

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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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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