

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 12:07:16

Main Information	
Primary registry identifying number	Protocol number
LBCTR2019040224	CLCZ696B2319
MOH registration number	
22659/2018	
Study registered at the country of origin	Study registered at the country of origin: Specify
Yes	
Type of registration	Type of registration: Justify
Retrospective	LCTR was recently initiated, original file was previously submitted
	by Paper
Date of registration in national regulatory	
agency 29/05/2018	
Primary sponsor	Primary sponsor: Country of origin
Novartis Pharma Services Inc.	Novartis Pharmaceuticals
Date of registration in primary registry	Date of registration in national regulatory agency
09/04/2019	29/05/2018
Public title	Acronym
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	PANORAMA
Scientific title	Acronym
Multicenter, Open-label Study to Evaluate Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of LCZ696 Followed by a 52-week Randomized, Double-blind, Parallel Group, Active- controlled 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	

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outflow obstruction or aortic arch obstruction Moderate-to severe obstructive pulmonary disease Serum potassium > 5.3 mmol/L Allergy or hypersensitivity to ACEI / ARB Type of intervention Pharmaceutical N/A **Trial scope** Trial scope: Specify scope Therapy N/A Study design: Allocation Study design: Masking Randomized controlled trial Blinded (masking used) Study design: Control Study phase 3 Study design: Purpose Study design: Specify purpose

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

Patients with restrictive or hypertrophic cardiomyopathy

Active myocarditis

- Renal vascular hypertension (including renal artery stenosis)

History of angioedema

### Type of study

Interventional

Active

Treatment

clinicaltrials@moph.gov.lb

### Key inclusion and exclusion criteria: Inclusion criteria

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

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%

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

Patients that have had cardiovascular surgery or percutaneous intervention to palliate or correct congenital cardiovascular malformations within

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

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

Health conditions/problem studied: Specify Cardiovascular / Pediatric Heart Failure

Key inclusion and exclusion criteria: Specify gender

Key inclusion and exclusion criteria: Age maximum 17

Type of intervention: Specify type

N/A



52تليها در اسة لمدة LCZ696 در اسة متعددة المراكز ، مفتوحة العنوان؛ لتقييم الأمان والتحمل والحركيات الدُّوانية والديناميكيات الذُّوانية لعقار مُقَارِنَةُ بعقار LCZ696 اسبوعًا عشوائية، مزدوجة التُعمية، من مجموعاتُ علاج متوازية، مُضبَطَة بعقار فعَّل، ؛ لتقييمُ أمان وفعالية عقار سنة و يعانون من فشل القلب بسبب قصور جهازي بوظائف18إنالابريل في الأطفال المرضى الذين تتراوح أعمار هم بين شهر واحد إلى أقل من

Key inclusion and exclusion criteria: Age minimum

Key inclusion and exclusion criteria: Exclusion criteria Patient with single ventricle or systemic right ventricle

Sustained or symptomatic dysrhythmias uncontrolled with drug or device therapy

انقباض البطين الأيسر

Drug: LCZ696

Drug: Enalapril

Both

1

Interventions: Specify

Drug: Placebo of LCZ696 Drug: Placebo of Enalapril

inotropes or with ventricular assist device)

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Study design: Assignment	Study design: Specify assignn	nent	
Parallel	N/A		
IMP has market authorization	IMP has market authorization: Specify		
Yes, Lebanon and Worldwide	Approved for Adults use only : France, Germany, Belgium, UK, USA, KSA, UAE, Turkey		
Name of IMP	Year of authorization	Month of authorization	
LCZ696 Entresto	2016	3	
Type of IMP Others			
Others			
Pharmaceutical class			
angiotensin receptor neprilysin inhibitor			
Therapeutic indication			
Chronic Heart Failure			
Therapeutic benefit			
Global Rank endpoint through 52 weeks of Treatment			
Study model	Study model: Explain model		
N/A	N/A		
Study model: Specify model N/A			
Time perspective	Time perspective: Explain time	e perspective	
N/A	N/A		
Time perspective: Specify perspective N/A			
Target follow-up duration	Target follow-up duration: Uni	t	
Number of groups/cohorts			
Biospecimen retention	Biospecimen description		
Samples without DNA	Biological samples : Urine, Hema Clinical Reference Laboratory, E 7310 Cambridge Research Park Beach Drive, Waterbeach Cambridge, CB25 9TN United Kingdom		
Target sample size	Actual enrollment target size		
8	4		
Date of first enrollment: Type	Date of first enrollment: Date		
Actual	17/08/2018		



# REPUBLIC OF LEBANON Lebanon Clinical Trials Registry

Date of study closure: Type Actual	Date of study closure: Date 29/10/2021
Recruitment status Recruiting	Recruitment status: Specify
Date of completion 30/04/2020	
IPD sharing statement plan	IPD sharing statement description 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.

### Secondary Sponsors

NA

Name



Contac	Contact for Public/Scientific Queries					
Contact type	Contact full name	Address	Country	Telephone	Email	Affiliation
Public	Ghassan Chehab	Beirut	Lebanon	009613388 581	ghassanchehab @yahoo.com	Rafik Hariri University Hospital
Scientific	Hind Khairallah	Sin El Fil	Lebanon	+961 1 512002 Ext. 271	Hind.Khairallah@ fattal.com.lb	Khalil Fattal et Fils s.a.l.
Public	Linda Daou	Beirut	Lebanon	009613524 424	drlindadaou@gm ail.com	Hotel Dieu 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 2335
Rafic Hariri University 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, Echocardiography, Urinalysis, Serum/ urine pregnancy test, lab test, completion of QoL questionnaires	Physical Exam, Vital signs, ECG, Echocardiography, Urinalysis, Serum/ urine pregnancy test, lab test, completion of QoL 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