

# Clinical trials of cell-based therapies for coronary artery disease in all type of patients

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## 1 cellular therapy

Trial	Treatments	Patients	Trials design and methods
<b>Skeletal Myoblast Transplantation vs placebo</b>			
Genzyme SMC00202 <i>ongoing</i> [NCT00102128] n=NA follow-up:	Cultured Autologous Skeletal Myoblast Transplantation versus placebo	patient with prior myocardial infarction and referred for CABG	Parallel groups double blind

## References

Genzyme SMC00202, :

## 2 gene therapy

Trial	Treatments	Patients	Trials design and methods
<b>VEGF gene transfer vs control</b>			
REVASC (Stewart) , 2006 n=NA follow-up:	AdVEGF121 gene transfer with epicardial injection at minithoracotomy versus control	patients with severe angina due to coronary artery disease and no conventional options for revascularization	open
<b>fibroblast growth factor gene vs placebo</b>			
AGENT 3 and 4 pooled n=NA follow-up:	-	-	
AGENT-1 (Grines) , 2002 n=NA follow-up:	-	-	
AGENT-2 (Grines) , 2003 n=NA follow-up:	-	-	

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Trial	Treatments	Patients	Trials design and methods
<b>AGENT-3</b> [NCT00346437] n=NA follow-up:	Ad5FGF-4 (replication deficient, E1A/E1Bdeleted, human adenovirus serotype 5 with human FGF-4 gene insert: alferminogene tadenovec versus placebo	-	
<b>AGENT-4</b> [NCT00185263] n=NA follow-up:	Ad5FGF-4 (replication deficient, E1A/E1Bdeleted, human adenovirus serotype 5 with human FGF-4 gene insert: alferminogene tadenovec versus placebo	-	
<b>AWARE</b> [NCT00438867] n=NA follow-up:	intracoronary infusion of Ad5FGF-4 versus placebo	Female Patients With Stable Angina Pectoris Who Are Not Candidates for Revascularization	double blind
<b>gene therapy vs placebo</b>			
<b>EUROINJECT-ONE</b> (Gyngysi) , 2005 n=NA follow-up:	percutaneously via NOGA-Myostar injectionsof plasmid encoding plasmid human (ph)VEGF-A(165) versus placebo	patients with chronic myocardial ischemia	double blind
<b>NCT00090714</b> <i>ongoing</i> [NCT00090714] n=NA follow-up:	recombinant plasmid DNA [pVGL1(VEGF2)] gene therapy versus placebo	patients with severe Angina Pectoris	Parallel groups double blind

## References

**REVASC (Stewart), 2006:**  
**AGENT 3 and 4 pooled, 0:**  
**AGENT-1 (Grines), 2002:**  
**AGENT-2 (Grines), 2003:**  
**AGENT-3, 0:**  
**AGENT-4, 0:**  
**AWARE, 0:**  
**EUROINJECT-ONE (Gyngysi), 2005:**  
**NCT00090714, :**

## 3 growth factor

Trial	Treatments	Patients	Trials design and methods
<b>fibroblast growth factor vs placebo</b>			

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Trial	Treatments	Patients	Trials design and methods
<b>FIRST (Simons) , 2002</b> n=NA follow-up: 90 days	Single-bolus intracoronary administration of fibroblast growth factor-2 (FGF2) versus placebo	patients with coronary artery disease	double blind
<b>GCSF Granulocyte-Colony Stimulating Factor vs placebo</b>			
<b>Seiler ongoing</b> [NCT00886509] n=NA follow-up: 6 months	Subcutaneous Administration of Pegylated Granulocyte-Colony Stimulating Factor versus placebo	patients with stable coronary artery disease treatable by PCI	Parallel groups double blind
<b>vascular endothelial growth factor vs placebo</b>			
<b>VIVA (Henry) , 2003</b> n=NA follow-up: 12 days	intracoronary and intravenous infusions of recombinant human vascular endothelial growth factor protein (rhVEGF) versus placebo	patients with stable exertional angina, unsuitable for standard revascularization	double blind
<b>VEGF vs placebo</b>			
<b>EMAT ongoing</b> [NCT00134433] n=NA follow-up:	growth factor (VEGF) angiogenesis along the diffusely diseased, non-directly bypassed LAD segment at a dose of 2 mg versus palcebo	patients undergoing surgical perivascular angiogenic therapy	Factorial plan double blind

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## References

**FIRST (Simons), 2002:**

**Seiler, :**

**VIVA (Henry), 2003:**

**EMAT, :**

## 4 stem cells

Trial	Treatments	Patients	Trials design and methods
<b>autologous bone marrowderived mononuclear cells vs placebo</b>			
<b>Ramshorst , 2009</b> [ISRCTN58194927] n=25/25 follow-up: 6 months	intramyocardial injection of 100 x 10(6) autologous bone marrow-derived mononuclear cells versus placebo	patients with chronic myocardial ischemia	Parallel groups double blind Netherlands
<b>CD34+ cells vs placebo</b>			
<b>Losordo , 2011</b> [NCT00300053] n=167 follow-up: 6 months	intramyocardial injection of autologous CD34+ cells versus placebo	patients with refractory angina who have exhausted all other treatment options	Parallel groups double-blind

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Trial	Treatments	Patients	Trials design and methods
<b>mesenchymal stem cells vs placebo</b>			
Kumar <i>ongoing</i> [NCT00883727] n=NA follow-up: 6 months	Intravenous ex Vivo Cultured Adult Allogenic Mesenchymal Stem Cells versus placebo	in patients with ST elevated acute myocardial infarction (STEMI)	Parallel groups double blind India
<b>stem cells CD34+ vs placebo</b>			
Losordo , 2007 [NCT00081913] n=NA follow-up:	Injection of Autologous CD34-Positive Cells versus placebo	Patientswith Canadian Cardiovascular Society class 3 or 4 angina who were undergoing optimal medical treatment and who were not candidates for mechanical revascularization	Parallel groups double blind

## References

Ramshorst, 2009:

Losordo, 2011:

Kumar, :

Losordo, 2007:

## 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.

TrialResults-center is non-profit and self-funded.