

Clinical trials of thrombectomy for percutaneous coronary intervention in patients with acute MI

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1 Catheter aspiration devices

| Trial | Treatments | Patients | Trials design and methods |
|--|--|---|--|
| Diver vs conventional PCI | | | |
| De Luca , 2006 n=38/38 follow-up: 6 months | Diver versus conventional stenting | patients with anterior ST elevation myocardial infarction | open |
| PIHRATE , 2004 n=102/94 follow-up: hospital stay | Diver versus conventional PCI | patients with acute myocardial infarction | |
| REMEDIA , 2005 n=50/49 follow-up: 1 month | Diver versus standard PCI | patients with ST-segment elevation acute myocardial infarction | open |
| Sardella , 2005 n=28/34 follow-up: 6 months | Diver versus conventional PCI | patients with acute myocardial infarction | |
| Export vs conventional PCI | | | |
| Lipiecki , 2009 n=20 follow-up: | - | - | |
| EXPIRA , 2005 n=88/87 follow-up: 1, 9 months | Export versus conventional PCI | patients with acute myocardial infarction | |
| Export (Chevalier) , 2008 n=120/129 follow-up: 1 month | Export versus conventional PCI | patients with acute myocardial infarction | |
| Noel , 2005 n=24/26 follow-up: hospital stay | Export versus conventional PCI | patients with acute myocardial infarction | |
| TAPAS , 2008 [ISRCTN16716833] n=535/536 follow-up: 1,12 months | Export versus conventional PCI | patients with myocardial infarction | Parallel groups open Netherlands |
| Pronto vs conventional PCI | | | |
| DEAR-MI , 2006 [NCT00257153] n=74/74 follow-up: 65279;1 month | 65279;Pronto versus primary percutaneous coronary intervention | patients with STEMI, admitted within 12 h of symptom onset | open |

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| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|---------------------------|
| Rescue vs conventional PCI | | | |
| Dudek , 2004 n=40/32 follow-up: hospital stay | Rescue (followed by stent implantation) versus PCI with stent implantation alone | patient with acute myocardial infarction with ST segment elevation | open |
| Kaltoft , 2006 n=108/107 follow-up: 1 month | Rescue versus standard PCI | patients with ST-segment-elevation myocardial infarction lasting <12 hours undergoing primary PCI | open |
| NONSTOP , 2004 n=129/129 follow-up: Hospital | Rescue versus conventional PCI | patients with acute myocardial infarction | |
| TVAC vs conventional PCI | | | |
| VAMPIRE , 2004 n=180/175 follow-up: 8 months | TVAC versus conventional PCI | patients with acute myocardial infarction | |

References

De Luca, 2006:
PIHRATE, 2004:
REMEDIA, 2005:
Sardella, 2005:
Lipiecki, 2009:
EXPIRA, 2005:
Export (Chevalier), 2008:
Noel, 2005:
TAPAS, 2008:
DEAR-MI, 2006:
Dudek, 2004:
Kaltoft, 2006:
NONSTOP, 2004:
VAMPIRE, 2004:

2 embolic protection devices

| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|---------------------------|
| Angioguard vs conventional PCI | | | |
| DIPLOMATE , 2004 n=32/28 follow-up: 1 month | Angioguard versus conventional PCI | patients with acute myocardial infarction | |

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| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|----------------------------------|
| Wang , 2003 n=20/20 follow-up: hospital stay | Angioguard versus conventional PCI | patients with acute myocardial infarction | open |
| FilterWire vs conventional PCI | | | |
| PROMISE , 2005 n=100/100 follow-up: 1 month | FilterWire versus control | patients with myocardial infarction with and without ST-segment elevation | open |
| UpFlow MI , 2007 n=51/49 follow-up: 1 month | FilterWire versus PCI using regular guidewires | patients with STEMI and coronary angiographic evidence of thrombotic occlusion | open |
| FilterWireg vs conventional PCI | | | |
| DEDICATION , 2008 n=312/314 follow-up: 1 month | FilterWireg versus PCI without distal protection | patients with STEMI referred within 12 h to have PCI | open |
| GuardWire vs conventional PCI | | | |
| ASPARAGUS , 2008 n=173/168 follow-up: hospital stay, 6 months | Guardwire versus conventional PCI | patients with acute myocardial infarction | open |
| EMERALD , 2005 n=252/249 follow-up: 1, 6 months | GuardWire versus angioplasty without distal protection | patients with ST-segment elevation myocardial infarction presenting within 6 hours of symptom onset and undergoing primary PCI or rescue intervention after failed thrombolysis | open |
| MICADO , 2007 n=80/74 follow-up: 1, 6 months | GuardWire versus PCI without distal protection | Patients with AMI within 24 hours from onset | open |
| Nanasato , 2004 n=34/30 follow-up: hospital stay | Guardwire versus conventional PCI | patients with acute myocardial infarction | open |
| Ochala , 2007 n=57/63 follow-up: 6 months | GuardWire versus abciximab | patients with ST elevation acute myocardial infarction referred for primary percutaneous coronary intervention | open |
| Tahk , 2008 n=50/46 follow-up: 1, 6 months | GuardWire versus primary angioplasty without distal protection | AMI patients presenting within 12 h of onset of symptoms | open |
| SpideRX vs conventional PCI | | | |
| PREMIAR , 2007 n=70/70 follow-up: 1, 6 months | SpideRX versus PCI without embolic protection | with acute ST-segment elevation myocardial infarction at high risk of embolic events (including only baseline Thrombolysis In Myocardial Infarction grade 0 to 2 flow) | open |

References

DIPLOMATE, 2004:

Wang, 2003:

PROMISE, 2005:
 UpFlow MI, 2007:
 DEDICATION, 2008:
 ASPARAGUS, 2008:
 EMERALD, 2005:
 MICADO, 2007:
 Nanasato, 2004:
 Ochala, 2007:
 Tahk, 2008:
 PREMIAR, 2007:

3 Mechanical thrombectomy devices

| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|--|
| AngioJet vs conventional PCI | | | |
| AiMI , 2006 n=240/240 follow-up: 1 month | AngioJet versus PCI alone | patients presenting within 12 h of symptom onset | open |
| Florence , 2004 n=50/50 follow-up: 1 month | AngioJet versus placebo | patients with a first acute myocardial infarction | |
| AnjoJet vs conventional PCI | | | |
| JETSTENT , 2010 n=256/245 follow-up: 6 months | AngioJet rheolytic thrombectomy versus direct stenting alone | patients with ST-elevation MI and at least moderate thrombus burden | Parallel groups open Italy |
| Export vs conventional PCI | | | |
| Lipiecki , 2009 n=20 follow-up: | - | - | |
| EXPIRA , 2005 n=88/87 follow-up: 1, 9 months | Export versus conventional PCI | patients with acute myocardial infarction | |
| Export (Chevalier) , 2008 n=120/129 follow-up: 1 month | Export versus conventional PCI | patients with acute myocardial infarction | |
| Noel , 2005 n=24/26 follow-up: hospital stay | Export versus conventional PCI | patients with acute myocardial infarction | |
| TAPAS , 2008 [ISRCTN16716833] n=535/536 follow-up: 1,12 months | Export versus conventional PCI | patients with myocardial infarction | Parallel groups open Netherlands |

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| Trial | Treatments | Patients | Trials design and methods |
|--|--|---|---------------------------|
| thrombectomy vs conventional PCI | | | |
| Ciszewski , 2011 n=67/70 follow-up: | - | high risk patients with STEMI and angiographic evidence of thrombus | |
| Liistro , 2009 n=NA follow-up: | - | patients with ST-segment elevation myocardial infarction | |
| INFUSE AMI , 2013 n=NA follow-up: | - | patients with ST-segment-elevation myocardial infarction caused by proximal or mid left anterior descending artery occlusion undergoing primary percutaneous coronary intervention with bivalirudin anticoagulation | |
| Chao , 2008 n=NA follow-up: | - | STEMI patients within 12 h from onset | |
| MUSTELLA n=NA follow-up: | - | - | |
| TROPHI n=NA follow-up: | - | - | |
| X-sizer vs conventional PCI | | | |
| Beran , 2002 n=30/31 follow-up: 1 month | X-sizer versus conventional PCI | patients with ACS and suspected intracoronary thrombus | open |
| Napodano , 2003 n=46/46 follow-up: 1 month | X-sizer versus conventional strategy of stenting | patients with AMI and angiographic evidence of intraluminal thrombus | open |
| X AMINE ST , 2005 n=100/101 follow-up: 1, 6 months | X-sizer versus standard PCI | patients with AMI <12 h and initial TIMI flow grade 0 to 1 and who were treated by PCI | open |
| thrombectomy vs PCI only | | | |
| TASTE (Frbert) , 2013 [NCT01093404] n=NA follow-up: | - | patients with STEMI undergoing PCI | |
| TOTAL , 2015 [NCT01149044] n=5033/5030 follow-up: | routine upfront manual thrombectomy versus PCI alone | patients with ST-segment elevation myocardial infarction (STEMI) undergoing primary PCI | |

References

AiMI, 2006:

Florence, 2004:

JETSTENT, 2010:

Lipiecki, 2009:
EXPIRA, 2005:
Export (Chevalier), 2008:
Noel, 2005:
TAPAS, 2008:
Ciszewski, 2011:
Liistro, 2009:
INFUSE AMI, 2013:
Chao, 2008:
MUSTELLA, :
TROPHI, :
Beran, 2002:
Napodano, 2003:
X AMINE ST, 2005:
TASTE (Frbert), 2013:
TOTAL, 2015:

4 About TrialResults-center.org

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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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