

# Coenzyme Q10 as adjunctive treatment of chronic heart failure: a randomised, double-blind, multicentre trial with focus on SYMptoms, BIOmarker status (Brain-Natriuretic Peptide [BNP]), and long-term outcome (hospitalisations/mortality)

<b>Submission date</b> 23/03/2007	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 23/04/2007	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 06/10/2014	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**

P-6708

## **Study information**

**Scientific Title**

**Acronym**

Q-SYMBIO

**Study objectives**

Adjuvant treatment of heart failure patients with coenzyme Q10 versus placebo will improve the patients symptoms and functional status and affect positively morbidity (unplanned cardiovascular hospitalisations) and mortality as a composite endpoint.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

The Ethical Scientific Committees for Copenhagen and Frederiksberg Municipality, 27/06/2003, ref: (KF) 02-023/03

The trial will respect the Helsinki (II) declaration, and have been evaluated and accepted by the relevant ethics committee(s). Written consent is obtained from each patient and the anonymity of each patient will be respected and ensured.

**Study design**

Randomised placebo-controlled parallel multicentre study

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Not specified

**Study type(s)**

Treatment

**Participant information sheet**

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

Established chronic heart failure due to predominantly ischaemic heart disease or cardiomyopathy.

### **Interventions**

Capsules containing 300 mg of CoQ10 daily or similar placebo capsules containing soy oil.

### **Intervention Type**

Drug

### **Phase**

Not Specified

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

Coenzyme Q10

### **Primary outcome measure**

1. Major Adverse Cardiovascular Events (MACE) defined as:
  - a. unplanned hospitalisations due to worsening heart failure
  - b. cardiovascular death
  - c. urgent cardiac transplantation, or
  - d. mechanical supportUsing a time to first event analysis (composite endpoint)
2. Physicians assessment:
  - a. New York Heart Association (NYHA) classification
  - b. Six Minutes hall Walk distance (6MW)

### **Secondary outcome measures**

1. NYHA symptom class, serum pro-BNP, echocardiography
2. Patients assessment:
  - a. dyspnea and fatigue (Visual Analogue Scale [VAS])
  - b. evaluation of change in symptoms (VAS)

### **Overall study start date**

01/04/2003

### **Completion date**

01/10/2008

## **Eligibility**

### **Key inclusion criteria**

1. Patients above the age of 18 years with chronic heart failure
2. New York Heart Association (NYHA) class III or IV with ability to participate in a six-minutes walk test
3. Stable on maximum current heart failure therapy
4. Informed consent obtained

### **Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Not Specified

**Target number of participants**

550

**Key exclusion criteria**

1. Myocardial infarction, unstable angina, percutaneous coronary intervention or cardiac surgery within the past six weeks
2. Heart failure due to congenital heart disease
3. Uncorrected valvular heart disease, planned valve surgery
4. Urgent waiting-list for heart transplantation (status-one patients)
5. Restrictive (including amyloid) cardiomyopathy
6. Alcoholic heart disease
7. Acute myocarditis
8. Patients on continuous intravenous (i.v.) therapy for heart failure
9. Patients with mechanical assist device
10. Stroke within the past six weeks
11. Women of childbearing potential and lactating females
12. Supplementary CoQ10 intake within the last month before run-in
13. Six-minutes walk distance greater than 450 metres
14. Life expectancy less than one year due to non-cardiac causes
15. Psychosocial instability or anticipated problems with compliance
16. Participation in another controlled trial
17. Lack of informed consent
18. Allergic to the constituents of the test medication (ubidecarenone, soy oil, alpha-tocopherol, gelatine)
19. Other serious disease including tumourous disease
20. Participation in other clinical trials

**Date of first enrolment**

01/04/2003

**Date of final enrolment**

01/10/2008

**Locations****Countries of recruitment**

Australia

Austria

Denmark

Hungary

India

Malaysia

Poland

Slovakia

Sweden

**Study participating centre**

**Pharma Nord ApS**

Vejle

Denmark

7100

## **Sponsor information**

**Organisation**

Pharma Nord ApS (Denmark)

**Sponsor details**

Sadelmagervej 30-32

Vejle

Denmark

7100

**Sponsor type**

Industry

**Website**

<http://www.pharmanord.dk/wstore/contentServlet>

**ROR**

<https://ror.org/00hz19x62>

## **Funder(s)**

**Funder type**

Industry

**Funder Name**

Pharma Nord ApS (Denmark)

**Funder Name**

International Coenzyme Q10 Association (Italy)

**Funder Name**

Kaneka Corporation of Osaka (Japan)

## Results and Publications

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****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	01/12/2014		Yes	No