

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)

Submission date 23/03/2007	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol ☐ Statistical analysis plan ☒ Results ☐ Individual participant data
Registration date 23/04/2007	Overall study status Completed	
Last Edited 06/10/2014	Condition category Circulatory System	

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
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.

Primary study design

Interventional

Study design

Randomised placebo-controlled parallel multicentre study

Study type(s)

Treatment

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(s)

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 support

Using 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)

Key secondary outcome(s)

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)

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

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Sex

Not Specified

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)

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

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?
	results				

[Results article](#)

01/12/2014

Yes

No