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 n=207/203 follow-up: 1 mo	Prolonged (3 to 5 days) antithrombotic pretreatment (Cooling-Off strategy) before intervention versus 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 open Germany

References

ISAR-COOL, 2003:

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2 early invasive strategy

Trial	Treatments	Patients	Trials design and methods
routine invasive strategy vs concervative strategy			
ICTUS , 2007 [ISRCTN82153174] n=604/596 follow-up: 12 mo (4y)	early invasive strategy versus selective invasive treatment strategy	patients with nonST-segment elevation acutec oronary syndrome and elevated cardiac troponin T	Parallel groups open Netherlands
FRISC 2 , 1999 n=1222/1234 follow-up: 24 mo	early invasive treatment strategy: angiography within 7 days aiming for revascularisation versus 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 Open Scandinavia

continued...

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

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Trial	Treatments	Patients	Trials design and methods
TIMACS , 2009 [NCT00552513] n=1593/1438 follow-up: 6 months	early invasive management: angiography within 24 hours followed by PCI or CABG as appropriate versus 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 open 30 countries
immediate invasive management vs delayed invasive strategy			
OPTIMA , 2009 [ISRCTN80874637] n=73/69 follow-up: 30 days	immediate angioplasty under triple antiplatelet therapy protection versus deferred angioplasty	patients with non-ST-segment elevation acute coronary syndromes eligible for percutaneous coronary intervention	Parallel groups open The Netherland, England
ABOARD , 2009 [NCT00442949] n=175/177 follow-up: 1 month	immediate catheterization and revascularization versus 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 open France

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3 fibrinolytic

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

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Trial	Treatments	Patients	Trials design and methods
Ardissino , 1990 n=12/12 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 double blind Italy
TIMI 3B , 1995 n=729/744 follow-up: 1 year	tissue-type plasminogen activator (t-PA) versus placebo	patients with unstable angina and non-Q wave myocardial infarction	Factorial plan Double blind

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4 surgery

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

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