# Combined treatment of heart failure after coronary heart disease

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
15/05/2025	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
20/05/2025	Completed	Results
Last Edited	2 7	Individual participant data
19/05/2025		[X] Record updated in last year

#### Plain English summary of protocol

Background and study aims

Qili cardiotonic capsule and Sacubitril/valsartan are commonly used drugs for the treatment of heart failure. The single drug treatment effect and prognosis are poor, and the combination of traditional Chinese and Western medicine can play the role of treating both symptoms and root causes. However, there are few studies on the combined treatment of heart failure at home and abroad. Therefore, this study took patients with heart failure after coronary heart disease as the research object, and explored the therapeutic effect of Qili cardiotonic capsule combined with Sacubitril/valsartan and its effect on NT-proBNP level.

#### Who can participate?

Patients with coronary heart disease and heart failure. The results showed that there were 33 males and 20 females in the experimental group, with an average age of  $68.89 \pm 10.60$  years. There were 27 males and 23 females in the control group, with an average age of  $68.30 \pm 11.44$  years.

#### What does the study involve?

The control group was treated with Sacubitril/valsartan orally, and the experimental group was treated with Sacubitril/valsartan combined with Qili cardiotonic capsule.

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

The combination of Sacubitril/valsartan and Qili cardiotonic capsule was more effective in the treatment of patients with coronary heart disease complicated with heart failureit can improve cardiac function in a short period of time.

#### Where is the study run from?

This study was conducted at Tianshui Hospital of Traditional Chinese Medicine (China)

When is the study starting and how long is it expected to run for? This study was starting on October 1, 2022 and ending on April 1, 2025.

Who is funding the study? Investigator initiated and funded

Who is the main contact? Lan Hai, hanlan lher@163.com

# Contact information

#### Type(s)

Public, Scientific, Principal Investigator

#### Contact name

Ms Lan Hai

#### **ORCID ID**

http://orcid.org/0009-0004-7642-1378

#### Contact details

No.105 Jianshe Road Tianshui City China 741000 +86-18193837516 hanlan\_lher@163.com

# Additional identifiers

#### **EudraCT/CTIS** number

Nil known

#### IRAS number

#### ClinicalTrials.gov number

Nil known

#### Secondary identifying numbers

Nil known

# Study information

#### Scientific Title

Clinical effect observation of Sacubitril/valsartan combined with Qili cardiotonic capsule on patients with heart failure after coronary heart disease

#### **Acronym**

**CEOSVQLC** 

#### **Study objectives**

The combination of Sacubitril/valsartan and Qili cardiotonic capsule was more effective in the treatment of patients with coronary heart disease complicated with heart failure, and can improve cardiac function in the short term.

#### Ethics approval required

Ethics approval required

#### Ethics approval(s)

Approved 10/04/2025, the Ethics Committee of Tianshui Traditional Chinese Medicine Hospital (Near the intersection of Nanming Road and Jiehe North Road in Zhongcheng Street, Tianshui City, 741000, China; +86-09388212475; mayupeng@21cn.com), ref: TSSZY2025-LY004-04

#### Study design

Single center randomized controlled trial

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Hospital

## Study type(s)

Treatment

#### Participant information sheet

No participant information sheet available

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

Combined treatment of heart failure after coronary heart disease

#### **Interventions**

106 patients with coronary heart disease and heart failure were randomly divided into control group and experimental group by simple random grouping method, 53 cases in each group. The control group was treated with Sacubitril/valsartan orally, and the experimental group was treated with Sacubitril/valsartan combined with Qili cardiotonic capsule. Both groups were followed up for 6 months.

#### Intervention Type

Drug

# Pharmaceutical study type(s)

Pharmacodynamic

#### Phase

Not Applicable

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

Sacubitril/valsartan, Qili cardiotonic capsule

## Primary outcome measure

- 1. N-terminal pro-brain natriuretic peptide (NT-proBNP) is measured using immunoassay at baseline and at 6 months
- 2. 6-minute walking distance is measured using the 6-minute walking test (6MWT) at baseline and at 6 months
- 3. Left ventricular ejection fraction (LVEF) is measured using echocardiography at baseline and at 6 months
- 4. Left ventricular end-systolic diameter (LVESD) is measured using echocardiography at baseline and at 6 months
- 5. Left ventricular end-diastolic diameter (LVEDD) is measured using echocardiography at baseline and at 6 months

#### Secondary outcome measures

There are no secondary outcome measures

#### Overall study start date

01/10/2022

#### Completion date

01/04/2025

# **Eligibility**

#### Key inclusion criteria

- 1. Meeting the 2021 European Society of Cardiology diagnostic criteria and treatment guidelines for acute and chronic heart failure;
- 2. The heart failure classification conformed to the New York Heart Association (NYHA) cardiac function classification II-IV;
- 3. Chronic heart failure with coronary heart disease.

#### Participant type(s)

Patient

#### Age group

Adult

#### Lower age limit

55 Years

#### Upper age limit

80 Years

#### Sex

Both

#### Target number of participants

106

#### Total final enrolment

106

#### Key exclusion criteria

- 1. Combined with other cardiovascular diseases leading to heart failure, such as severe valvular disease, malignant arrhythmia, acute myocarditis, acute myocardial infarction, various types of cardiomyopathy, malignant hypertension
- 2. Complicated with severe liver, kidney, lung or other important organ dysfunction
- 3. Combined with malignant tumor; severe anemia requiring blood transfusion
- 4. Patients who could not complete all follow-ups
- 5. Patients who did not test blood routine within 24 hours of hospitalization

#### Date of first enrolment

01/12/2022

#### Date of final enrolment

31/08/2024

# Locations

#### Countries of recruitment

China

#### Study participating centre

### Tianshui Hospital of Traditional Chinese Medicine

Near the intersection of Nanming Road and Jiehe North Road in Zhongcheng Street Tianshui City China 741000

# Sponsor information

#### Organisation

Tianshui Hospital of Traditional Chinese Medicine

#### Sponsor details

Near the intersection of Nanming Road and Jiehe North Road in Zhongcheng Street Tianshui City China 741000 +86-09388212475 mayupeng@21cn.com

#### Sponsor type

Hospital/treatment centre

#### Website

https://tszyyy.cn/

# Funder(s)

## Funder type

Other

#### Funder Name

Investigator initiated and funded

# **Results and Publications**

#### Publication and dissemination plan

Planner publication in a peer-reviewed journal.

#### Intention to publish date

30/05/2026

#### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request. hanlan\_lher@163.com

#### IPD sharing plan summary

Available on request