

# Clinical trials of radial

TrialResults-center [www.trialresultscenter.org](http://www.trialresultscenter.org)

## 1 CABG surgery

Trial	Treatments	Patients	Trials design and methods
<b>radial artery grafts vs saphenous vein grafts</b>			
<b>RAPS (Desai) , 2004</b> [NCT00187356] n=440/440 follow-up: 12 months	group 1 versus group 2	patients undergoing bypass of the anterior circulation	Cross over open Canada, New Zealand
<b>RSVP , 2008</b> [NCT00139399] n=82/60 follow-up: 5 ans	radial artery grafted to a stenosed branch of the native left circumflex coronary artery versus saphenous vein grafted to a stenosed branch of the native left circumflex coronary artery	patient undergoing CABG for a stenosed branch of the native left circumflex coronary artery	Parallel groups open England
<b>Gaudino (radial A) , 2005</b> n=40/40 follow-up: 52 months	radial artery on the first obtuse marginal artery versus great saphenous vein graft on the first obtuse marginal artery	coronary artery bypass patients with previous in-stent restenosis (n=60) or not (n=60)	Parallel groups open Italy
<b>VA CABG , 2010</b> [NCT00054847] n=366/367 follow-up: 1 year (5y)	radial artery graft versus saphenous vein graft	patients with stable coronary artery disease	Parallel groups open USA

More details and results :

- radial graft for CABG surgery in all type of patients at <http://www.trialresultscenter.org/go-Q401>

## References

### **RAPS (Desai), 2004:**

Desai ND, Naylor CD, Kiss A, Cohen EA, Feder-Elituv R, Miwa S, Radhakrishnan S, Dubbin J, Schwartz L, Femes SE Impact of patient and target-vessel characteristics on arterial and venous bypass graft patency: insight from a randomized trial. *Circulation* 2007;115:684-91 [17283268]

Singh SK, Desai ND, Petroff SD, Deb S, Cohen EA, Radhakrishnan S, Schwartz L, Dubbin J, Femes SE The impact of diabetic status on coronary artery bypass graft patency: insights from the radial artery patency study. *Circulation* 2008;118:S222-5 [18824758]

Desai ND, Cohen EA, Naylor CD, Fremes SE A randomized comparison of radial-artery and saphenous-vein coronary bypass grafts. N Engl J Med 2004;351:2302-9 [15564545] [10.1056/NEJMoa040982](https://doi.org/10.1056/NEJMoa040982)

**RSVP, 2008:**

Collins P, Webb CM, Chong CF, Moat NE Radial artery versus saphenous vein patency randomized trial: five-year angiographic follow-up. Circulation 2008;117:2859-64 [18506009]

**Gaudino (radial A), 2005:**

Gaudino M, Cellini C, Pragliola C, Trani C, Burzotta F, Schiavoni G, Nasso G, Possati G Arterial versus venous bypass grafts in patients with in-stent restenosis. Circulation 2005;112:I265-9 [16159829]

**VA CABG, 2010:**

Goldman S, Sethi GK, Holman W, Thai H, McFalls E, Ward HB, Kelly RF, Rhenman B, Tobler GH, Bakaeen FG, Huh J, Soltero E, Moursi M, Haime M, Crittenden M, Kasirajan V, Ratliff M, Pett S, Irimpen A, Gunnar W, Thomas D, Fremes S, Moritz T, Reda D, Harrison L Radial artery grafts vs saphenous vein grafts in coronary artery bypass surgery: a randomized trial. JAMA 2011 Jan 12;305:167-74 [21224458] [10.1001/jama.2010.1976](https://doi.org/10.1001/jama.2010.1976)

## 2 percutaneous coronary intervention

Trial	Treatments	Patients	Trials design and methods
<b>radial vs femoral</b>			
<a href="#">Grinfeld , 1996</a> n=NA follow-up: hospital stay	Radial versus femoral	Diagnostic coronary angiography	open
<a href="#">ACCESS , 1997</a> n=300/300 follow-up: 1 month	Radial (6F) versus femoral (6F)	patients undergoing PTCA	open
<a href="#">Achenbach , 2005</a> n=152/155 follow-up: hospital stay	Radial versus femoral	Patients age >75 undergoing coronary angiography	open
<a href="#">Bodi , 2008</a> n=666/332 follow-up: hospital stay	Right or Left radial versus femoral	Patients with STEMI for primary PCI	open
<a href="#">BRAFE , 1997</a> n=50/55 follow-up: 1 month	Radial (6F) versus femoral (6F)	Elective PCI with stent	open
<a href="#">CARAFE , 2001</a> n=NA follow-up: hospital stay	Radial (5 or 6F) versus femoral (5F or 6F with perclose if PCI)	Coronary angiography or PCI	open

continued...

<b>Trial</b>	<b>Treatments</b>	<b>Patients</b>	<b>Trials design and methods</b>
Cooper , 1999 n=101/99 follow-up: hospital stay	Radial (4F) versus femoral (5F or 6F)	Diagnostic coronary angiography	open
FARMI , 2007 n=57/57 follow-up: hospital stay	Radial (5F) versus femoral (6F)	Patients with STEMI for primary or rescue PCI	open
Gorge and Kirstein , 2001 n=214/216 follow-up: hospital stay	Radial versus femoral	Coronary angiography or PCI	open
Lange and von Boetticher , 2006 n=NA follow-up: End of procedure	Radial versus femoral (5F)	Coronary angiography or PCI	open
Li , 2007 n=184/186 follow-up: hospital stay	Radial versus femoral	Coronary angiography or PCI	open
Mann , 1996 n=73/75 follow-up: hospital stay	Right radial (6F) versus femoral (6F)	PTCA	open
Mann , 1998 n=68/77 follow-up: hospital stay	Radial (6F) versus femoral (6F or 7F)	Patients with ACS undergoing PCI with stent	open
Monsegu , 2000 n=196/183 follow-up: hospital stay	Left radial (5F) versus femoral (4F)	Diagnostic coronary angiography	open
Moriyama , 2002 n=108/92 follow-up: hospital stay	Radial (4F) versus femoral (4F)	Diagnostic coronary angiography	open
OCTOPLUS , 2004 n=192/185 follow-up: hospital stay	Radial versus femoral	Patients age >80 undergoing coronary angiography or PCI	open
OUTCLAS , 2005 n=322/322 follow-up: 1 month	Radial (6F) versus femoral	Outpatients referred for PCI	open
RADIAL AMI , 2005 n=25/25 follow-up: 1 month	-	Patients with STEMI for primary or rescue PCI	open

continued...

<b>Trial</b>	<b>Treatments</b>	<b>Patients</b>	<b>Trials design and methods</b>
<b>RADIAMI , 2007</b> n=50/50 follow-up: hospital stay	Radial versus femoral with closure device	Patients with STEMI for primary or rescue PCI	open
<b>Reddy , 2004</b> n=NA follow-up: hospital stay	Radial (6F) versus femoral (4F) or femoral with angioseal closure	Diagnostic coronary angiography	open
<b>TEMPURA , 2003</b> n=77/72 follow-up: 9 months	Radial (6F) versus femoral (6F)	Patients with STEMI for primary PCI	open
<b>Tian , 2003</b> n=200/200 follow-up: hospital stay	Radial versus femoral	Diagnostic coronary angiography	open
<b>Vazquez-Rodriguez , 2004</b> n=217/222 follow-up: 1 month	Radial versus femoral	-	open

More details and results :

- radial access for percutaneous coronary intervention in all type of patients at <http://www.trialresultscenter.org/go-Q354>

## References

### **Grinfeld, 1996:**

J Am Coll Cardiol 1996;27(Suppl A):901.g

### **ACCESS , 1997:**

Kiemeneij F, Laarman GJ, Odekerken D, Slagboom T, van der Wieken R A randomized comparison of percutaneous transluminal coronary angioplasty by the radial, brachial and femoral approaches: the access study. J Am Coll Cardiol 1997;29:1269-75 [9137223]

### **Achenbach , 2005:**

J Am Coll Cardiol 2005;45:A40

### **Bodi, 2008:**

JACC Cardiovasc Intervent 2008;1(2 [Supplement B]): B94

### **BRAFE , 1997:**

Benit E, Missault L, Eeman T, Carlier M, Muyldermans L, Materne P, Lafontaine P, De Keyser J, Decoster O, Pourbaix S, Castadot M, Boland J Brachial, radial, or femoral approach for elective Palmaz-Schatz stent implantation: a randomized comparison. Cathet Cardiovasc Diagn 1997;41:124-30 [9184280]

### **CARAFE , 2001:**

Louvard Y, Lefvre T, Allain A, Morice M Coronary angiography through the radial or the femoral approach: The CARAFE study. Catheter Cardiovasc Interv 2001;52:181-7 [11170325]

**Cooper , 1999:**

Cooper CJ, El-Shiekh RA, Cohen DJ, Blaesing L, Burket MW, Basu A, Moore JA Effect of transradial access on quality of life and cost of cardiac catheterization: A randomized comparison. *Am Heart J* 1999;138:430-6 [[10467191](#)]

**FARMI , 2007:**

Brasselet C, Tassan S, Nazeyrollas P, Hamon M, Metz D Randomised comparison of femoral versus radial approach for percutaneous coronary intervention using abciximab in acute myocardial infarction: results of the FARMI trial. *Heart* 2007;93:1556-61 [[17639099](#)] [10.1136/hrt.2007.117309](#)

**Gorge and Kirstein, 2001:**

*Eur Heart J* 2001;22(Suppl):512

**Lange and von Boetticher, 2006:**

Lange HW, von Boetticher H Randomized comparison of operator radiation exposure during coronary angiography and intervention by radial or femoral approach. *Catheter Cardiovasc Interv* 2006;67:12-6 [[16331696](#)] [10.1002/ccd.20451](#)

**Li , 2007:**

Li WM, Li Y, Zhao JY, Duan YN, Sheng L, Yang BF, Wang FL, Gong YT, Yang SS, Zhou LJ, Liu PD, Zhang L, Chu S Safety and feasibility of emergent percutaneous coronary intervention with the transradial access in patients with acute myocardial infarction. *Chin Med J (Engl)* 2007;120:598-600 [[17442210](#)]

**Mann , 1996:**

Mann JT 3rd, Cubeddu MG, Schneider JE, Arrowood M Right Radial Access for PTCA: A Prospective Study Demonstrates Reduced Complications and Hospital Charges. *J Invasive Cardiol* 1996;8 Suppl D:40D-44D [[10785786](#)]

**Mann , 1998:**

Mann T, Cubeddu G, Bowen J, Schneider JE, Arrowood M, Newman WN, Zellinger MJ, Rose GC Stenting in acute coronary syndromes: a comparison of radial versus femoral access sites. *J Am Coll Cardiol* 1998;32:572-6 [[9741495](#)]

**Monsegu , 2000:**

*Am J Cardiol* 2000;86(Suppl 8A):521I

**Moriyama , 2002:**

*Circulation* 2002;106 (Suppl II):693

**OCTOPLUS , 2004:**

Louvard Y, Benamer H, Garot P, Hildick-Smith D, Loubeyre C, Rigattieri S, Monchi M, Lefvre T, Hamon M Comparison of transradial and transfemoral approaches for coronary angiography and angioplasty in octogenarians (the OCTOPLUS study). *Am J Cardiol* 2004;94:1177-80 [[15518616](#)] [10.1016/j.amjcard.2004.07.089](#)

**OUTCLAS , 2005:**

Slagboom T, Kiemeneij F, Laarman GJ, van der Wieken R Outpatient coronary angioplasty: feasible and safe. *Catheter Cardiovasc Interv* 2005;64:421-7 [[15789393](#)] [10.1002/ccd.20313](#)

**RADIAL AMI , 2005:**

Cantor WJ, Puley G, Natarajan MK, Dzavik V, Madan M, Fry A, Kim HH, Velianou JL, Pirani N, Strauss BH, Chisholm RJ Radial versus femoral access for emergent percutaneous coronary intervention with adjunct glycoprotein IIb/IIIa inhibition in acute myocardial infarction—the RADIAL-AMI pilot randomized trial. *Am Heart J* 2005;150:543-9 [[16169338](#)] [10.1016/j.ahj.2004.10.043](#)

**RADIAMI , 2007:**

*Eur Heart J* 2007;28:663.

**Reddy , 2004:**

Reddy BK, Brewster PS, Walsh T, Burket MW, Thomas WJ, Cooper CJ Randomized comparison of rapid ambulation using radial, 4 French femoral access, or femoral access with AngioSeal closure. Catheter Cardiovasc Interv 2004;62:143-9 [[15170701](#)] [10.1002/ccd.20027](#)

**TEMPURA , 2003:**

Saito S, Tanaka S, Hiroe Y, Miyashita Y, Takahashi S, Tanaka K, Satake S Comparative study on transradial approach vs. transfemoral approach in primary stent implantation for patients with acute myocardial infarction: results of the test for myocardial infarction by prospective unicenter randomization for access sites (TEMPURA) trial. Catheter Cardiovasc Interv 2003;59:26-33 [[12720237](#)] [10.1002/ccd.10493](#)

**Tian , 2003:**

Chin J Gerontol 2003;23:563-5

**Vazquez-Rodriguez, 2004:**

J Am Coll Cardiol 2007;49(Suppl 2):12B