

Clinical trials of Bone marrow mononuclear cells

TrialResults-center www.trialresultscenter.org

1 heart failure

Trial	Treatments	Patients	Trials design and methods
Bone marrow mononuclear cells vs control			
Ang , 2008 n=NA	-	Elective CABG patients with established myocardial scars diagnosed as akinetic or dyskinetic segments by dobutamine stress echocardiography and confirmed at surgery	single-blinded
Hendriks , 2006 n=NA follow-up: 4 months	-	patients with a postinfarction nonviable scar	
TOPCARE-CHD , 2006 [NCT00289822] n=NA	-	patients with stable ischemic heart disease who had had a myocardial infarction at least 3 months previously	
Yao , 2008 n=24/23	-	patients with stable ischaemic heart disease due to a previous MI	
Bone marrow mononuclear cells vs placebo			
FOCUS-HF , 2011 [NCT00203203.] n=20/10 follow-up: 6 mo	-	patients with chronic HF	

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

Ang, 2008:

Ang KL, Chin D, Leyva F, Foley P, Kubal C, Chalil S, Srinivasan L, Bernhardt L, Stevens S, Shenje LT, Galianes M Randomized, controlled trial of intramuscular or intracoronary injection of autologous bone marrow cells into scarred myocardium during CABG versus CABG alone. Nat Clin Pract Cardiovasc Med 2008;5:663-70 [18711405] [10.1038/ncpcardio1321](https://doi.org/10.1038/ncpcardio1321)

Hendrikx, 2006:

Hendrikx M, Hensen K, Clijsters C, Jongen H, Koninckx R, Bijmens E, Ingels M, Jacobs A, Geukens R, Dendale P, Vijgen J, Dilling D, Steels P, Mees U, Rummens JL Recovery of regional but not global contractile function by the direct intramyocardial autologous bone marrow transplantation: results from a randomized controlled clinical trial. *Circulation* 2006;114:1101-7 [[16820557](#)] [10.1161/CIRCULATIONAHA.105.000505](#)

TOPCARE-CHD, 2006:

Assmus B, Honold J, Schchinger V, Britten MB, Fischer-Rasokat U, Lehmann R, Teupe C, Pistorius K, Martin H, Abolmaali ND, Tonn T, Dimmeler S, Zeiher AM Transcatheter transplantation of progenitor cells after myocardial infarction. *N Engl J Med* 2006;355:1222-32 [[16990385](#)] [10.1056/NEJMoa051779](#)

Yao, 2008:

Yao K, Huang R, Qian J, Cui J, Ge L, Li Y, Zhang F, Shi H, Huang D, Zhang S, Sun A, Zou Y, Ge J Administration of intracoronary bone marrow mononuclear cells on chronic myocardial infarction improves diastolic function. *Heart* 2008;94:1147-53 [[18381377](#)] [10.1136/hrt.2007.137919](#)

Yao K, Huang RC, Ge L, Qian JY, Li YL, Xu SK, Zhang F, Zhang YQ, Niu YH, Shi JH, Zhang SH, Fan B, Wang QB, Sun AJ, Zou YZ, Ge JB [Observation on the safety: clinical trial on intracoronary autologous bone marrow mononuclear cells transplantation for acute myocardial infarction]. *Zhonghua Xin Xue Guan Bing Za Zhi* 2006 Jul;34:577-81 [[17081355](#)]

FOCUS-HF, 2011:

Perin EC, Silva GV, Henry TD, Cabreira-Hansen MG, Moore WH, Coulter SA, Herlihy JP, Fernandes MR, Cheong BY, Flamm SD, Traverse JH, Zheng Y, Smith D, Shaw S, Westbrook L, Olson R, Patel D, Gahremanpour A, Canales J, Vaughn WK, Willerson JT A randomized study of transendocardial injection of autologous bone marrow mononuclear cells and cell function analysis in ischemic heart failure (FOCUS-HF). *Am Heart J* 2011;161:1078-87.e3 [[21641354](#)] [10.1016/j.ahj.2011.01.028](#)

Willerson JT, Perin EC, Ellis SG, Pepine CJ, Henry TD, Zhao DX, Lai D, Penn MS, Byrne BJ, Silva G, Gee A, Traverse JH, Hatzopoulos AK, Forder JR, Martin D, Kronenberg M, Taylor DA, Cogle CR, Baraniuk S, Westbrook L, Sayre SL, Vojvodic RW, Gordon DJ, Skarl Intramyocardial injection of autologous bone marrow mononuclear cells for patients with chronic ischemic heart disease and left ventricular dysfunction (First Mononuclear Cells injected in the US [FOCUS]): Rationale and design. *Am Heart J* 2010 Aug;160:215-23 [[20691824](#)]