# Clinical trials of myocardial revascularization for acute coronary syndrome in all type of patients

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## 1 cooling-off strategy

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|---|
| **early intervention vs early strategy** | | | |
| ISAR-COOL , 2003<br>n=207/203<br>follow-up: 1 mo | Prolonged (3 to 5 days) antithrombotic pretreatment (Cooling-Off strategy) before intervention<br>versus<br>early intervention after pretreatment for less than 6 hours | patients with symptoms of unstable angina plus either ST-segment depression or elevation of cardiac troponin T levels | Parallel groups<br>open<br>Germany |

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## 2 early invasive strategy

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|---|
| **routine invasive strategy vs concervative strategy** | | | |
| ICTUS , 2007<br>[ISRCTN82153174]<br>n=604/596<br>follow-up: 12 mo (4y) | early invasive strategy<br>versus<br>selective invasive treatment strategy | patients with nonST-segment elevation acutec oronary syndrome and elevated cardiac troponin T | Parallel groups<br>open<br>Netherlands |
| FRISC 2 , 1999<br>n=1222/1234<br>follow-up: 24 mo | early invasive treatment strategy: angiography within 7 days aiming for revascularisation<br>versus<br>non-invasive treatment strategy: angiography only in patients with refractory or recurrent symptoms despite maximum medical treatment or severe ischemia during exercise test before discharge | patients with nonST-segment elevation acutecoronary syndrome | Factorial plan<br>Open<br>Scandinavia |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|---|
| NQWMI (Eisenberg) , 2005<br>n=42/46<br>follow-up: 12 months | Invasive (angiography at days 2 to 5)<br>versus<br>Noninvasive (stress testing at day 2 to 5) | patients with nonQ-wave myocardial infarction | Parallel groups<br>open<br>Canada |
| RITA 3 , 2002<br>[ISRCTN07752711r]<br>n=895/915<br>follow-up: 24 mo (60 mo) | routine angiography followed by revascularisationage/pj<br>versus<br>conservative strategy (ischaemia-driven or symptom-driven angiographyS | patients with nonST-segment elevation acutecoronary syndrome | Parallel groups<br>open<br>UK |
| TACTICS-TIMI 18 , 2001<br>n=1114/1106<br>follow-up: 6 mo | early invasive management strategy<br>versus<br>conservative management strategy | patients with nonST-segment elevation acute coronary syndrome | Parallel groups<br>open<br>9 countries |
| TRUCS , 2000<br>n=76/72<br>follow-up: 12 mo | invasive strategy<br>versus<br>conservative strategy | patients with nonST-segment elevation acute coronary syndrome in geographically isolated hospitals without cardiac surgical facilities | Parallel groups<br>Greece |
| VINO , 2002<br>n=64/67<br>follow-up: 6 mo | first day angiography / angioplasty strategy<br>versus<br>early conservative therapy | patients with nonST-segment elevation acute coronary syndrome | Parallel groups<br>open<br>Czech Republic |
| the Italian Elderly ACS study<br>*ongoing*<br>[NCT00510185]<br>n=NA<br>follow-up: | early aggressive approach<br>versus<br>initially conservative approach | patients older than 74 years of age with NSTEACS | |
| **routine invasive strategy - noncomptemporary vs concervative strategy** | | | |
| MATE , 1998<br>n=111/90<br>follow-up: 21 mo | early triage angiography and subsequent therapies based on the angiogram<br>versus<br>conventional medical therapy | acute MI ineligible for thrombolytic therapy within 24 h of symptoms | Parallel groups<br>open<br>US |
| TIMI 3B (PTCA) , 1994<br>n=740/733<br>follow-up: 12 mo | Early invasive strategy: systematic angiography (18-48h after randomisation) and revascularisation (PTCA or CABG)<br>versus<br>Early elective strategy: angiography and revascularisation only in case of ischemic recurrence (see paper) | patient with unstable angina or non Q wave MI within 24hrs of onset | Factorial plan<br>Open<br>USA & Canada |
| VANQWISH , 1998<br>n=462/458<br>follow-up: 23 mo | invasive management<br>versus<br>conservative management: medical therapy with subsequent invasive management if indicated by the development of spontaneous or indicible ischemia within 24-72 hours | Patients with NonQ-wave myocardial infarction | Parallel groups<br>Open<br>US |
| **early invasive management vs delayed invasive strategy** | | | |

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| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|---|
| TIMACS , 2009<br>[NCT00552513]<br>n=1593/1438<br>follow-up: 6 months | early invasive management: angiography within 24 hours followed by PCI or CABG as appropriate<br>versus<br>delayed invasive strategy: angiography after 36 hours followed by PCI or CABG as appropriate | patients with unstable angina or non-ST-segment-elevation MI (NSTEMI) | Parallel groups<br>open<br>30 countries |
| **immediate invasive management vs delayed invasive strategy** | | | |
| OPTIMA , 2009<br>[ISRCTN80874637]<br>n=73/69<br>follow-up: 30 days | immediate angioplasty under triple antiplatelet therapy protection<br>versus<br>deferred angioplasty | patients with non-ST-segment elevation acute coronary syndromes eligible for percutaneous coronary intervention | Parallel groups<br>open<br>The Netherland, England |
| ABOARD , 2009<br>[NCT00442949]<br>n=175/177<br>follow-up: 1 month | immediate catheterization and revascularization<br>versus<br>catheterization and revascularization on the next working day (between 8 and 60 hours after enrollment) | patient with non ST-elevation acute coronary syndrome | Parallel groups<br>open<br>France |

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# 3 fibrinolytic

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|---|
| **anistreplase vs placebo** | | | |
| UNASEM , 1992<br>n=80/79<br>follow-up: hospital stay, 1y | anistreplase IV 30 UI over 5 minutes<br>versus<br>placebo | Patients without a previous myocardial infarction, with a typical history of unstable angina and ECG abnormalities indicative of ischemia | Parallel groups<br>double blind<br>Europe |
| **intracoronary urokinase vs placebo** | | | |
| TAUSA , 1994<br>n=232/237<br>follow-up: hospital stay | intracoronary urokinase 250000 UI or 500000 UI<br>versus<br>placebo | ischemic rest pain with or without a recent (<1 month) infarction | Parallel groups<br>double blind<br>USA |
| **t-PA vs placebo** | | | |
| Topol , 1988<br>n=20/20<br>follow-up: hospital stay | intravenous tissue plasminogen activator (t-PA)<br>versus<br>placebo | patients with angina at rest and provocable ischemia (pacing induced) | Parallel groups<br>open<br>USA |
| TIMI 3A , 1993<br>n=150/156<br>follow-up: hospital stay | 90-minute front-loaded infusion of t-PA (0.8 mg/kg i.v.; maximum, 80 mg)<br>versus<br>placebo | patients with unstable angina or non-Q wave myocardial infarction | Parallel groups<br>double blind<br>USA, canada |
| Nicklas , 1989<br>n=20/20<br>follow-up: | rt-PA, 150 mg/8 h<br>versus<br>placebo | patients with rest angina, angiographically documented coronary artery disease and pacing-induced ischemia | Parallel groups<br>Double blind<br>USA |
| Gold , 1987<br>n=12/12<br>follow-up: | intravenous recombinant human tissue-type plasminogen activator (rt-PA).<br>versus<br>placebo | chest pain at rest with transient ST segment deviation of at least 1 mm | Parallel groups |
| Williams , 1990<br>n=45/22<br>follow-up: | tissue-type plasminogen activator (rt-PA) (0.75 mg/kg over 1 hour or (0.75 mg/kg over 1 hour; total dose, 100 mg over 6 hours)<br>versus<br>placebo | rest angina and angiographic evidence of coronary stenosis | Parallel groups<br>double blind<br>USA |
| Freeman , 1992<br>n=35/35<br>follow-up: in hospital | tissue-type plasminogen activator (t-PA) (0.49 MU/kg for 1 hour followed by 0.07 MU/kg per hour for 9 hours)<br>versus<br>placebo | patients with unstable angina | Parallel groups<br>double blind<br>USA |
| van der Brand , 1991<br>n=19/17<br>follow-up: hospital stay | alteplase 100 mg in 3 h<br>versus<br>placebo | patients with angina at rest, despite bedrest and medical treatment | Parallel groups<br>double blind<br>The Netherlands |
| charbonnier , 1992<br>n=25/25<br>follow-up: | rt-PA 100 mg/90 minutes (10 mg bolus + 90 mg/90 minutes<br>versus<br>placebo | unstable angina pectoris | Parallel groups<br>double blind |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|---|
| Ardissino , 1990<br>n=12/12<br>follow-up: in hospital | recombinant tissue-type plasminogen activator (rt-PA) followed by heparin versus heparin alone | unstable angina refractory to conventional medical treatment | Parallel groups<br>double blind<br>Italy |
| TIMI 3B , 1995<br>n=729/744<br>follow-up: 1 year | tissue-type plasminogen activator (t-PA) versus placebo | patients with unstable angina and non-Q wave myocardial infarction | Factorial plan<br>Double blind |

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# 4 surgery

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|---|
| **surgery vs medical treatment** | | | |
| VA cooperative , 1987<br>n=231/237<br>follow-up: 2 years (5,10 years) | coronary-artery bypass surgery plus medical therapy<br>versus<br>medical therapy alone | men with unstable angina pectoris | Parallel groups<br>open<br>US |

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# 5 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.

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