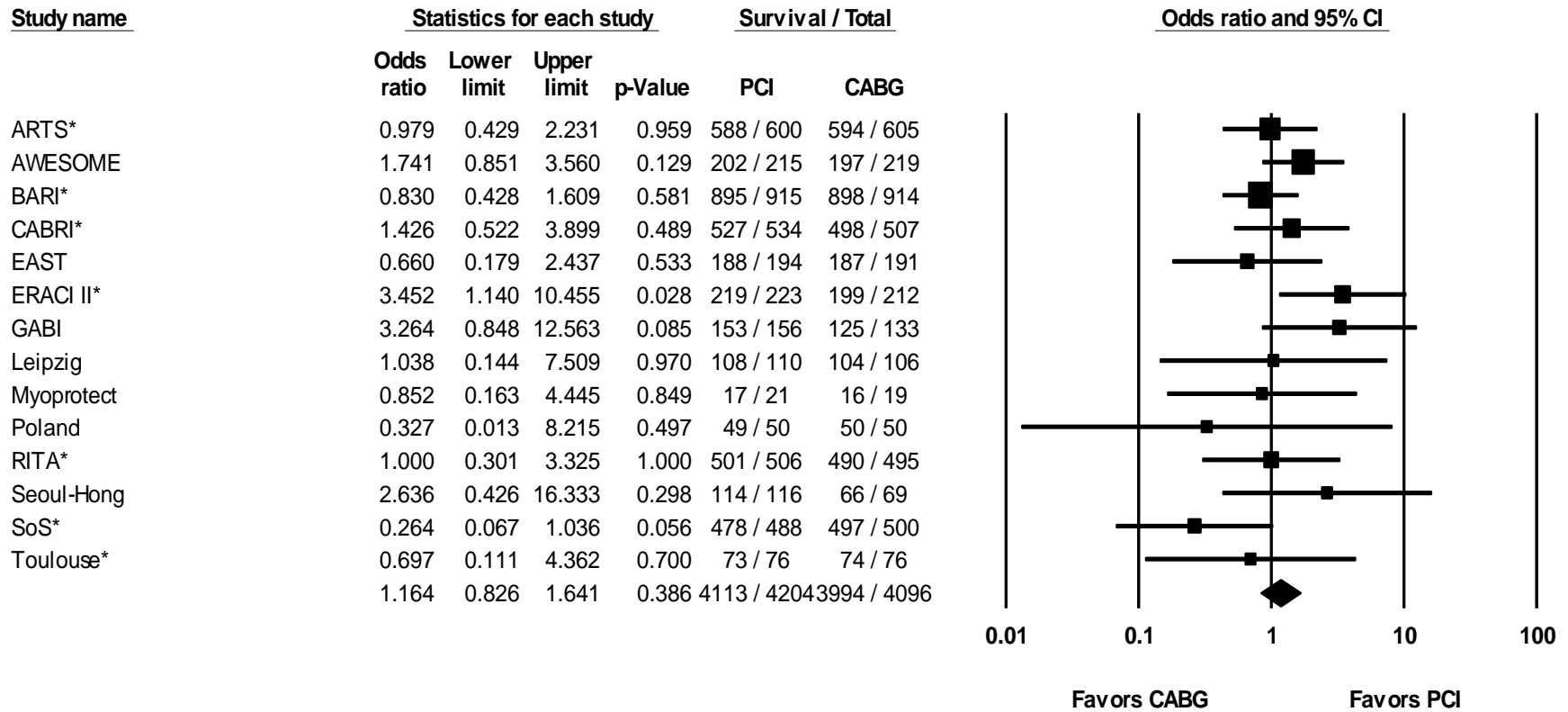


Heterogeneity Statistics: Q-value 18, p value 0.21 squared 21

Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.

PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 7. Forest plots for survival at 6 months using all studies (PCI/CABG odds ratio)

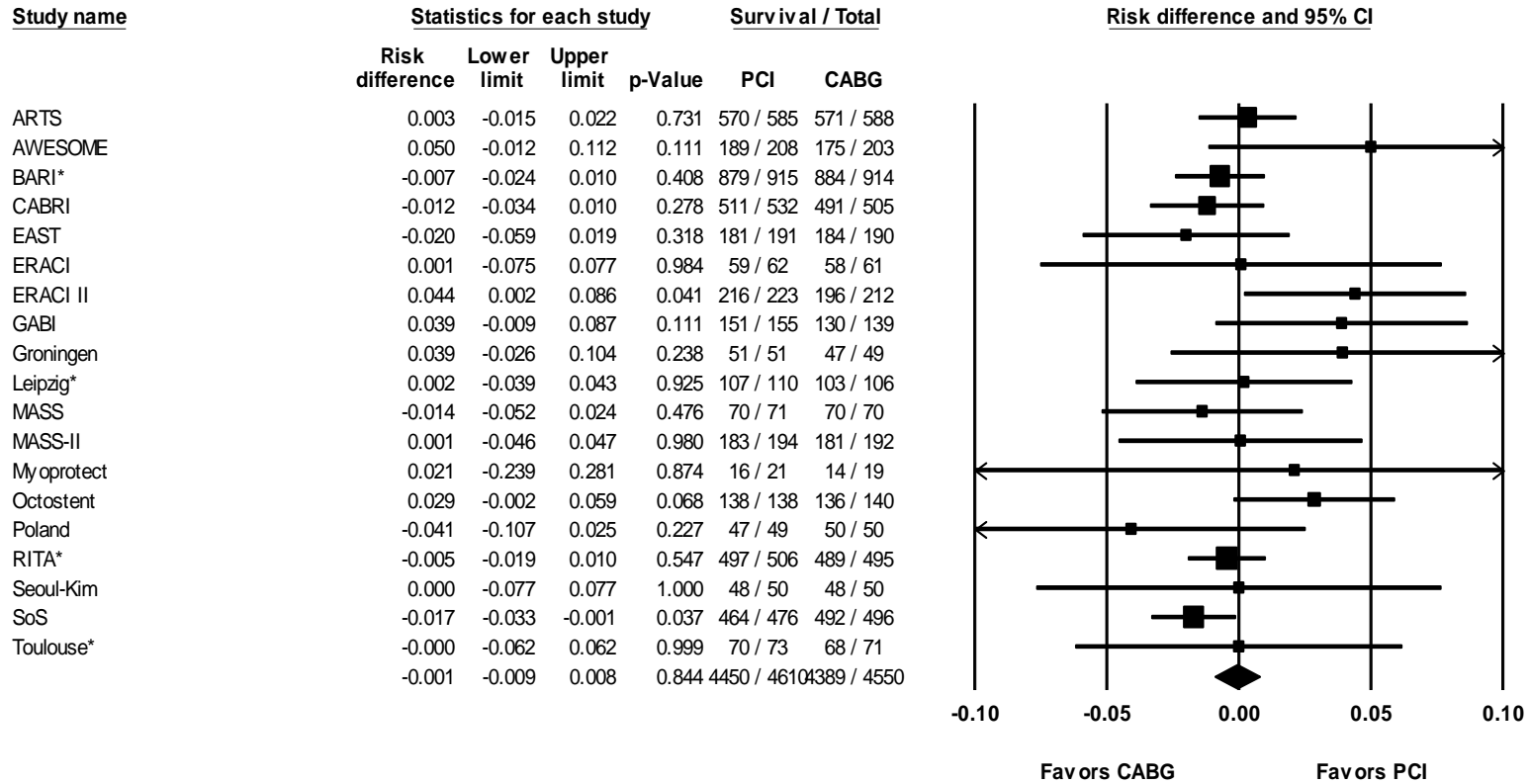


Heterogeneity Statistics: Q-value 16; p-value 0.3; I squared 17.

Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.

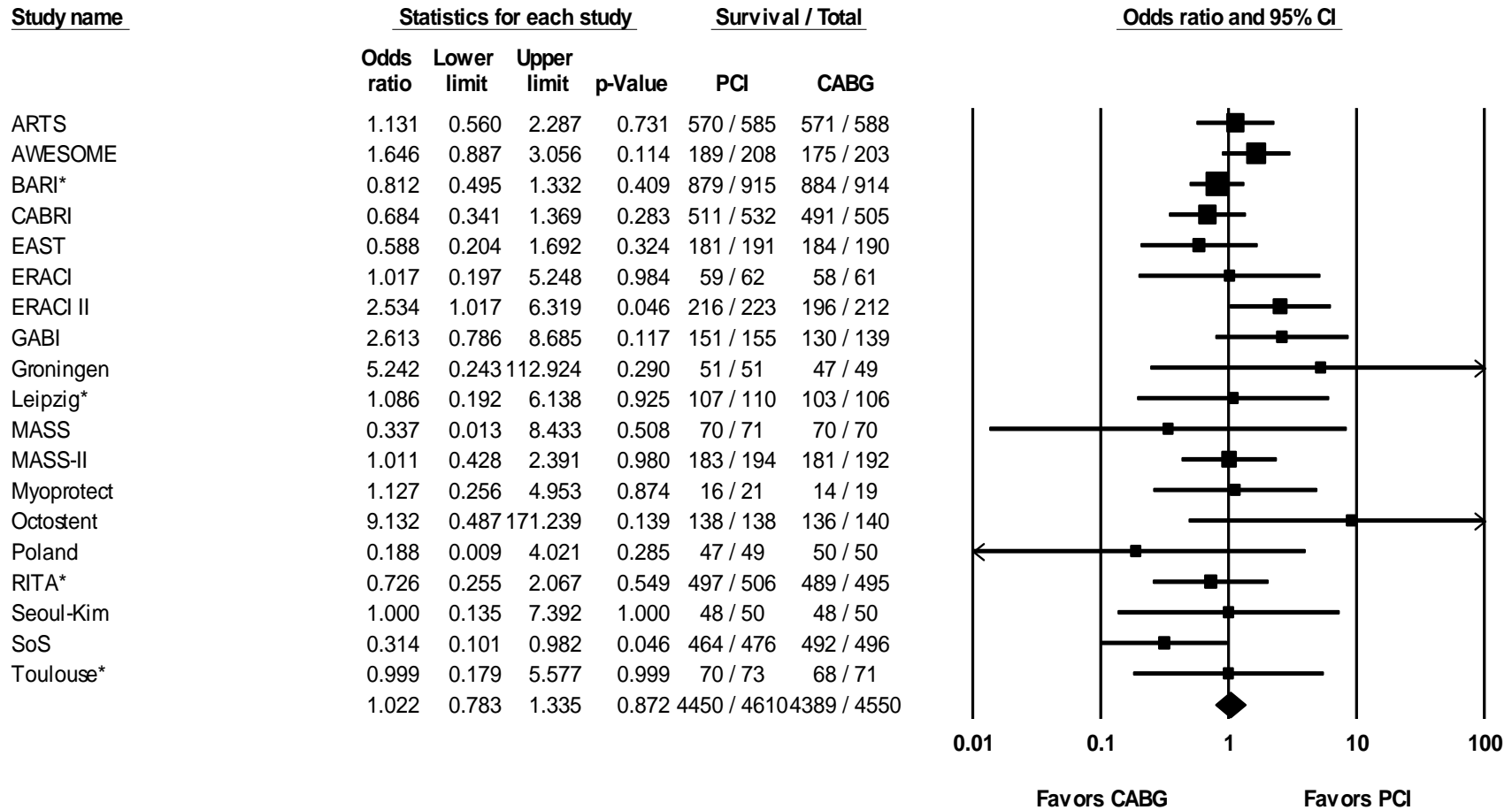
PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 8. Forest plots for survival at 12 months (PCI-CABG survival difference)



Heterogeneity Statistics: Q-value 23.0, p-value 0.19; I squared 22.
 Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.
 PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 9. Forest plots for survival at 12 months (PCI/CABG odds ratio)

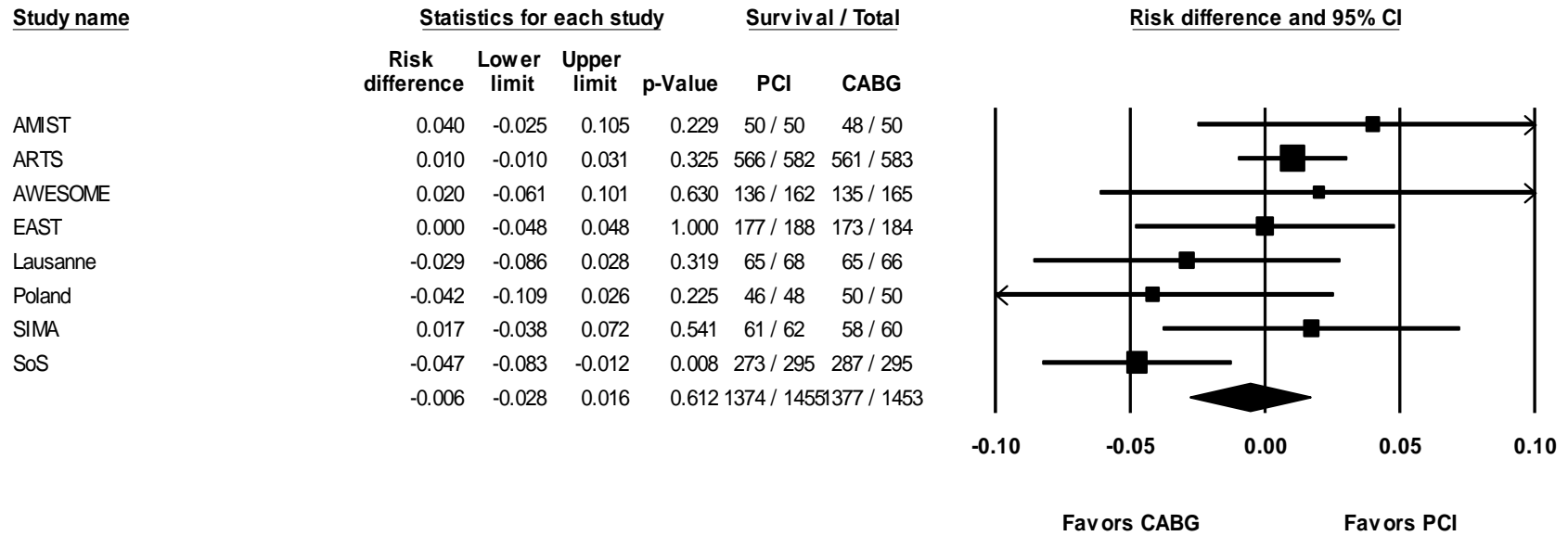


Heterogeneity Statistics: Q-value 21.0, p-value 0.28; I squared 15.

Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.

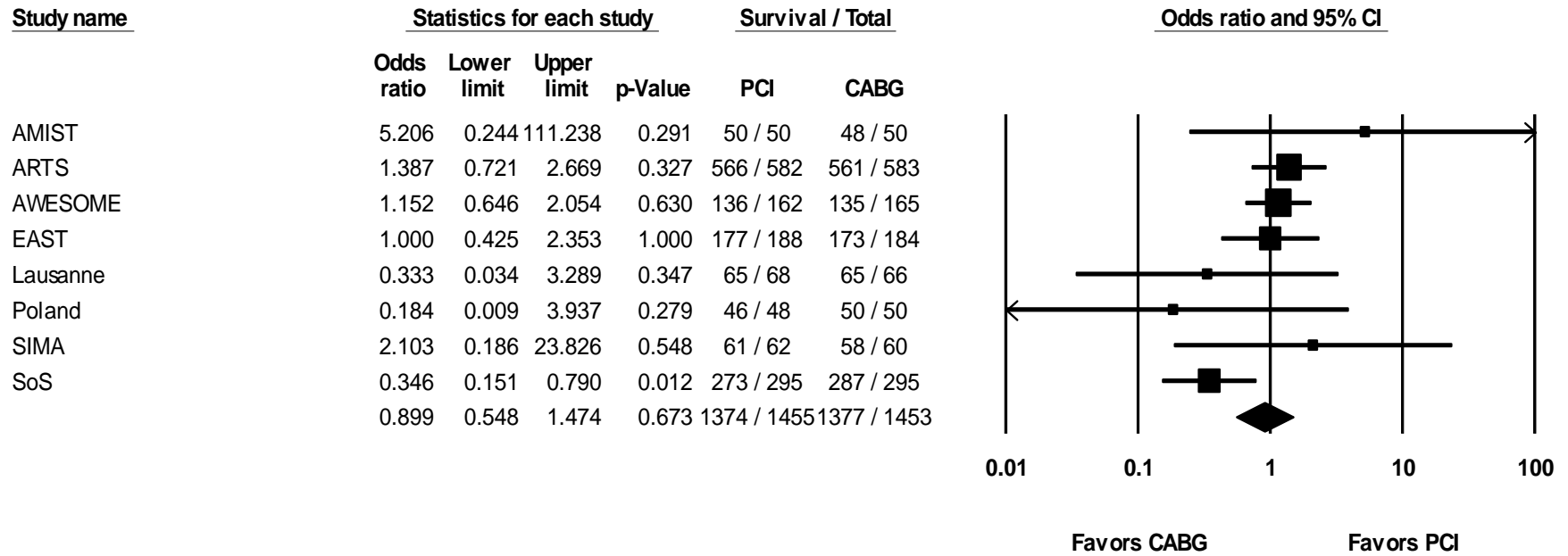
PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 10. Forest plot for survival at 24 months (PCI-CABG survival difference)



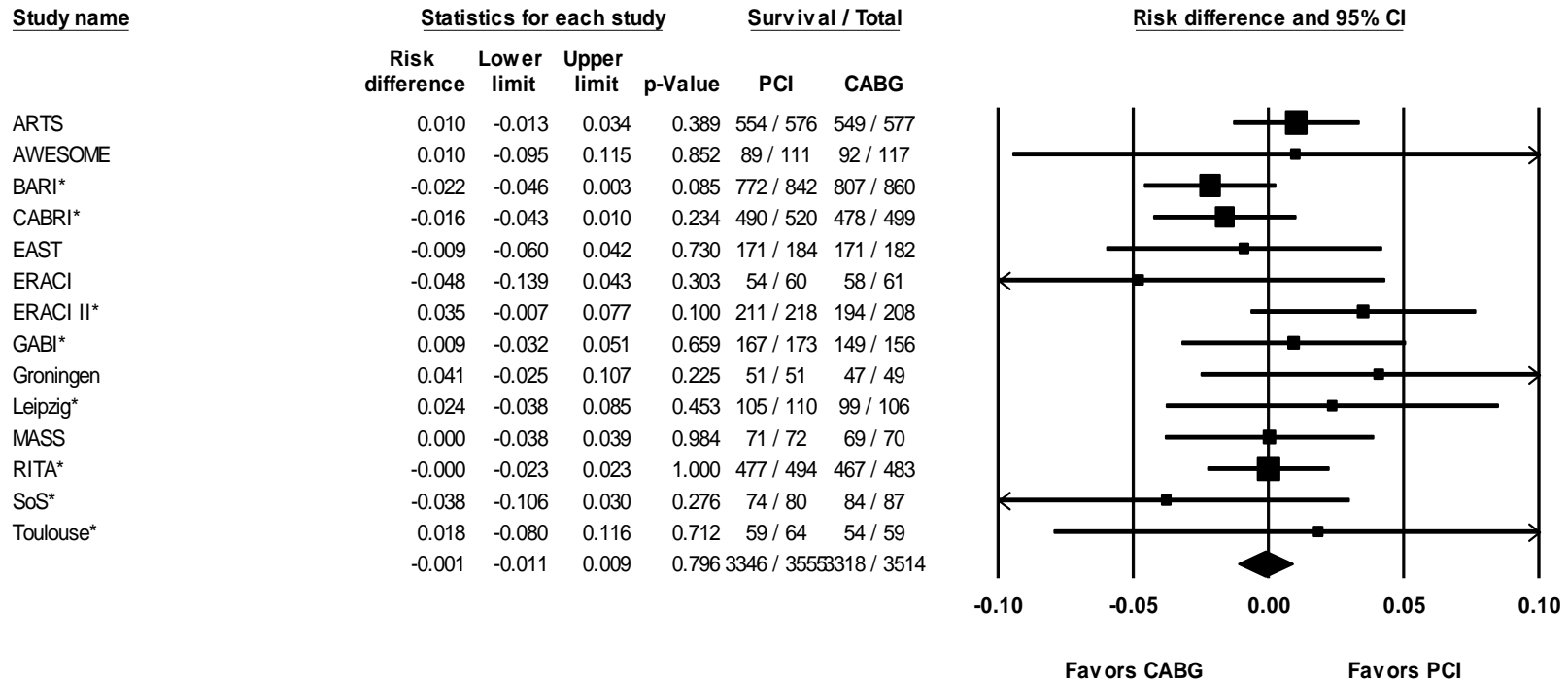
Heterogeneity Statistics: Q-value 12.3, P-value 0.09; I-squared 43.
 PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 11. Forest plot for survival at 24 months (PCI/CABG odds ratio)



Heterogeneity Statistics: Q-value 11, P-value 0.14; I-squared 36.
 PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 12. Forest plot for survival at 36 months (PCI-CABG survival difference)

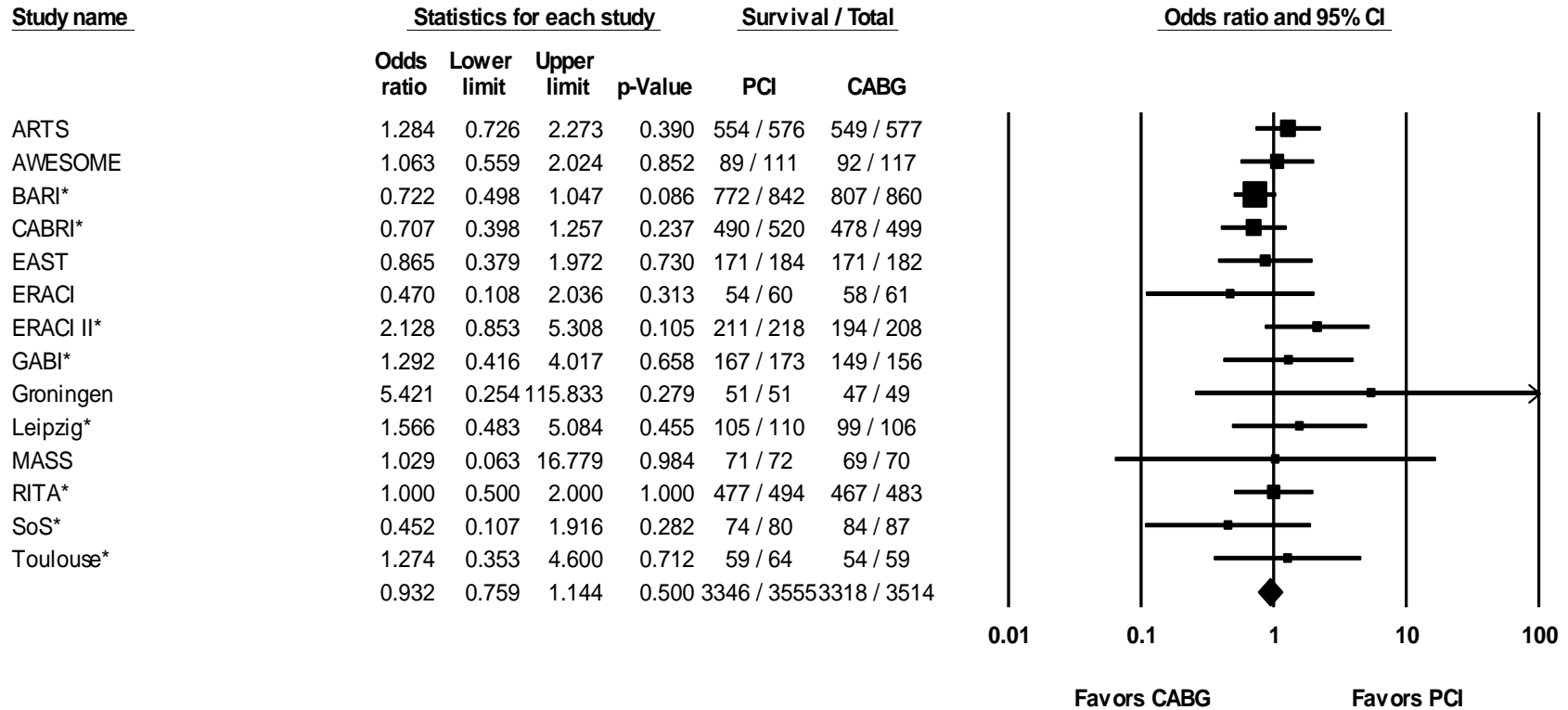


Heterogeneity Statistics: Q-value 12.5, P-value 0.48; I-squared 0.0.

Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.

PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 13. Forest plot for survival at 36 months (PCI/CABG odds ratio)

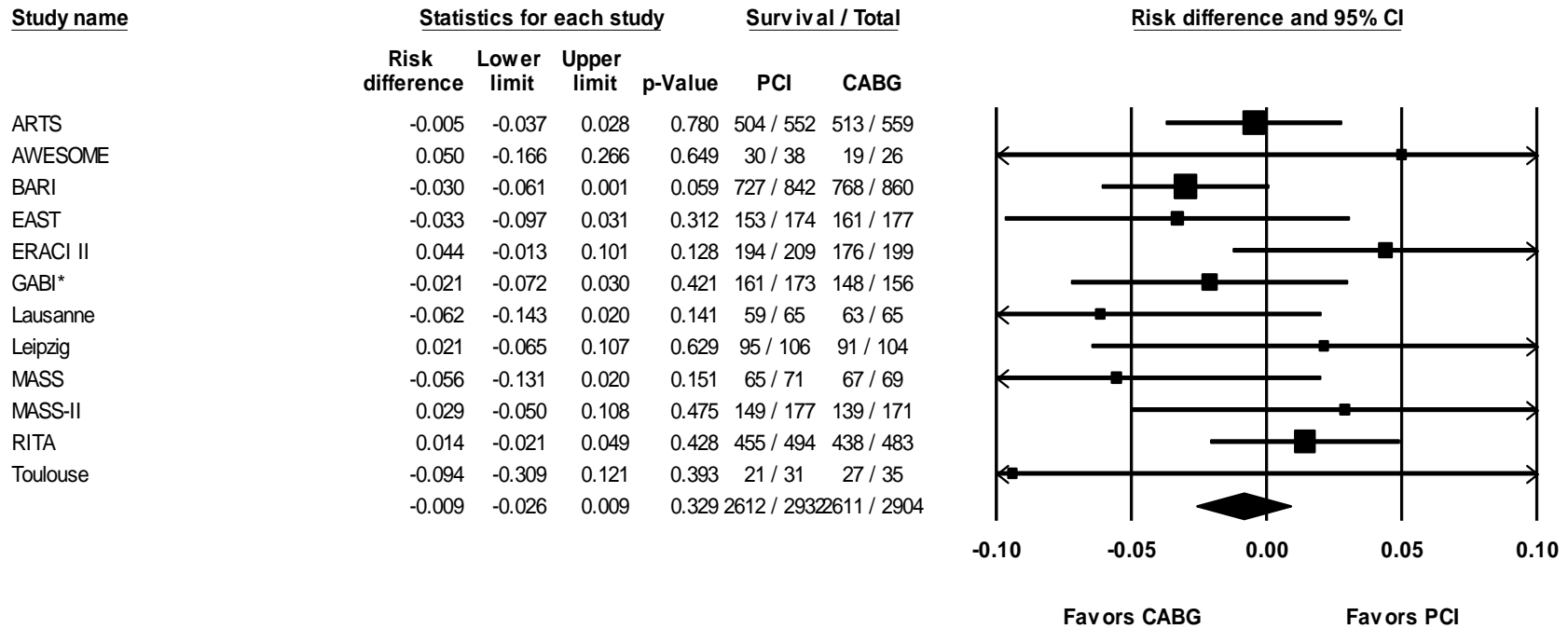


Heterogeneity Statistics: Q-value 11.6, P-value 0.56; I-squared 0.0.

Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.

PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 14. Forest plot for survival at 60 months (PCI-CABG survival difference)

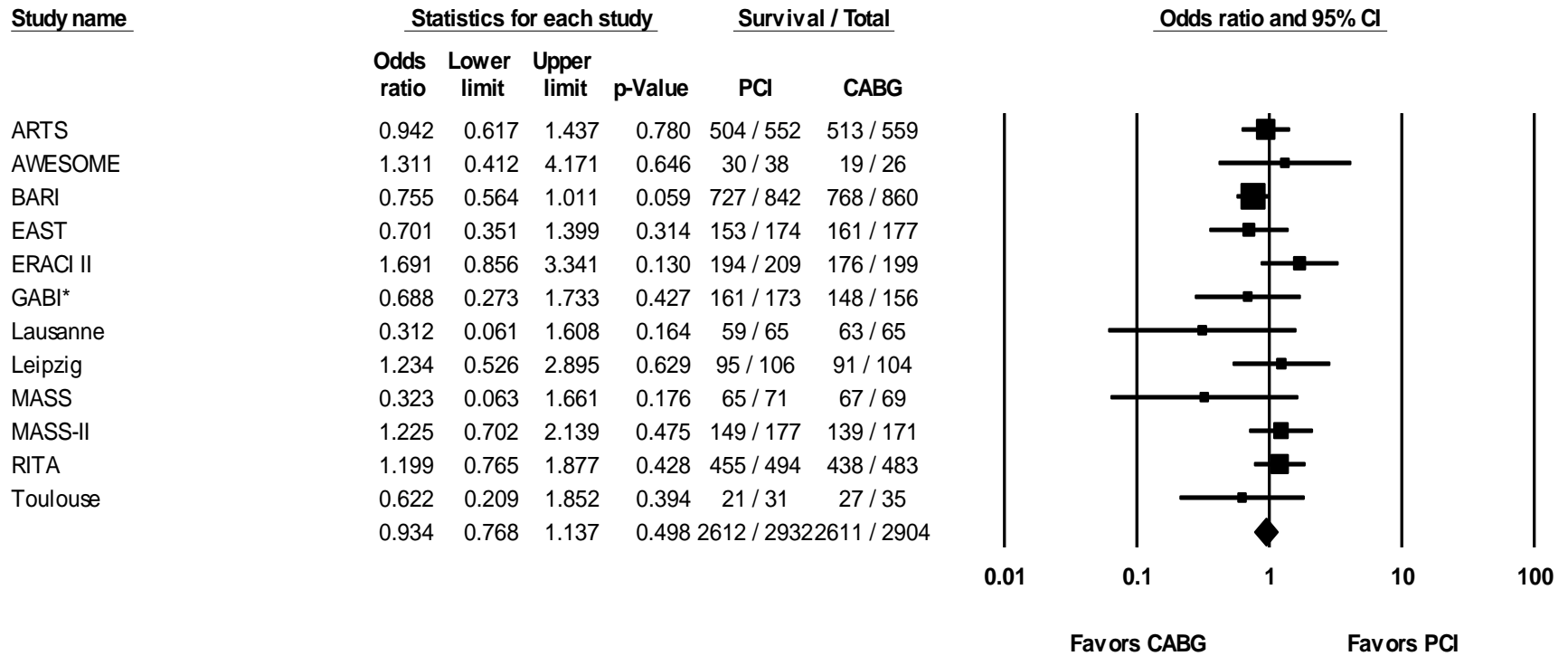


Heterogeneity Statistics: Q-value 12.9, P-value 0.3; I-squared 14.5.

Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.

PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix Figure 15. Forest plot for survival at 60 months (PCI/CABG odds ratio)



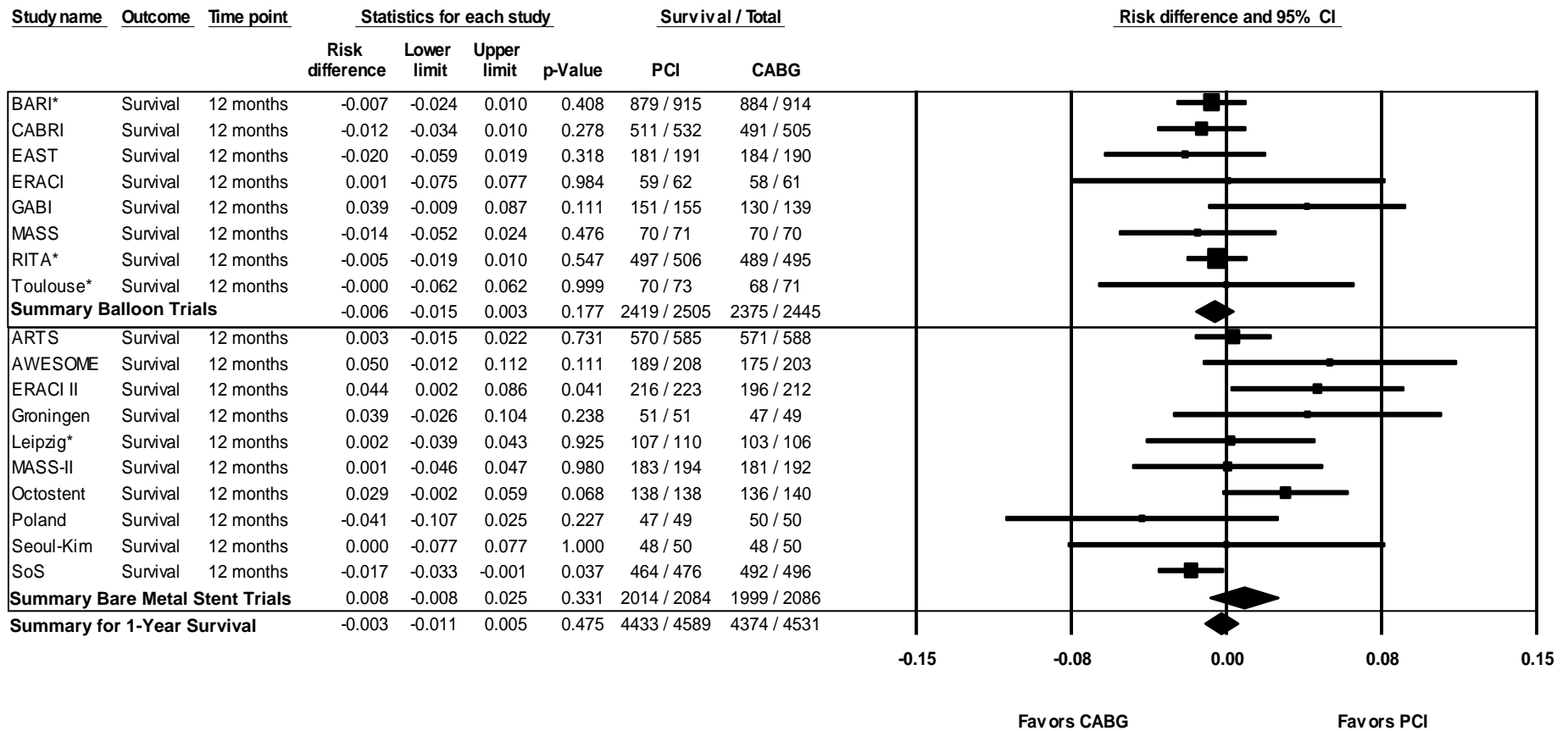
Heterogeneity Statistics: Q-value 12.7, P-value 0.3; I-squared 13.5.

Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.

PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix C: Additional Analyses and Evidence Tables (continued)

Appendix Figure 16. Comparative survival at 1-year between balloon and stent trials



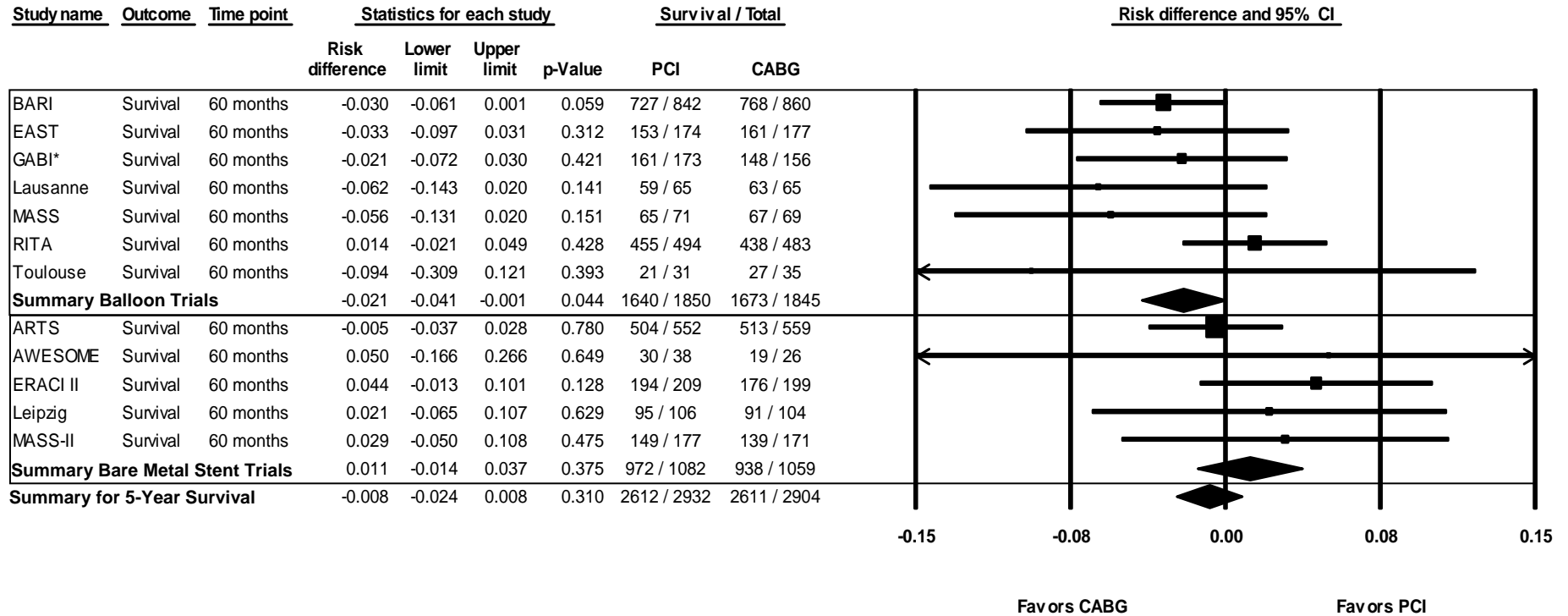
Balloon Trials: Heterogeneity Statistics: Q-value 4.4, P-value 0.7; I-squared 0. PCI/CABG Odds Ratio analysis: 0.82 (CI: 0.60, 1.14; p=0.2)

Bare Metal Stent Trials: Heterogeneity Statistics: Q-value 17, P-value 0.04; I-squared 48. PCI/CABG Odds Ratio analysis: 1.26 (CI: 0.90, 1.77; p=0.2)

Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.

PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; MVD=multi-vessel disease; CI=Confidence Interval

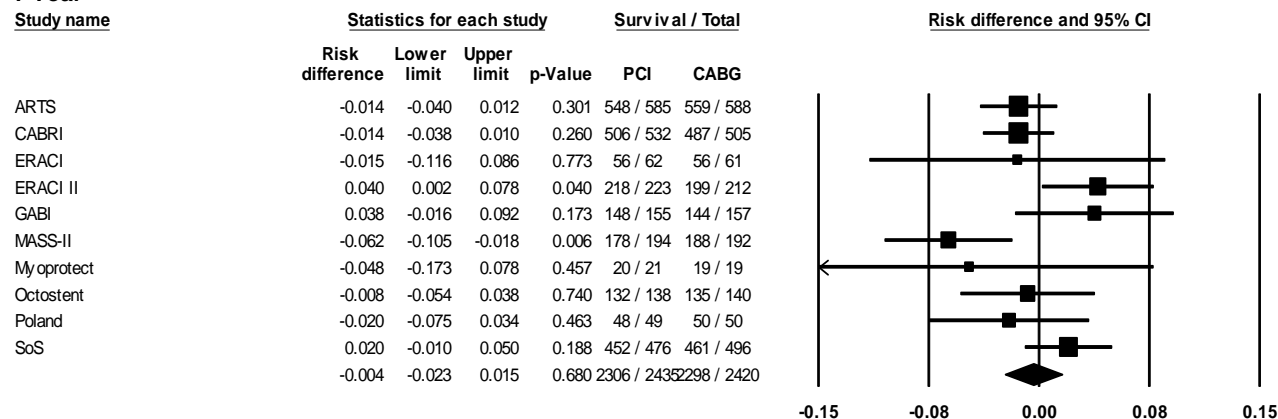
Appendix Figure 17. Comparative survival at 5-years between balloon and stent trials



Balloon Trials: Heterogeneity Statistics: Q-value 6.5, P-value 0.4; I-squared 7.4. PCI/CABG Odds Ratio analysis: 0.80 (CI: 0.64, 1.0; p=0.05)
 Bare Metal Stent Trials: Heterogeneity Statistics: Q-value 2.6, P-value 0.6; I-squared 0. PCI/CABG Odds Ratio analysis: 1.16 (CI: 0.88,1.53; p=0.29)
 Trial names followed by an asterisk indicate that the survival data were abstracted from Kaplan-Meier curves.
 PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; MVD=multi-vessel disease; CI=Confidence Interval

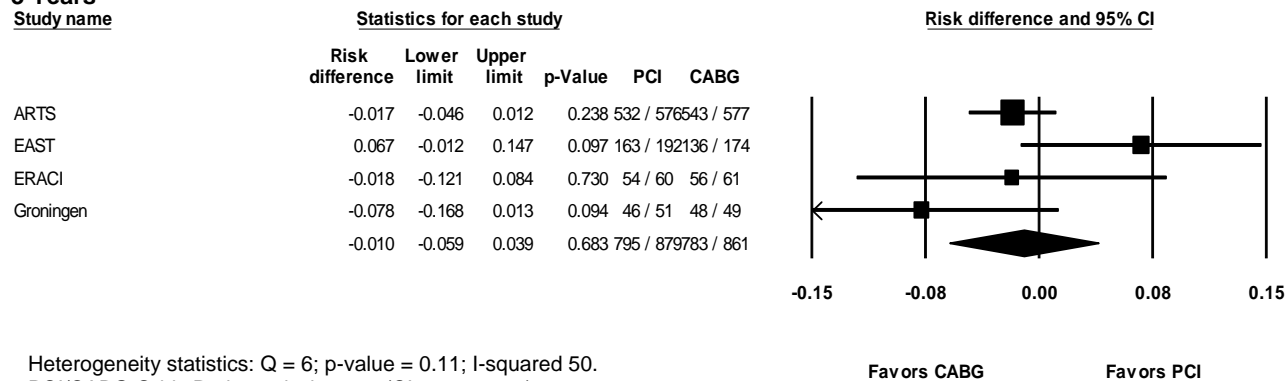
Appendix Figure 18. Freedom from MI post-procedure (PCI-CABG difference in freedom from MI)

1 Year

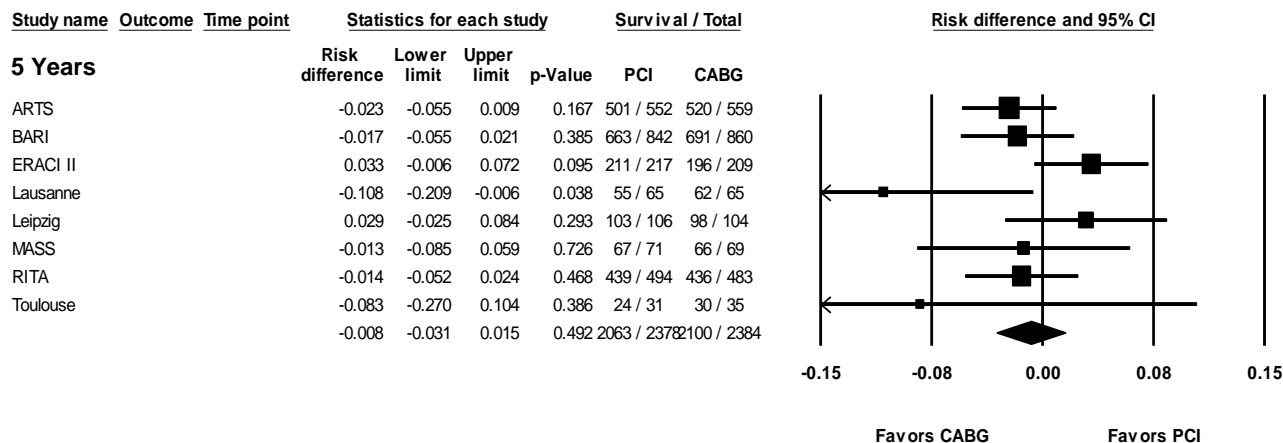


Heterogeneity statistics: Q = 18.6; p-value = 0.03; I-squared 52.
 PCI/CABG Odds Ratio analysis: 0.94 (CI: 0.62, 1.42); p=0.8.

3 Years



Heterogeneity statistics: Q = 6; p-value = 0.11; I-squared 50.
 PCI/CABG Odds Ratio analysis: 0.92 (CI: 0.51, 1.66); p=0.8.



Heterogeneity statistics: Q = 11.5; p-value = 0.12; I-squared 39.
 PCI/CABG Odds Ratio analysis: 0.87 (CI: 0.68, 1.12)

MI=myocardial infarction; PCI=percutaneous coronary intervention; CABG=coronary artery bypass grafting; CI=confidence interval

Appendix D: Peer Reviewers

Charles R. Bridges, M.D. Sc.D.
Chief of Cardiothoracic Surgery
Division of Cardiothoracic Surgery
Pennsylvania Hospital

Rochelle Fu, Ph.D.
Assistant Professor
Department of Public Health and
Preventative Medicine
Oregon Health and Science University

Appendix E: Abstraction Forms

Level One (Screening Title and Abstract) CABG/PCI Abstraction Form

Does this article evaluate the comparative effectiveness of PCI vs. CABG for coronary artery disease?

- Yes
- No **{exclusion}**
- Can't Tell **{retrieve article and rescreen at level 1}**

Only answer Question 2 if question 1 was answered "yes"

Should this article proceed to full text review?

- Yes – This is an English-language article of apparent RCT evaluation of the comparative effectiveness of PCI & CABG in humans **{promotion to Level 2 review}**
- Yes – This article is known to be a secondary report of a known trial that has already been included (include as a duplicate) **{neutral}**
- No not a RCT **{exclusion}**
- ineligible topic **{exclusion}**
- animal data only **{exclusion}**
- other reason Specify: _____ **{exclusion}**
- Foreign language article not meeting any other exclusion criteria **{exclusion}**
- Can't tell – This is an English-language article that needs to be screened further **{retrieve article and rescreen at Level 2}**

For articles that are excluded but which may be of interest to the research (e.g., is a registry or other large observational study), please check this box and specify the reason of interest:

- TEXT BOX **{no action}**

Level Two (Full Text) Abstraction Form

Should this article undergo full-text abstraction	<input type="checkbox"/> No, not an RCT {exclude} <input type="checkbox"/> No, not a CER of PCI vs. CABG {exclude} <input type="checkbox"/> No, other reason (specify _____) {exclude}
Name of study:	
Purpose of study:	
Study design:	<input type="checkbox"/> Randomized controlled trial <input type="checkbox"/> Registry <input type="checkbox"/> Other (specify _____)
Enrolling Centers: (Check all that apply) Setting:	Number of enrolling centers ____ <input type="checkbox"/> US <input type="checkbox"/> Canada <input type="checkbox"/> UK <input type="checkbox"/> Europe <input type="checkbox"/> South America <input type="checkbox"/> Asia <input type="checkbox"/> Africa <input type="checkbox"/> %Academic centers _____ <input type="checkbox"/> %Community hospitals _____ <input type="checkbox"/> Other (specify _____) <input type="checkbox"/> Can't tell
Study funding:	<input type="checkbox"/> Government (NIH, MRC, etc) <input type="checkbox"/> Foundation (AHA, etc) <input type="checkbox"/> Industry <input type="checkbox"/> Other (specify _____) <input type="checkbox"/> Not stated
Reference IDs used for trial data extraction:	_____ _____
Are there relevant references cited in the included articles for other publications from this trial? If yes, please circle them in the bibliography.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Year(s) of patient entry:	_____ to _____
Randomization method:	<input type="checkbox"/> Central telephone <input type="checkbox"/> Central Computer <input type="checkbox"/> Local Computer <input type="checkbox"/> Sealed Envelope <input type="checkbox"/> Other (specify _____)
Randomization strata	<input type="checkbox"/> None <input type="checkbox"/> Center <input type="checkbox"/> Number of Vessels <input type="checkbox"/> Other (specify _____)
Intention to treat analysis?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not stated
Describe the method of interpretation of angiograms.	<input type="checkbox"/> Central Laboratory <input type="checkbox"/> Local site interpretation <input type="checkbox"/> Quantitative angiography <input type="checkbox"/> Other (specify _____)

Appendix E: Abstraction Forms (continued)

<p>Qualifications of the study surgeons.</p>	<ul style="list-style-type: none"> <input type="radio"/> Not specified <input type="radio"/> Minimum case volume (specify ___) <input type="radio"/> Maximum mortality (specify ___) <input type="radio"/> Other (specify _____)
<p>Qualifications of the study interventional cardiologists.</p>	<ul style="list-style-type: none"> <input type="radio"/> Not specified <input type="radio"/> Minimum case volume (specify ___) <input type="radio"/> Maximum mortality (specify ___) <input type="radio"/> Minimum success rates (specify ___) <input type="radio"/> Other (specify _____)
<p>Qualification of the hospitals/centers involved in the trial.</p>	<ul style="list-style-type: none"> <input type="radio"/> Not specified <input type="radio"/> Minimum case volume (specify ___) <input type="radio"/> Maximum mortality (specify ___) <input type="radio"/> Minimum success rates (specify ___) <input type="radio"/> Other (specify _____)
<p>Are there any study design issues that you suspect may bias the results? If so, how?</p>	<p><input type="radio"/> Yes <input type="radio"/> No Specify</p>
<p>Inclusion criteria of the study:</p>	<ul style="list-style-type: none"> <input type="radio"/> Multi-vessel Disease <input type="radio"/> Single-vessel Proximal LAD Disease <input type="radio"/> Equivalent revascularization feasible <input type="radio"/> Symptoms warrant revascularization <input type="radio"/> Positive stress test <input type="radio"/> Minimum # PCI eligible lesions (specify _____) <input type="radio"/> Refractory ischemia <input type="radio"/> Other (specify _____)
<p>Exclusion criteria of the study:</p>	<ul style="list-style-type: none"> <input type="radio"/> Prior CABG <input type="radio"/> Prior PCI <input type="radio"/> Age Cutoff (Specify ___) <input type="radio"/> EF Cutoff (specify ___) <input type="radio"/> Heart Failure <input type="radio"/> Left Main CAD <input type="radio"/> Single-vessel CAD <input type="radio"/> Total Occlusion <input type="radio"/> Unsuitable Coronary anatomy <input type="radio"/> Recent MI (Specify ___) <input type="radio"/> Cardiogenic shock <input type="radio"/> Life-limiting illness <input type="radio"/> Refractory ischemia <input type="radio"/> Other (Specify _____)
<p>Components of Primary Endpoint (N=)</p>	<ul style="list-style-type: none"> <input type="radio"/> Total Mortality <input type="radio"/> Cardiac Mortality <input type="radio"/> Myocardial Infarction <input type="radio"/> Stroke <input type="radio"/> TIA <input type="radio"/> Unstable Angina <input type="radio"/> Angina/Recurrent Symptoms <input type="radio"/> Repeat Revascularization <input type="radio"/> Other (specify _____)

Appendix E: Abstraction Forms (continued)

Secondary Endpoints Reported	<input type="checkbox"/> Total Mortality <input type="checkbox"/> Cardiac Mortality <input type="checkbox"/> Myocardial Infarction <input type="checkbox"/> Stroke <input type="checkbox"/> TIA <input type="checkbox"/> Unstable Angina <input type="checkbox"/> Angina/Recurrent Symptoms (Y/N) <input type="checkbox"/> Angina Class <input type="checkbox"/> Repeat Revascularization <input type="checkbox"/> Cost <input type="checkbox"/> Employment/Productivity <input type="checkbox"/> Quality of Life (specify _____) <input type="checkbox"/> Cognitive function <input type="checkbox"/> Other (specify _____)
------------------------------	---

SUBJECT INFORMATION

	PCI Subjects	Surgery Subjects
Number of subjects randomized at start of study?		
Number of subjects who received assigned therapy?		
Number of subjects lost to follow-up or withdrawn?		

Age

<input type="checkbox"/> Mean <input type="checkbox"/> Median <input type="checkbox"/> Cutoff (specify _____) <input type="checkbox"/> Other (specify _____)		
--	--	--

Gender

Women <input type="checkbox"/> Calculated N		
---	--	--

Race

White <input type="checkbox"/> Calculated N		
Black <input type="checkbox"/> Calculated N		
Hispanic <input type="checkbox"/> Calculated N		
Asian <input type="checkbox"/> Calculated N		
Other <input type="checkbox"/> Calculated N		

Other demographics reported (specify _____)		
--	--	--

Appendix E: Abstraction Forms (continued)

Comorbidities

Diabetes o Calculated N		
Definition of diabetes:		
Hypertension o Calculated N		
Hyperlipidemia o Calculated N		
Prior MI o Calculated N		
Prior PCI o Calculated N		
Prior CABG o Calculated N		
Heart Failure (present) o Calculated N		
Class I o Calculated N		
Class II o Calculated N		
Class III o Calculated N		
Class IV o Calculated N		

Smoking

Current Smoking o Calculated N		
Other Smoking (specify _____) o Calculated N		

Appendix E: Abstraction Forms (continued)

Presentation

Stable Angina	<input type="radio"/> Calculated N		
Class I	<input type="radio"/> Calculated N		
Class II	<input type="radio"/> Calculated N		
Class III	<input type="radio"/> Calculated N		
Class IV	<input type="radio"/> Calculated N		
Unstable Angina	<input type="radio"/> Calculated N		
Acute MI	<input type="radio"/> Calculated N		
Recent MI (specify ____)	<input type="radio"/> Calculated N		
Cardiogenic shock	<input type="radio"/> Calculated N		
Asymptomatic	<input type="radio"/> Calculated N		

Left Ventricular Function

<input type="radio"/> Mean <input type="radio"/> Median <input type="radio"/> Cutoff (specify ____) <input type="radio"/> Other (specify ____) 		
--	--	--

Non-Coronary Atherosclerosis

Prior Stroke	<input type="radio"/> Calculated N		
Prior TIA	<input type="radio"/> Calculated N		
Prior Stroke or TIA	<input type="radio"/> Calculated N		
Prior Carotid Surgery	<input type="radio"/> Calculated N		
Claudication	<input type="radio"/> Calculated N		
Peripheral Vascular Disease	<input type="radio"/> Calculated N		
Prior Vascular Surgery	<input type="radio"/> Calculated N		

Other coronary risk factors or cormorbidities reported? (specify _____)		
--	--	--

Appendix E: Abstraction Forms (continued)

Discharge Medications

ASA	<input type="radio"/> recommended	<input type="radio"/> Calculated N		
β-Blockers	<input type="radio"/> recommended	<input type="radio"/> Calculated N		
Clopidogrel	<input type="radio"/> recommended	<input type="radio"/> Calculated N		
ACE-Inhibitors	<input type="radio"/> recommended	<input type="radio"/> Calculated N		
Statins	<input type="radio"/> recommended	<input type="radio"/> Calculated N		
Other recommended (specify _____)		<input type="radio"/> Calculated N		

SHORT-TERM OUTCOMES

Definition of procedure-related:	
---	--

All cause Mortality

Procedural	<input type="radio"/> Calculated N		
30 Day	<input type="radio"/> Calculated N		

Non-fatal MI

Procedural	<input type="radio"/> Calculated N		
30 Day	<input type="radio"/> Calculated N		
Definition for Post-CABG MI			
Definition for Post-PCI MI			

Appendix E: Abstraction Forms (continued)

Other short-term complications

Stroke	<input type="radio"/> Calculated N		
CHF	<input type="radio"/> Calculated N		
Nosocomial infections	<input type="radio"/> Calculated N		
Respiratory failure or other Pulmonary Complication	<input type="radio"/> Calculated N		
VT/VF	<input type="radio"/> Calculated N		
Atrial Fibrillation	<input type="radio"/> Calculated N		
Other Arrhythmias (specify)	<input type="radio"/> Calculated N		
Bleeding	<input type="radio"/> Calculated N		
Bleeding requiring a transfusion	<input type="radio"/> Calculated N		
Renal Failure	<input type="radio"/> Calculated N		
PCI re-intervention	<input type="radio"/> Calculated N		
Surgical re-intervention	<input type="radio"/> Calculated N		
Hospital readmission	<input type="radio"/> Calculated N		
Other (specify _____)	<input type="radio"/> Calculated N		

LONG-TERM OUTCOMES (From text or tables, not survival curves)

Survival-Overall Mortality-Overall Kaplan Meier Estimate Raw Percentage Absolute Numbers Other (specify_____)

REFID for these results _____

						Specify:	Specify:	Specify:	Specify:
Year 1	Year 2	Year 3	Year 4	Year 5		BLANK	BLANK	BLANK	BLANK
						BOX	BOX	BOX	BOX

PCI
CABG
PCI/CABG ratio

MI-Free Survival MI-fatal and nonfatal MI-nonfatal Kaplan Meier Estimate Raw Percentage Absolute Numbers Other (specify_____)

REFID for these results _____

						Specify:	Specify:	Specify:	Specify:
Year 1	Year 2	Year 3	Year 4	Year 5		BLANK	BLANK	BLANK	BLANK
						BOX	BOX	BOX	BOX

PCI
CABG
PCI/CABG ratio

Appendix E: Abstraction Forms (continued)

Survival free from cardiovascular deaths Cardiovascular death Kaplan Meier Estimate Raw Percentage Absolute Numbers Other (specify _____)

REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
CABG
PCI/CABG ratio

Repeat Revascularization Freedom from Revascularization Kaplan Meier Estimate Raw Percentage Absolute Numbers Other (specify _____)

REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
CABG
PCI/CABG ratio

Angina Freedom from Angina: Kaplan Meier Estimate Raw Percentage Absolute Numbers Other (specify _____)

REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
CABG
PCI/CABG ratio

Other outcomes: We are interested in CHF, stroke, respiratory failure or other pulmonary complications, renal failure, arrhythmias, QOL, functional health status or general health status, cognitive impairment, productivity/employment, and cost. Please describe the outcomes presented and their units.

Outcome 1: _____ Kaplan Meier Estimate Raw Percentage Absolute Numbers Other (specify _____)

REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
CABG
PCI/CABG ratio

Outcome 2: _____ Kaplan Meier Estimate Raw Percentage Absolute Numbers Other (specify _____)

REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
CABG
PCI/CABG ratio

Appendix E: Abstraction Forms (continued)

Outcome 3: _____ o Kaplan Meier Estimate o Raw Percentage o Absolute Numbers oOther (specify _____)
REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
 CABG
 PCI/CABG ratio

Outcome 4: _____ o Kaplan Meier Estimate o Raw Percentage o Absolute Numbers oOther (specify _____)
REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
 CABG
 PCI/CABG ratio

Outcome 5: _____ o Kaplan Meier Estimate o Raw Percentage o Absolute Numbers oOther (specify _____)
REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
 CABG
 PCI/CABG ratio

Outcome 6: _____ o Kaplan Meier Estimate o Raw Percentage o Absolute Numbers oOther (specify _____)
REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
 CABG
 PCI/CABG ratio

Outcome 7: _____ o Kaplan Meier Estimate o Raw Percentage o Absolute Numbers oOther (specify _____)
REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
 CABG
 PCI/CABG ratio

Outcome 8: _____ o Kaplan Meier Estimate o Raw Percentage o Absolute Numbers oOther (specify _____)
REFID for these results _____

Year 1	Year 2	Year 3	Year 4	Year 5	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX	Specify: BLANK BOX

PCI
 CABG
 PCI/CABG ratio

Appendix E: Abstraction Forms (continued)

Outcome 9: _____ o Kaplan Meier Estimate o Raw Percentage o Absolute Numbers o Other (specify _____)
REFID for these results _____

						Specify:	Specify:	Specify:	Specify:
Year 1	Year 2	Year 3	Year 4	Year 5		BLANK	BLANK	BLANK	BLANK
						BOX	BOX	BOX	BOX

PCI
 CABG
 PCI/CABG ratio

Outcome 10: _____ o Kaplan Meier Estimate o Raw Percentage o Absolute Numbers o Other (specify _____)
REFID for these results _____

						Specify:	Specify:	Specify:	Specify:
Year 1	Year 2	Year 3	Year 4	Year 5		BLANK	BLANK	BLANK	BLANK
						BOX	BOX	BOX	BOX

PCI
 CABG
 PCI/CABG ratio

SUBGROUP OUTCOMES DATA

Subgroup outcome 1 (specify)

Refid for these results

Type of data

- Kaplan Meier Estimate
- Raw percentage
- Absolute numbers
- Other (specify)

Group 1 (specify)

PCI sample size at randomization

CABG sample size at randomization

Group 1 outcome						Specify:	Specify:	Specify:	Specify:
1	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK	BLANK	BLANK	BLANK
						BOX	BOX	BOX	BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Group 2 (specify)

PCI sample size at randomization

CABG sample size at randomization

Group 2 outcome						Specify:	Specify:	Specify:	Specify:
1	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK	BLANK	BLANK	BLANK
						BOX	BOX	BOX	BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Appendix E: Abstraction Forms (continued)

Group 3 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 3 outcome						Specify:	Specify:	Specify:	Specify:
1	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Group 4 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 4 outcome						Specify:	Specify:	Specify:	Specify:
1	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Subgroup outcome 2 (specify)

Refid for these results

Type of data

- Kaplan Meier Estimate
- Raw percentage
- Absolute numbers
- Other (specify)

Group 1 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 1 outcome						Specify:	Specify:	Specify:	Specify:
2	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:	Big blank text box								

Appendix E: Abstraction Forms (continued)

Group 2 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 2 outcome						Specify:	Specify:	Specify:	Specify:
2	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Group 3 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 3 outcome						Specify:	Specify:	Specify:	Specify:
2	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Group 4 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 4 outcome						Specify:	Specify:	Specify:	Specify:
2	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Subgroup outcome 3 (specify)

Refid for these results

Type of data

- Kaplan Meier Estimate
- Raw percentage
- Absolute numbers
- Other (specify)

Group 1 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 1 outcome						Specify:	Specify:	Specify:	Specify:
3	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Appendix E: Abstraction Forms (continued)

Group 2 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 2 outcome						Specify:	Specify:	Specify:	Specify:
3	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Group 3 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 3 outcome						Specify:	Specify:	Specify:	Specify:
3	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:	Big blank text box								

Group 4 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 4 outcome						Specify:	Specify:	Specify:	Specify:
3	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Subgroup outcome 4 (specify)

Refid for these results

Type of data

- Kaplan Meier Estimate
- Raw percentage
- Absolute numbers
- Other (specify)

Group 1 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 1 outcome						Specify:	Specify:	Specify:	Specify:
4	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Appendix E: Abstraction Forms (continued)

Group 2 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 2 outcome						Specify:	Specify:	Specify:	Specify:
4	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Group 3 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 3 outcome						Specify:	Specify:	Specify:	Specify:
4	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:	Big blank text box								

Group 4 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 4 outcome						Specify:	Specify:	Specify:	Specify:
4	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Subgroup outcome 5 (specify)

Refid for these results

Type of data

- Kaplan Meier Estimate
- Raw percentage
- Absolute numbers
- Other (specify)

Group 1 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 1 outcome						Specify:	Specify:	Specify:	Specify:
5	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Appendix E: Abstraction Forms (continued)

Group 2 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 2 outcome						Specify:	Specify:	Specify:	Specify:
5	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Group 3 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 3 outcome						Specify:	Specify:	Specify:	Specify:
5	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Group 4 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 4 outcome						Specify:	Specify:	Specify:	Specify:
5	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Subgroup outcome 6 (specify)

Refid for these results

Type of data

- Kaplan Meier Estimate
- Raw percentage
- Absolute numbers
- Other (specify)

Group 1 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 1 outcome						Specify:	Specify:	Specify:	Specify:
6	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									

Appendix E: Abstraction Forms (continued)

Group 2 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 2 outcome 6						Specify:	Specify:	Specify:	Specify:
	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Group 3 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 3 outcome 6						Specify:	Specify:	Specify:	Specify:
	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Group 4 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 4 outcome 6						Specify:	Specify:	Specify:	Specify:
	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Subgroup outcome 7 (specify)

Refid for these results

Type of data

- Kaplan Meier Estimate
- Raw percentage
- Absolute numbers
- Other (specify)

Group 1 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 1 outcome 7						Specify:	Specify:	Specify:	Specify:
	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Appendix E: Abstraction Forms (continued)

Group 2 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 2 outcome						Specify:	Specify:	Specify:	Specify:
7	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Group 3 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 3 outcome						Specify:	Specify:	Specify:	Specify:
7	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments:

Group 4 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 4 outcome						Specify:	Specify:	Specify:	Specify:
7	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments: Big blank text box

Subgroup outcome 8 (specify)

Refid for these results

Type of data

- Kaplan Meier Estimate
- Raw percentage
- Absolute numbers
- Other (specify)

Group 1 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 1 outcome						Specify:	Specify:	Specify:	Specify:
8	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX

PCI
 CABG
 PCI/CABG ratio
 Comments: Big blank text box

Appendix E: Abstraction Forms (continued)

Group 2 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 2 outcome						Specify:	Specify:	Specify:	Specify:
8	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:	Big blank text box								

Group 3 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 3 outcome						Specify:	Specify:	Specify:	Specify:
8	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:	Big blank text box								

Group 4 (specify)

PCI sample size at randomization
CABG sample size at randomization

Group 4 outcome						Specify:	Specify:	Specify:	Specify:
8	Year 1	Year 2	Year 3	Year 4	Year 5	BLANK BOX	BLANK BOX	BLANK BOX	BLANK BOX
PCI									
CABG									
PCI/CABG ratio									
Comments:									