

# Clinical trials of systematic ballon angioplasty

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## 1 acute myocardial infarction

Trial	Treatments	Patients	Trials design and methods
<b>immediate systematic ballon angioplasty vs no immediate angioplasty</b>			
<b>ECSG , 1988</b> n=183/184 follow-up: 1 y	angioplasty as soon as possible (after rtPA) versus non-invasive strategy without immediate CA and PTCA	patients with acute myocardial infarction within 5 h after onset of symptoms	parallel group open Europe
<b>Belenkie , 1991</b> n=50/39 follow-up: 4 months	immediate PTCA versus delayed PTCA (18-38h)	patients with a patent infarct-related artery after thrombolytic therapy suitable for angioplasty	parallel group open Canada
<b>Ellis , 1994</b> n=78/73 follow-up:	balloon angioplasty supplemented by further thrombolytic therapy as needed versus conservative therapy	patients with first anterior wall infarction treated with any accepted intravenous thrombolytic regimen and angiographically demonstrated to have an occluded infarct vessel within 8 hours of chest pain onset	
<b>Erbel , 1989</b> n=103/103 follow-up: 3 years	combined intravenous and intracoronary streptokinase with immediate coronary angioplasty versus combined intravenous and intracoronary streptokinase without immediate coronary angioplasty	patients with acute transmural myocardial infarction	Parallel groups
<b>MERLIN (Sutton) , 2004</b> n=NA follow-up: 30 days	emergency coronary angiography with rescue PCI versus conservative treatment	patients with STEMI and failed fibrinolysis	Parallel groups
<b>SHOCK (Hochman) , 1999</b> [NCT00000552] n=152/150 follow-up: 30 days (6y)	emergency revascularization versus initial medical stabilization	patients with cardiogenic shock complicating acute MI	Parallel groups open US

continued...

<b>Trial</b>	<b>Treatments</b>	<b>Patients</b>	<b>Trials design and methods</b>
<b>SWISS-SMASH , 1999</b> n=32/23 follow-up: 30 days (1y)	emergency angiography, followed immediately by revascularization when indicated versus initial medical management	Patients with acute myocardial infarction and early shock	Parallel groups open Europe
<b>TAMI 1 pilot , 1987</b> n=99/98 follow-up: in hospital	Angioplasty within 120 min (after rtPA) versus deferred CA (7-10 days) and angioplasty if indicated	patients with acute myocardial infarction.	parallel group open USA
<b>TAMI-5 (Califf) , 1991</b> n=287/288 follow-up:	immediate catheterization with angioplasty for failed thrombolysis (90min after rtPA/urokinase) versus deferred predischARGE catheterization on days 5-10, no PTCA planned	patient with acute myocardial infarction	Factorial plan
<b>TIMI 2A , 1988</b> n=195/194 follow-up: 21 days	CA within 120 min of the start of the rtPA infusion. PTCA whether the artery is open or closed versus CA within 18-48hrs. PTCA only if artery open (TIMI 2 or 3)	patient thrombolized for a AMI	parallel group open USA
<b>Topol , 1987</b> n=15/13 follow-up: in hospital	immediate PTCA versus no PTCA	patients with evolving transmural myocardial infarction	parallel group open USA
<b>systematic ballon angioplasty vs no systematic angioplasty</b>			
<b>SWIFT , 1991</b> n=397/403 follow-up: 1 y	CA 72h with a view to PTCA or CABG versus elective angioplasty (only if required by clinical indication)	patients presenting with clinical and electrocardiographic features of acute myocardial infarction up to three hours after the onset of major symptoms	Parallel groups Open UK
<b>SIAM , 1992</b> n=158/166 follow-up: <3 years	CA with CABG/PTCA 14-48 hours versus no CA within the first 21days unless evidence of ischemia	patients treated by thrombolysis for AMI	Parallel groups Open Europe
<b>TAMI 6 , 1992</b> n=34/37	PTCA 6-24h after rtPA versus no PTCA planned	-	

continued...

Trial	Treatments	Patients	Trials design and methods
Barbash , 1990 n=97/104	PTCA>72h after rtPA if stenosis>70% versus PTCA>72h after rtPA if stenosis>50% and ischemia	-	
Guerci , 1987 n=42/43 follow-up: 10 days	PTCA at 4 day versus no PTCA during the 10 days study period	patients candidate to PTCA determined at the 1st day CA	Factorial plan United states
TIMI 2 , 1989 n=1636/1626 follow-up: 6 we	CA 18 to 48 hrs versus no CA unless spontaneous or exercise induced ischemia	patients treated with intravenous recombinant tissue plasminogen activator (rt-PA) within four hours of the onset of chest pain thought to be caused by myocardial infarction	Factorial plan Open United states
TIMI II-A (deferred) n=194/197 follow-up:	delayed invasive strategy, deferred angiography and PTCA for 18-48 hours versus conservative approach	-	
TOPS , 1992 n=42/45 follow-up: 12 months	PTCA to be performed 4-14 days after MI versus conservative management, no PTCA	patients with residual stenoses after thrombolytic treatment of myocardial infarction	Parallel groups
Van den Brand , 1991 n=113/104 follow-up: 3 mo	CA at 2-5 days, PTCA if suitable lesion versus CA at 2-5 days but no PTCA	suitable lesion	Parallel groups NA Europe
Vermeer , 1999 n=NA follow-up: 42 days	alteplase followed by transfer to the PTCA centre and (if indicated) rescue PTCA versus thrombolytic treatment with alteplase	patients with acute myocardial infarction initially admitted to a hospital without PTCA facilities	Parallel groups

More details and results :

- myocardial revascularization for acute myocardial infarction in all type of patients at <http://www.trialresultscenter.org/go-Q129>
- PCI for acute myocardial infarction in all type of patients at <http://www.trialresultscenter.org/go-Q246>
- myocardial revascularization for acute myocardial infarction in patients in cardiogenic shock at <http://www.trialresultscenter.org/go-Q248>

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