

Study to Evaluate Safety, Tolerability, Pharmacokinetics and Pharmacodynamics of LCZ696 Followed by a 52-week Study of LCZ696 Compared With Enalapril in Pediatric Patients With Heart Failure-PANORAMA

10/09/2025 11:55:02

## **Main Information**

Primary registry identifying number

LBCTR2019040224

MOH registration number

22659/2018

Study registered at the country of origin

Type of registration

Retrospective

Date of registration in national regulatory agency

29/05/2018

**Primary sponsor** 

Novartis Pharma Services Inc.

Date of registration in primary registry

13/11/2020

**Public title** 

Study to Evaluate Safety, Tolerability, Pharmacokinetics and Pharmacodynamics of LCZ696 Followed by a 52-week Study of LCZ696 Compared With Enalapril in Pediatric Patients With Heart

Failure- PANORAMA

Multicenter, Open-label Study to Evaluate Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of LCZ696 Followed by a 52-week Randomized, Double-blind, Parallel Group, Activecontrolled Study to Evaluate the Efficacy and Safety of LCZ696 Compared With Enalapril in Pediatric Patients From 1 Month to < 18 Years of Age With Heart Failure Due to Systemic Left Ventricle

Systolic Dysfunction

Brief summary of the study: English

This study consist of two parts (Part 1 and Part 2). The purpose of Part 1 is to evaluate the way the body absorbs, distributes and removes the drug LCZ696. This will help determine the proper dose of LCZ696 for Part 2 of the study.

The purpose for Part 2 is to compare the effectiveness and safety of LCZ696 with enalapril in pediatric heart failure patients over 52 weeks of treatment.

Brief summary of the study: Arabic

Protocol number

CLCZ696B2319

Study registered at the country of origin: Specify

Type of registration: Justify

LCTR was recently initiated, original file was previously submitted

by Paper

Primary sponsor: Country of origin

**Novartis Pharmaceuticals** 

Date of registration in national regulatory agency

29/05/2018

Acronym

**PANORAMA** 

Acronym

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52تليها دراسة لمدة LCZ696 دراسة متعددة المراكز، مفتوحة العنوان؛ لتقييم الأمان والتحمل والحركيات الدُوانية والديناميكيات الدُّوانية لعقار انقباض البطين الأيسر

### Health conditions/problem studied: Specify

Cardiovascular / Pediatric Heart Failure

Interventions: Specify

Drug: LCZ696

LCZ696: 3.125 mg granules (packaged in capsules containing 4 or 10 granules), 50 mg, 100 mg, 200 mg dosage strengths

Drug: Enalapril

Enalapril will be open label in Part 1 and double blind in Part 2

Drug: Placebo of LCZ696 Drug: Placebo of Enalapril

### Key inclusion and exclusion criteria: Inclusion criteria

Chronic heart failure resulting from left ventricular systolic dysfunction, and receiving chronic HF therapy (if not newly diagnosed) NYHA classification II-IV (older children: 6 to <18 years old) or Ross CHF classification II-IV (younger children: < 6 years old) Systemic left ventricular ejection fraction ≤ 40% or fractional shortening ≤20%

For Part 1 study: Patients must be treated with an ACEI or ARB prior to screening. Patients in Group 1 and 2 must be currently treated with the dose equivalent of at least enalapril 0.2 mg/kg prior to the LCZ696 3.1 mg/kg administration. Group 3 patients will participate in LCZ696 0.8 mg/kg and not LCZ696 3.1 mg/kg.

Biventricular physiology with systemic left ventricle

Key inclusion and exclusion criteria: Gender Key inclusion and exclusion criteria: Specify gender

Both

Key inclusion and exclusion criteria: Age minimum Key inclusion and exclusion criteria: Age maximum

### Key inclusion and exclusion criteria: Exclusion criteria

Patient with single ventricle or systemic right ventricle

Patients listed for heart transplantation (as United Network for Organ Sharing status 1A) or hospitalized waiting for transplant (while on inotropes or with ventricular assist device)

Sustained or symptomatic dysrhythmias uncontrolled with drug or device therapy

Patients that have had cardiovascular surgery or percutaneous intervention to palliate or correct congenital cardiovascular malformations within 3 months of the screening visit. Patients anticipated to undergo corrective heart surgery during the 12 months after entry into Part 2 Patients with unoperated obstructive or severe regurgitant valvular (aortic, pulmonary, or tricuspid) disease, or significant systemic ventricular outflow obstruction or aortic arch obstruction

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N/A

Patients with restrictive or hypertrophic cardiomyopathy

Active myocarditis

Renal vascular hypertension (including renal artery stenosis)

Moderate-to severe obstructive pulmonary disease

Serum potassium > 5.3 mmol/L

History of angioedema

Allergy or hypersensitivity to ACEI / ARB

### Type of study

Interventional

Type of intervention Type of intervention: Specify type

Pharmaceutical

Trial scope Trial scope: Specify scope

Therapy

Study design: Allocation Study design: Masking Randomized controlled trial Blinded (masking used)

Study design: Control Study phase

Active

Study design: Purpose Study design: Specify purpose

Treatment N/A



Study design: Assignment

Parallel

IMP has market authorization

Yes, Lebanon and Worldwide

Name of IMP

LCZ696 Entresto

Type of IMP

Others

Pharmaceutical class

angiotensin receptor neprilysin inhibitor

Therapeutic indication

Chronic Heart Failure

Therapeutic benefit

Global Rank endpoint through 52 weeks of Treatment

Study model

N/A

Study model: Specify model

N/A

Time perspective

N/A

Time perspective: Specify perspective

N/A

Target follow-up duration

Number of groups/cohorts

Biospecimen retention

Samples without DNA

Target sample size

8

Date of first enrollment: Type

Actual

Study design: Specify assignment

N/A

IMP has market authorization: Specify

Approved for Adults use only: France, Germany, Belgium, UK,

USA, KSA, UAE, Turkey

Year of authorization Month of authorization

2016 3

Study model: Explain model

N/A

Time perspective: Explain time perspective

N/A

Target follow-up duration: Unit

Biospecimen description

Biological samples : Urine, Hematology, Chemistry will be sent to Clinical Reference Laboratory, Europe Ltd.

7310 Cambridge Research Park Beach Drive, Waterbeach Cambridge, CB25 9TN United Kingdom

Actual enrollment target size

8

Date of first enrollment: Date

17/08/2018





| Date of | study closure: | Гуре | Date of st | tudy closure: | Date |
|---------|----------------|------|------------|---------------|------|
|         |                |      |            |               |      |

Actual 29/10/2021

Recruitment status **Recruitment status: Specify** 

Recruiting

Date of completion

30/04/2020

IPD sharing statement plan IPD sharing statement description

No Not provided

## Additional data URL

https://clinicaltrials.gov/ct2/show/record/NCT02678312?term=pediatric&cond=Cardiovascular+Diseases&cntry=LB&rank=1

**Admin comments** 

Trial status

Approved

| Secondary Identifying Numbers  |                              |  |
|--------------------------------|------------------------------|--|
| Full name of issuing authority | Secondary identifying number |  |
| Clinicaltrials.gov             | NCT02678312                  |  |

## **Sources of Monetary or Material Support**

Name

Novartis Pharma Services Inc.

|   |     | ر ام م |          | 0  |               |     |   |
|---|-----|--------|----------|----|---------------|-----|---|
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| U | eco |        | - 1      | OU | UH            | -10 |   |

Name

NA



| Contact for Public/Scientific Queries |                   |            |         |                              |                                   |  |
|---------------------------------------|-------------------|------------|---------|------------------------------|-----------------------------------|--|
| Contact type                          | Contact full name | Address    | Country | Telephone                    | Email                             | Affiliation                            |
| Public                                | Ghassan Chehab    | Beirut     | Lebanon | 009613388<br>581             | ghassanchehab<br>@yahoo.com       | Rafik Hariri<br>University<br>Hospital |
| Scientific                            | Hind Khairallah   | Sin El Fil | Lebanon | +961 1<br>512002<br>Ext. 271 | Hind.Khairallah@<br>fattal.com.lb | Khalil<br>Fattal et<br>Fils s.a.l.     |
| Public                                | Linda Daou        | Beirut     | Lebanon | 009613524<br>424             | drlindadaou@gm<br>ail.com         | Hotel Dieu<br>De France                |

| Centers/Hospitals Involved in the Study |                                 |                                    |                  |  |
|---|---------------------------------|------------------------------------|------------------|--|
| Center/Hospital name                    | Name of principles investigator | Principles investigator speciality | Ethical approval |  |
| Hotel Dieu De France                    | Dr Linda Daou                   | Pediatric Cardiologist             | Approved         |  |
| Rafik Hariri University Hospital        | Dr Ghassan Chehab               | Pediatric Cardiologist             | Approved         |  |

| Ethics Review                       |               |              |                          |                               |  |
|-------------------------------------|---------------|--------------|--------------------------|-------------------------------|--|
| Ethics approval obtained            | Approval date | Contact name | Contact email            | Contact phone                 |  |
| Hotel Dieu de France                | 27/02/2018    | Nancy Alam   | nancy.alam@usj.edu.lb    | +961 (0) 1 421000 ext<br>2335 |  |
| Rafic Hariri University<br>Hospital | 09/01/2018    | Rawan Yamout | rawan.yamout@crurhuh.com | 018300000 ext 2036            |  |



| Countries of Recruitment |  |  |  |  |
|--------------------------|--|--|--|--|
| Name                     |  |  |  |  |
| Lebanon                  |  |  |  |  |
| Argentina                |  |  |  |  |
| Bulgaria                 |  |  |  |  |
| Canada                   |  |  |  |  |
| China                    |  |  |  |  |
| Croatia                  |  |  |  |  |
| Finland                  |  |  |  |  |
| France                   |  |  |  |  |
| Hungary                  |  |  |  |  |
| Japan                    |  |  |  |  |
| Jordan                   |  |  |  |  |
| Turkey                   |  |  |  |  |
| United States of America |  |  |  |  |

| Health Conditions or Problems Studied |                                    |         |  |
|---------------------------------------|------------------------------------|---------|--|
| Condition                             | Code                               | Keyword |  |
| Heart Failure                         | Heart failure, unspecified (I50.9) | HF      |  |

| Interventions   |   |                          |  |  |
|---|---|--------------------------|--|--|
| Intervention  | Description   | Keyword                  |  |  |
| Physical Exam, Vital signs, ECG,<br>Echocardiography, Urinalysis, Serum/ urine<br>pregnancy test, lab test, completion of QoL<br>questionnaires | Physical Exam, Vital signs, ECG,<br>Echocardiography, Urinalysis, Serum/ urine<br>pregnancy test, lab test, completion of QoL<br>questionnaires | ICF, Lab, IMP, radiology |  |  |



| Primary Outcomes   |             |          |  |  |
|--|-------------|----------|--|--|
| Name   | Time Points | Measure  |  |  |
| Percentage of patients falling into each category based on global ranking  | 52 weeks    | 52 weeks |  |  |
| The global ranking is based on clinical events such as death, listing for urgent heart transplant, mechanical life support requirement at end of study, worsening heart failure (HF), New York Heart Association (NYHA)/Ross, Patient Global Impression of Severity (PGIS), Pediatric Quality of Life Inventory (PedsQL) physical functioning domain. The primary endpoint will be derived based on 5 categories ranking worst to best outcome | 52 weeks    | 52 weeks |  |  |

| Key Secondary Outcomes                                     |             |          |  |  |
|--|-------------|----------|--|--|
| Name   | Time Points | Measure  |  |  |
| Time to first occurrence of Category 1 or Category 2 event | 52 weeks    | 52 weeks |  |  |
| Change from baseline in NYHA/Ross functional class         | 52 weeks    | 52 weeks |  |  |



| Trial Results                        |  |
|--------------------------------------|--|
| Summary results                      |  |
| Study results globally               |  |
| Date of posting of results summaries | Date of first journal publication of results |
| Results URL link                     |  |
| Baseline characteristics             |  |
| Participant flow                     |  |
| Adverse events                       |  |
| Outcome measures                     |  |
| URL to protocol files                |  |
|                                      |  |