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

Submission date	<b>Recruitment status</b> No longer recruiting	[X] Prospectively registered			
22/01/2007		[X] Protocol			
Registration date	Overall study status	Statistical analysis plan			
10/05/2007	Completed	[X] Results			
Last Edited	Condition category	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 angermann\_c@ukw.de

### Contact information

#### Type(s)

Scientific

#### Contact name

Prof Christiane Angermann

#### Contact details

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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

#### 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 months.

#### 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

#### 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 ≥ 500 ms OR inborn long OT syndrome
- 16. Patients with current treatment with drugs inducing QT prolongation, such as antiarrhythmic drugs class IA and III, anti-psychotics, tricyclic antidepressants

#### Previous inclusion criteria:

- 1. Current treatment with a selective serotonin re-uptake inhibitor (SSRI)
- 2. Previous treatment failure with escitalopram
- 3. Acute myocardial infarction (less than 3 months), acute cardiac decompensation, recent (less than 3 months) or planned (less than 12 months) cardiac surgery
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- 8.2. Schizophrenia and spectrum disorders
- 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 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	<b>Details</b> results	Date created [	Date added	Peer reviewed?	Patient-facing?
Results article		28/06/2016		Yes	No
Protocol article	protocol	01/12/2007		Yes	No
Participant information sheet	Participant information sheet	11/11/2025 1	11/11/2025	No	Yes
Study website	Study website	11/11/2025 1	11/11/2025	No	Yes