

# Intramyocardial injection of autologous bone marrow cells in no-option patients with refractory angina pectoris and documented ischemia; a registry.

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruiting
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON28156

### Source

NTR

### Health condition

bone marrow cells, stem cell therapy, refractory angina, intramyocardial injection

## Sponsors and support

**Primary sponsor:** Leiden University Medical Center (LUMC), Department of Cardiology

**Source(s) of monetary or material Support:** Leiden University Medical Center (LUMC)

## Intervention

## Outcome measures

### Primary outcome

The change in myocardial perfusion (SPECT) at 3 months follow-up relative to baseline.

### Secondary outcome

## EFFICACY:

### Clinical end points:

1. Angina frequency;
2. Canadian cardiovascular society score;
3. Quality of life;
4. Exercise capacity.

### Functional end points:

5. Change in LV ejection fraction at 3 months follow-up;
6. Regional myocardial function on a segmental base at 3 months follow-up.

### Safety:

7. Occurrence of arrhythmias;
8. Pericardial effusion > 5 mm (echo);
9. Myocardial damage;
10. Severe inflammation.

## Study description

### Background summary

After written informed consent has been obtained, quality of life and exercise capacity will be investigated. In addition myocardial function and perfusion will be documented.

Bone marrow will be aspirated from the iliac crest under local anesthesia.

In patients NOGA mapping will be performed with subsequent intramyocardial injection of autologous bone marrow-derived mononuclear cells.

Quality of life and exercise capacity will be reassessed at 3 and 6 months follow-up. In

addition, changes in myocardial function and perfusion will be evaluated at 3 months follow-up.

### **Study objective**

The aim of this study is to provide more insight in the therapeutic effect and mechanism of action of intramyocardial bone marrow cell injection in patients with refractory angina pectoris and documented ischemia.

### **Study design**

At 3 and 6 months follow-up.

### **Intervention**

After written informed consent has been obtained, quality of life and exercise capacity will be investigated. In addition myocardial function and perfusion will be documented.

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## **Contacts**

### **Public**

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### **Scientific**

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## Eligibility criteria

### Inclusion criteria

1. Severe refractory angina despite optimal medical therapy;
2. Reversible ischemia on GATED-SPECT;
3. No candidate for (repeat) revascularization (CABG or PCI);
4. Male or female, > 18 years old;
5. Patients must be stable (e.g. not be in a setting of life-threatening heart failure);
6. Written informed consent.

### Exclusion criteria

1. Acute myocardial infarction, PCI or CABG within 6 months of enrolment in the study;
2. History of malignancy (except low grade and fully resolved non-melanoma skin malignancy);
3. Unexplained haematological or biochemical abnormalities;
4. Concurrent participation in a study using an experimental drug or an experimental procedure within 6 months before the injection procedure;
5. Other severe concurrent illnesses (e.g. active infection, aortic stenosis, renal failure);
6. Bleeding diathesis or HIV infection;
7. Inability to follow the protocol and comply with follow-up requirements.

## Study design

### Design

Study type:	Interventional
Intervention model:	Factorial
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	20-10-2008
Enrollment:	150
Type:	Anticipated

## Ethics review

Positive opinion	
Date:	24-06-2011
Application type:	First submission

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register	ID
NTR-new	NL2821
NTR-old	NTR2962
Other	MEC LUMC : P05.025
ISRCTN	ISRCTN wordt niet meer aangevraagd.

## Study results

### Summary results

N/A