

# Effects of selective serotonin re-uptake inhibition on Morbidity, mortality and mood in Depressed Heart Failure patients

<b>Submission date</b>	<b>Recruitment status</b>	<input checked="" type="checkbox"/> Prospectively registered
22/01/2007	No longer recruiting	<input checked="" type="checkbox"/> Protocol
<b>Registration date</b>	<b>Overall study status</b>	<input type="checkbox"/> Statistical analysis plan
10/05/2007	Completed	<input checked="" type="checkbox"/> Results
<b>Last Edited</b>	<b>Condition category</b>	<input type="checkbox"/> Individual participant data
04/07/2016	Mental and Behavioural Disorders	

## Plain English summary of protocol

### Background and study aims

Depression and chronic heart failure (CHF) are frequent and often occur together. Major depression affects 20-40% of CHF patients and impacts adversely on quality of life, clinical outcomes and healthcare costs. Some antidepressants, such as escitalopram, act via increasing the amount of serotonin in the brain. Currently, it is uncertain whether treatment with such antidepressants improves depression and outcomes in CHF patients, and, if yes, by which mechanisms. Therefore, this study aims to investigate the effects of escitalopram on morbidity, mortality and mood in depressed CHF patients over a prolonged period of time.

### Who can participate?

Patients aged 18 or over who suffer from chronic systolic heart failure and major depression.

### What does the study involve?

Patients are randomly allocated to one of two possible treatments (either escitalopram or placebo [dummy] tablets) and receive at the same time optimal cardiological treatment, as the dose of the study drug is increased over a period of 3 months. During that time, specialized nurses perform support and monitoring via telephone, thus closely supervising treatment effects and patients health and mood status. After 3 months, nurse monitoring is decreased to bimonthly telephone calls. During follow-up mood is also closely supervised by psychologists and psychiatrists, who intervene in case of significant worsening. During the total 24-month study period patients undergo nine study visits.

### What are the possible benefits and risks of participating?

There are no risks or disadvantages to participate in the trial which exceed the described and known side effects of escitalopram. It is not known whether one or the other treatment strategy (escitalopram or placebo treatment) is superior for patients with chronic heart failure. Furthermore, all participants will receive an optimized treatment plan regarding the management of heart failure.

Where is the study run from?  
University of Wuerzburg (Germany)

When is the study starting and how long is it expected to run for?  
The study started in 2009 and will be completed in 2014

Who is funding the study?  
The study is supported by the German Ministry of Education and Research. Lundbeck GmbH provides study medication and additional financial support for patient screening.

Who is the main contact?  
Prof. Dr. C. E. Angermann  
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## Contact information

**Type(s)**  
Scientific

**Contact name**  
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## Additional identifiers

**Protocol serial number**  
N/A

## Study information

**Scientific Title**  
Effects of selective serotonin re-uptake inhibition on Morbidity, mortality and mood in Depressed Heart Failure patients

**Acronym**  
MOOD-HF

**Study objectives**  
To investigate the effects of treatment with the selective serotonin re-uptake inhibitor escitalopram compared to placebo on morbidity and mortality in chronic heart failure patients with a current episode of major depression.

Protocol can be found at: [http://www.chfc.ukw.de/fileadmin/uk/chfc/Dokumente/Studien\\_Flyer/MOOD-HF\\_Pruefplan.pdf](http://www.chfc.ukw.de/fileadmin/uk/chfc/Dokumente/Studien_Flyer/MOOD-HF_Pruefplan.pdf)

## **Ethics approval required**

Old ethics approval format

## **Ethics approval(s)**

Ethics Committee of the Medical Faculty of the University of Würzburg, primary approval: 27/05/2008, amendment 01: 06/02/2009, amendment 02: 14/10/2009, amendment 03: 06/08/2010, amendment 04: 08/12/2010, amendment 05: 02/03/2011, amendment 06: 30/06/2011, amendment 07: 30/09/2011, amendment 08: 06/08/2012, amendment 09: 10/12/2012, amendment 10: 17/06/2013, amendment 11: 24/03/2014

## **Study design**

Prospective randomised double-blind placebo-controlled two-armed parallel-group multicentre phase IV trial

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

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

Heart failure and co-morbid depression

## **Interventions**

Current interventions as of 15/04/2014:

1. Experimental intervention: nurse support and cardiological care and escitalopram 10 to 20 mg/day orally (p.o.)
2. Control intervention: nurse support and cardiological care and placebo 10 to 20 mg/day p.o.

Duration of intervention per patient: minimum 6 months, maximum 24 months, down titration 1 month.

## **Previous interventions:**

1. Experimental intervention: cardiological care and escitalopram 10 to 20 mg/day orally (p.o.)
2. Control intervention: cardiological care and placebo 10 to 20 mg/day p.o.

Duration of intervention per patient: minimum 12 months, maximum 24 months, down titration 1 month.

## **Intervention Type**

Drug

## **Phase**

Phase IV

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

Escitalopram

**Primary outcome(s)**

Time to first event of death or hospitalisation.

**Key secondary outcome(s)**

Major secondary outcome:

Reduction of the degree of depression as assessed by the Patient Health Questionnaire (PHQ-9) Scale and the Montgomery Asberg Depression Scale (MADRS)

Further secondary outcomes:

1. Days alive out of hospital
2. PHQ-GAD-7 (General Anxiety Disorder) scale
3. Quality of life as assessed by the 36-item Short Form Health Survey (SF-36), and the Kansas City Cardiomyopathy Questionnaire (KCCQ)
4. Cardiovascular mortality
5. Cardiovascular morbidity
6. Health economy
7. Adherence to HF and study medication
8. CHF severity
9. Parameters of inflammation
10. Sympathetic nervous system function
11. Escitalopram plasma levels
12. Platelet function/coagulation (substudy)
13. Vasoreactivity (substudy)

**Completion date**

31/08/2014

## Eligibility

**Key inclusion criteria**

1. Aged more than 18 years
2. Stable systolic chronic heart failure (CHF) (New York Heart Association [NYHA] II to IV) with left ventricular ejection fraction (LVEF) less than 45%
3. Current comorbid episode of major depression confirmed by Structured Clinical Interview for Diagnostic and Statistical Manual for mental disorders - fourth edition (DSM-IV) (SCID)
4. Written informed consent

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

### **Key exclusion criteria**

Current inclusion criteria as of 15/04/2014:

1. Current treatment with a selective serotonin re-uptake inhibitor (SSRI)
2. Previous treatment failure with escitalopram
3. Acute myocardial infarction (less than three months), acute cardiac decompensation, recent (less than three months) or planned (less than 12 months) cardiac surgery
4. Advanced renal failure (Modification of Diet in Renal Disease [MDRD] less than 30 ml/min)
5. Thyreotoxicosis
6. Reduced life expectancy due to other co-morbidity (e.g. malignancy)
7. Moderate or severe hepatic insufficiency (plasma levels of hepatic enzymes more than threefold of the upper level of the normal range)
8. Known evidence of major psychiatric comorbidity:
  - 8.1. Imminent risk for or history of attempted suicide
  - 8.2. Schizophrenia and spectrum disorders
  - 8.3. Bipolar affective disorder
  - 8.4. Current substance disorder
  - 8.5. Moderate and severe Dementia
  - 8.6. Severe depressive episode with psychotic features
9. Other contraindications against therapy with escitalopram (according to product information)
10. Participation in another clinical trial
11. Inability to comply with PHQ-9 and/or SCID testing and/or telephone monitoring for mental or linguistic reasons or lack of access to telephone
12. Pregnancy or nursing period
13. Women with child bearing potential without effective contraception during the conduct of the trial
14. Expected low compliance with the visit schedule or telephone monitoring (e.g., due to comorbidity or travel distance to the trial site)
15. Patients with normal ventricular activation (no bundle branch block (total or incomplete), no other intraventricular conduction delay and no pacemaker) and known QTc\* prolongation  $\geq 500$  ms OR inborn long QT syndrome
16. Patients with current treatment with drugs inducing QT prolongation, such as antiarrhythmic drugs class IA and III, anti-psychotics, tricyclic antidepressants

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  - 8.3. Bipolar affective disorder
  - 8.4. Current substance disorder
  - 8.5. Dementia

- 8.6. Severe depressive episode with psychotic features
- 8.7. Delirium
- 9. Other contraindications against therapy with escitalopram (according to product information)

**Date of first enrolment**

01/08/2007

**Date of final enrolment**

31/08/2014

## Locations

**Countries of recruitment**

Germany

**Study participating centre****University of Wuerzburg**

Wuerzburg

Germany

97078

## Sponsor information

**Organisation**

German Federal Ministry of Education and Research (Bundesministerium Für Bildung und Forschung [BMBF]) (Germany)

**ROR**

<https://ror.org/04pz7b180>

## Funder(s)

**Funder type**

Government

**Funder Name**

Bundesministerium für Bildung und Forschung

**Alternative Name(s)**

Federal Ministry of Research, Technology and Space, Bundesministerium für Bildung und Forschung, Federal Ministry of Education and Research, BMBF

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

Germany

## 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	28/06/2016		Yes	No
<a href="#">Protocol article</a>	protocol	01/12/2007		Yes	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes