

# Clinical trials of PCI for acute myocardial infarction in failed fibrinolysis (rescue PCI)

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

## 1 repeat fibrinolysis

Trial	Treatments	Patients	Trials design and methods
<b>repeat fibrinolysis vs no repeat fibrinolysis</b>			
<b>REACT (repeat fibrinolysis) , 2005</b> n=142/141 follow-up: 6 months	repeated thrombolysis versus conservative treatment with unfractionated heparin for 24h	patients with ST-segment elevation myocardial infarction and failed reperfusion (less than 50 percent ST-segment resolution) within 90 minutes after thrombolytic treatment	open
<b>Sarullo , 2000</b> n=45/45 follow-up: in hospital	thrombolytic treatment (rTPA 50 mg), 10 mg as bolus plus 40 mg in 60 minutes versus placebo	patients with large AMI and failed thrombolysis	Parallel groups double blind
<b>Mounsey , 1995</b> n=19/18 follow-up: 6 weeks	alteplase (tissue type plasminogen activator (rt-PA) 100 mg over three hours) versus placebo	patients with acute myocardial infarction and electrocardiographic evidence of failed reperfusion	Parallel groups

## References

### REACT (repeat fibrinolysis), 2005:

Gershlick AH, Stephens-Lloyd A, Hughes S, Abrams KR, Stevens SE, Uren NG, de Belder A, Davis J, Pitt M, Banning A, Baumbach A, Shiu MF, Schofield P, Dawkins KD, Henderson RA, Oldroyd KG, Wilcox R Rescue angioplasty after failed thrombolytic therapy for acute myocardial infarction. *N Engl J Med* 2005;353:2758-68 [[16382062](#)]

Carver A, Rafelt S, Gershlick AH, Fairbrother KL, Hughes S, Wilcox R Longer-term follow-up of patients recruited to the REACT (Rescue Angioplasty Versus Conservative Treatment or Repeat Thrombolysis) trial. *J Am Coll Cardiol* 2009;54:118-26 [[19573727](#)]

### Sarullo, 2000:

Sarullo FM, Americo L, Di Pasquale P, Castello A, Mauri F Efficacy of rescue thrombolysis in patients with acute myocardial infarction: preliminary findings. *Cardiovasc Drugs Ther* 2000;14:83-9 [[10755205](#)]

### Mounsey, 1995:

Mounsey JP, Skinner JS, Hawkins T, MacDermott AF, Furniss SS, Adams PC, Kesteven PJ, Reid DS Rescue thrombolysis: alteplase as adjuvant treatment after streptokinase in acute myocardial infarction. *Br Heart J* 1995;74:348-53 [[7488444](#)]

## 2 rescue PCI

Trial	Treatments	Patients	Trials design and methods
<b>rescue PTCA vs no rescue PTCA</b>			
<b>Belenkie , 1992</b> n=16/12 follow-up: hospital stay	rescue PTCA versus conservative treatment	patients with a persistently occluded infarct artery following thrombolytic therapy more than 3 h after symptom onset	Parallel groups open Canda
<b>REACT (rescue PCI) , 2005</b> n=144/141 follow-up: 6-month	rescue PCI versus conservative treatment (with unfractionated heparin for 24 hours)	patients with ST-segment elevation myocardial infarction and failed reperfusion (less than 50 percent ST-segment resolution) within 90 minutes after thrombolytic treatment	Parallel groups open
<b>MERLIN , 2004</b> n=153/154 follow-up: 30-day	emergency coronary angiography with or without rescue PCI versus conservative treatment	patients with STEMI and failed fibrinolysis	Parallel groups
<b>RESCUE II , 2000</b> n=14/15 follow-up: 30-day	PCI versus conservative	patient with TIMI II flow after fibrinolytic therapy for moderate to large MI	Parallel groups
<b>RESCUE , 1994</b> n=78/73 follow-up: 30-day	balloon angioplasty supplemented by further thrombolytic therapy as needed versus conservative therapy (aspirin, heparin, and coronary vasodilators)	patients with first anterior wall infarction and angiographically demonstrated occluded infarct vessel within 8 hours of chest pain onset after thrombolysis	Parallel groups
<b>vs balloon angioplasty</b>			
<b>STOPAMI 4 , 2004</b> n=90/91 follow-up: 12 months	coronary stenting versus coronary balloon angioplasty	patients with AMI referred for failed thrombolysis performed within the previous 24 h	Parallel groups open

## References

### Belenkie, 1992:

Belenkie I, Traboulsi M, Hall CA, Hansen JL, Roth DL, Manyari D, Filipchuck NG, Schnurr LP, Rosenal TW, Smith ER Rescue angioplasty during myocardial infarction has a beneficial effect on mortality: a tenable hypothesis. *Can J Cardiol* 1992 May;8:357-62 [[1617519](#)]

### REACT (rescue PCI), 2005:

Gershlick AH, Stephans-Lloyd A, Hughes S, Abrams KR, Stevens SE, Uren NG, de Belder A, Davis J, Pitt M, Banning A, Baumbach A, Shiu MF, Schofield P, Dawkins KD, Henderson RA, Oldroyd KG, Wilcox R Rescue angioplasty after failed thrombolytic therapy for acute myocardial infarction. *N Engl J Med* 2005;353:2758-68 [[16382062](#)]

Carver A, Rafelt S, Gershlick AH, Fairbrother KL, Hughes S, Wilcox R Longer-term follow-up of patients recruited to the REACT (Rescue Angioplasty Versus Conservative Treatment or Repeat Thrombolysis) trial. *J Am Coll Cardiol* 2009;54:118-26 [[19573727](#)]

### MERLIN, 2004:

Sutton AG, Campbell PG, Graham R, Price DJ, Gray JC, Grech ED, Hall JA, Harcombe AA, Wright RA, Smith RH, Murphy JJ, Shyam-Sundar A, Stewart MJ, Davies A, Linker NJ, de Belder MA A randomized trial of rescue angioplasty versus a conservative approach for failed fibrinolysis in ST-segment elevation myocardial infarction: the Middlesbrough Early Revascularization to Limit Infarction (MERLIN) trial. *J Am Coll Cardiol* 2004;44:287-96 [[15261920](#)]

Kunadian B, Sutton AG, Vijayalakshmi K, Thornley AR, Gray JC, Grech ED, Hall JA, Harcombe AA, Wright RA, Smith RH, Murphy JJ, Shyam-Sundar A, Stewart MJ, Davies A, Linker NJ, de Belder MA, Early invasive versus conservative treatment in patients with failed fibrinolysis—no late survival benefit: the final analysis of the Middlesbrough Early Revascularisation to Limit Infarction (MERLIN) randomized trial. *Am Heart J* 2007;153:763-71. [[17452151](#)] [10.1016/j.ahj.2007.02.021](#)

**RESCUE II, 2000:**

Ellis SG, Da Silva ER, Spaulding CM, Nobuyoshi M, Weiner B, Talley JD Review of immediate angioplasty after fibrinolytic therapy for acute myocardial infarction: insights from the RESCUE I, RESCUE II, and other contemporary clinical experiences. *Am Heart J* 2000;139:1046-53 [[10827386](#)]

**RESCUE, 1994:**

Ellis SG, da Silva ER, Heyndrickx G, Talley JD, Cernigliaro C, Steg G, Spaulding C, Nobuyoshi M, Erbel R, Vassanelli C Randomized comparison of rescue angioplasty with conservative management of patients with early failure of thrombolysis for acute anterior myocardial infarction. *Circulation* 1994;90:2280-4 [[7955184](#)]

**STOPAMI 4, 2004:**

Schmig A, Ndrepepa G, Mehilli J, Dirschinger J, Nekolla SG, Schmitt C, Martinoff S, Seyfarth M, Schwaiger M, Kastrati A A randomized trial of coronary stenting versus balloon angioplasty as a rescue intervention after failed thrombolysis in patients with acute myocardial infarction. *J Am Coll Cardiol* 2004;44:2073-9 [[15542294](#)]

### 3 About TrialResults-center.org

TrialResults-center is an innovative knowledge database that collects the results of RCTs and provides dynamic interactive systematic reviews and meta-analysis in the field of all major heart and vessels diseases.

The TrialResults-center database provides a unique view of the treatment efficacy based on all data provided directly from clinical trial results, offering a valuable alternative to personal bibliographic search, published meta-analysis, etc. Furthermore, it would allow comparing easily the various concurrent therapeutic for the same clinical condition.

Rigorous meta-analysis method is used to populate TrialResults-center: widespread search of published and non published trials, study selection using pre-specified criteria, data extraction using standard form.

TrialResults-center is continually updated on a weekly basis. We continually search all new results (whatever their publication channel) and these news results are immediately added to the database with a maximum of 1 week.

TrialResults-center is non-profit and self-funded.