

# Netherlands Heart Foundation's Myocardial Infarction and Depression-Intervention Trial: effects of antidepressant treatment following myocardial infarction

<b>Submission date</b> 02/04/2012	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 22/05/2012	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 25/08/2015	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

Background and study aims:

Depression after myocardial infarction (heart attack) is associated with an increased risk of new cardiovascular events and mortality. The aim of MIND-IT was to find out whether offering antidepressant treatment improves cardiovascular prognosis in depressed myocardial infarction patients.

Who can participate?

Patients admitted for myocardial infarction to one of 10 hospitals in the Netherlands with a depressive episode during the first year after the myocardial infarction. In total of 331 patients participated.

What does the study involve?

The study investigates the effects of an antidepressant treatment strategy on depression and cardiovascular events in depressed myocardial infarction patients. Patients were randomly allocated into two groups: a study group and a usual care group. Patients in the study group were offered several types of antidepressant treatments from which they could choose

1. Mirtazapine versus placebo (dummy drug) on depression. If after 8 weeks there is no sufficient improvement in depression, open treatment with the antidepressant citalopram is offered.

2. Citalopram versus placebo on depression

The patients in the usual care received feedback about their depression status, but were told they were free to seek treatment for mood problems outside the study protocol. Hospital readmissions for cardiovascular reasons and mortality during the years following the treatment period were monitored.

What are the possible benefits and risks of participating?

Potential benefits are regular screening for depression after the myocardial infarction may

identify patients at increased risk of new cardiovascular events who would otherwise perhaps not be identified. Potential risks of participation in the trial for those in the placebo groups, is that depressed patients may be in need of antidepressants.

Where is the study run from?  
Multiple sites in the Netherlands.

When is the study starting and how long is it expected to run for?  
Recruitment of patients was between May 2000 and January 2003. The duration of trial for each patient was 6 months.

Who is funding the study?  
The Netherlands Heart Foundation

Who is the main contact?  
Prof. Dr. Peter de Jonge  
peter.de.jonge@umcg.nl

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof Peter de Jonge

**Contact details**  
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## Additional identifiers

## Study information

**Scientific Title**  
Effects of antidepressant treatment following myocardial infarction: a randomized controlled trial

**Acronym**  
MIND-IT

**Study objectives**  
It is the aim of the Netherlands Heart Foundation's Myocardial INfarction and Depression-Intervention Trial (MIND-IT) to evaluate the influence of antidepressive treatment versus care-as-usual for post-myocardial infarction (MI) depression on cardiac prognosis.

**Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Medical Ethical Committee, University Medical Center Groningen, 1998, ref: METc: 98/11/191

### **Study design**

Multicenter single-blind randomized controlled trial

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

### **Health condition(s) or problem(s) studied**

Myocardial infarction and depression

### **Interventions**

Patients in the intervention arm were offered several treatment options according to a strictly defined protocol:

First-choice treatment was double-blind placebo-controlled treatment with the selective noradrenaline reuptake inhibitor mirtazapine. In case of refusal or insufficient treatment response after 8 weeks, open treatment with the selective serotonin reuptake inhibitor (SSRI) citalopram was offered. Sufficient treatment response was defined as at least 50% reduction on the Hamilton Depression Rating Scale (HDRS) compared with baseline score or a HDRS score at 8 weeks of 49. Thus, patients who were initially treated with placebo and who did not improve within 8 weeks were subsequently treated with an SSRI.

The third option was 'tailored treatment' which was at the discretion of the clinical psychiatrist (e.g. SSRI, psychotherapy, etc.). Patients were scheduled to visit the psychiatrist on average once a month during the treatment period of 6 months.

Patients in the care as usual arm were not given feedback about their depression status, but were told that they were free to seek treatment for mood problems outside study procedures, which was monitored.

### **Intervention Type**

Drug

### **Phase**

Not Applicable

### **Drug/device/biological/vaccine name(s)**

Mirtazapine, citalopram

### **Primary outcome(s)**

The occurrence of any significant cardiac event. Cardiac events included:

1. Cardiac death or hospital admission for documented non-fatal myocardial infarction
2. Myocardial ischaemia
3. Coronary revascularisation (coronary angioplasty or bypass surgery)
4. Heart failure or ventricular tachycardia occurring in the time between randomisation and 18 months postmyocardial infarction

**Key secondary outcome(s)**

Other cardiac-related hospital admissions (defined as admissions with an initial evaluation by a cardiologist or hospitalisations at the cardiology ward)

**Completion date**

31/12/2007

**Eligibility****Key inclusion criteria**

1. Hospital admission for myocardial infarction, defined as: Documentation of an increase in cardiac enzymes and either electrocardiographic changes and/or chest pain (Enzyme changes: elevation of creatine kinase isoenzyme (CK-MB) (CK-MB \_1\_ ULN and CK-MB/CK ratio above the local normal limit) or in case CKMB is not available, elevation of total CK (total CK \_2\_ ULN); electrocardiographic changes: new significant Q waves in at least 2 out of 12 leads or new R in V1 with R/S ratio \_1; Chest pain: \_20 minutes of new or markedly increased chest pain)
2. Age more than or equal to 18 years
3. Signed informed consent for study

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. Occurrence of MI while the patient was hospitalized for another reason, except for unstable angina pectoris
2. Lacking capability to participate in study procedures (ie, patients notable to communicate and patients not available for follow-up)
3. Any disease likely to influence short-term survival
4. Already receiving psychiatric treatment for depression
5. Participation in any clinical trial that might intervene with the study objectives and/or safety of the patient

**Date of first enrolment**

01/05/2000

**Date of final enrolment**

01/01/2003

## **Locations**

### **Countries of recruitment**

Netherlands

### **Study participating centre**

**University Medical Center Groningen**

-

### **Study participating centre**

**Medical Centre Leeuwarden**

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### **Study participating centre**

**Medical Centre in Enschede**

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### **Study participating centre**

**Medical Centre in Heerenveen**

-

### **Study participating centre**

**Medical Centre Drachten**

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### **Study participating centre**

**University Medical Centre Maastricht**

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### **Study participating centre**

**Medical Centre in Heerlen**

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**Study participating centre**  
University Medical Centre Amsterdam

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**Study participating centre**  
Medical Centre in Amsterdam

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**Study participating centre**  
Medical Centre in Almere

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**Study participating centre**  
University Medical Centre Utrecht

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## **Sponsor information**

### **Organisation**

The Netherlands Heart Foundation (Netherlands)

### **ROR**

<https://ror.org/05nxhgm70>

## **Funder(s)**

### **Funder type**

Industry

### **Funder Name**

Organon (Netherlands)

### **Funder Name**

Lundbeck (Denmark)

# Results and Publications

## Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not provided at time of registration

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/06/2007		Yes	No
<a href="#">Protocol article</a>	study protocol	01/08/2002		Yes	No