

# Clinical trials of myoblasts

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## 1 acute myocardial infarction

Trial	Treatments	Patients	Trials design and methods
<b>Autologous Skeletal Myoblasts vs placebo</b>			
<a href="#">NCT00975234</a> <i>ongoing</i> [NCT00975234] n=NA follow-up:	Intra-lesion injection of autologous skeletal myoblasts versus placebo	Patients With Old Myocardial Infarction	

More details and results :

- cell-based therapies for acute myocardial infarction in PCI at <http://www.trialresultscenter.org/go-Q313>

## References

[NCT00975234](#), :  
ongoing trial NCT00975234

## 2 heart failure

Trial	Treatments	Patients	Trials design and methods
<b>myoblasts vs control</b>			
<a href="#">CAuSMIC</a> , 2005 n=12/11 follow-up: 12 mo	3-dimensional guided catheter-based delivery of autologous skeletal myoblasts versus control	patients with previous myocardial infarction and heart failure, New York Heart Association (NYHA) functional class II to IV	
<a href="#">SEISMIC</a> , 2011 n=26/14 follow-up: 6 mo	percutaneous intramyocardial transplantation of autologous skeletal myoblasts versus control	Patientst with heart failure patients with implanted cardioverter-defibrillators	
<b>myoblasts vs placebo</b>			

continued...

Trial	Treatments	Patients	Trials design and methods
<b>MAGIC , 2001</b> n=63/34 follow-up: 6 mo	autologous skeletal myoblasts into the postinfarction scar during coronary artery bypass grafting of remote myocardial areas versus placebo	patient with severe ischaemic heart failure	
<b>MARVEL , 2011</b> [NCT00526253 ] n=14/6 follow-up: 6 mo	image-guided, catheter-based intramyocardial injection of placebo or myoblasts (400 or 800 million) versus placebo	patients with class II to IV HF and ejection fraction <35%	

More details and results :

- cell-based therapies for heart failure in all types of patients at <http://www.trialresultscenter.org/go-Q515>
- regenerative therapy for heart failure in all type of patients at <http://www.trialresultscenter.org/go-Q649>

## References

### CAuSMIC, 2005:

Dib N, Michler RE, Pagani FD, Wright S, Kereiakes DJ, Lengerich R, Binkley P, Buchele D, Anand I, Swingen C, Di Carli MF, Thomas JD, Jaber WA, Opie SR, Campbell A, McCarthy P, Yeager M, Dilsizian V, Griffith BP, Korn R, Kreuger SK, Ghazoul M, MacLellan WR Safety and feasibility of autologous myoblast transplantation in patients with ischemic cardiomyopathy: four-year follow-up. *Circulation* 2005;112:1748-55 [16172284] [10.1161/CIRCULATIONAHA.105.547810](https://doi.org/10.1161/CIRCULATIONAHA.105.547810)

Dib N, Dinsmore J, Lababidi Z, White B, Moravec S, Campbell A, Rosenbaum A, Seyedmadani K, Jaber WA, Rizenhour CS, Diethrich E One-year follow-up of feasibility and safety of the first U.S., randomized, controlled study using 3-dimensional guided catheter-based delivery of autologous skeletal myoblasts for ischemic cardiomyopathy (CAuSMIC study). *JACC Cardiovasc Interv* 2009;2:9-16 [19463392] [10.1016/j.jcin.2008.11.003](https://doi.org/10.1016/j.jcin.2008.11.003)

### SEISMIC, 2011:

Duckers HJ, Houtgraaf J, Hehrlein C, Schofer J, Waltenberger J, Gershlick A, Bartunek J, Nienaber C, Macaya C, Peters N, Smits P, Siminiak T, van Mieghem W, Legrand V, Serruys PW Final results of a phase IIa, randomised, open-label trial to evaluate the percutaneous intramyocardial transplantation of autologous skeletal myoblasts in congestive heart failure patients: the SEISMIC trial. *EuroIntervention* 2011;6:805-12 [21252013] [10.4244/EIJV6I7A139](https://doi.org/10.4244/EIJV6I7A139)

### MAGIC, 2001:

Menasch P, Hagge AA, Scorsin M, Pouzet B, Desnos M, Duboc D, Schwartz K, Vilquin JT, Marolleau JP Myoblast transplantation for heart failure. *Lancet* 2001;357:279-80 [11214133] [10.1016/S0140-6736\(00\)03617-5](https://doi.org/10.1016/S0140-6736(00)03617-5)

### MARVEL, 2011:

Povsic TJ, O'Connor CM, Henry T, Taussig A, Kereiakes DJ, Fortuin FD, Niederman A, Schatz R, Spencer R 4th, Owens D, Banks M, Joseph D, Roberts R, Alexander JH, Sherman W A double-blind, randomized, controlled, multicenter study to assess the safety and cardiovascular effects of skeletal myoblast implantation by catheter delivery in patients with chronic heart failure after myocardial infarction. *Am Heart J* 2011;162:654-662.e1 [21982657] [10.1016/j.ahj.2011.07.020](https://doi.org/10.1016/j.ahj.2011.07.020)