

## **LUNG Study**

12/08/2025 18:59:16

**Main Information** 

Primary registry identifying number

LBCTR2024015481

MOH registration number

Study registered at the country of origin

Yes

Type of registration

Prospective

Date of registration in national regulatory agency

06/12/2023

**Primary sponsor** 

Hôtel-Dieu de France University Hospital

Date of registration in primary registry

29/10/2024

**Public title** 

LUNG Study

Scientific title

A Biomarker-Driven Precision Management of Lebanese Patients with Previously Untreated Metastatic Non-Squamous Non-Small

Cell LunG Cancer

Brief summary of the study: English

A Biomarker-Driven Precision Management of Lebanese Patients with Previously Untreated Metastatic Non-Squamous Non-Small

Cell LunG Cancer - LUNG study Protocol number: ML44926

Lung cancer is the most common cancer worldwide and is still responsible for most cancer deaths. In Lebanon, more than 1000 cases of lung cancer are diagnosed each year. The Lebanese National Cancer Registry showed that Lebanon has the highest incidence of lung cancer in females and the second highest for males in the MENA region. The high cigarette and water-pipe consumption rate among the Lebanese population plays a key role, in addition to several other risk factors. For decades, cytotoxic chemotherapy has been the cornerstone of management of metastatic non- squamous non-small cell lung cancer (NS-NSCLC). The recognition of specific somatic 'driver' mutations in NSCLC has transformed both the treatment and outcomes for patients with advanced-stage lung cancer. The current two-step study will report on the prevalence of a plethora of tumor biomarkers (screening period). A specific set of activating mutations will characterize patients who will be offered participation in the treatment phase of the study, a parallel-arm umbrella trial that will assess the efficacy

and safety of two orally administered precision medicine treatments

Brief summary of the study: Arabic

(alectinib and entrectinib).

Protocol number

ML44926

Study registered at the country of origin: Specify

Type of registration: Justify

N/A

Primary sponsor: Country of origin

Lebanon

Date of registration in national regulatory agency

06/12/2023

Acronym

Acronym



إعتماد الطّب الدقيق بحسب الواصمات الحيوية لمعالجة سرطان الرئة غير صغير الخلايا المنتشر الذي لم يتمَّ علاجه سابقًا لدى المرضى اللبنانيين LUNG دراسة –

ML44926 :البروتوكول رقم

يُعدَّ سرطان الرئة أكثر أنواع السرطان شيوعًا في جميع أنحاء العالم ولا يزال مسؤولاً عن معظم الوفيات الناجمة عن السرطان. في لبنان، يتمُّ حالة سرطان الرئة كل عام. أظهر السجل الوطني اللبناني للسرطان أن لبنان يسجّل أعلى معدّل للإصابة بسرطان الرئة ١٠٠٠ تشخيص أكثر من بين الإناث وثاني أعلى معدل بين الذكور في منطقة الشرق الأوسط وشمال أفريقيا. ويلعب إرتفاع معدّل إستهلاك السجائر والشيشة بين اللبنانيين دوراً رئيسيا، بالإضافة إلى العديد من عوامل الخطر الأخرى.

لطالما كان العلاج الكيميائي هو أساس علاج سرطان الرئة ذو الخلايا غير الحرشفية غير الصغيرة النقيلي. أذَى اكتشاف بعض الوصمات الحيويّة المحدّدة في سرطان الرئة غي مرحلة متقدمة. ستقدّم المحدّدة في سرطان الرئة غي مرحلة متقدمة. ستقدّم الدراسة الحالية المكوّنة من خطوتين تقريرًا عن مدى انتشار عدد كبير من الوصمات الحيويّة للورم (فترة فحص الوصمات الحيويّة). أمّا المرضى ذوو الورم الذي يحتوي على وصمات حيويّة محدّدة في هذه الدراسة فسيُعرض عليهم المشاركة في مرحلة العلاج من الدراسة، وهو بحث من شرع المرضى شأنه تقييم فعالية وسلامة إثنين من علاجات الطب الدقيق التي يتمّ تناولها عن طريق الفم (الألكتينيب والإنتركتينيب)

### Health conditions/problem studied: Specify

Metastatic non-squamous non-small cell lung cancer

Interventions: Specify
Alectinib and Entrectinib

### Key inclusion and exclusion criteria: Inclusion criteria

The patient must meet all the following criteria to be enrolled in the study:

- 1. The patient is ≥ 18 years of age.
- 2. The patient has signed the ICF.
- 3. Diagnosis of pathologically confirmed metastatic NS-NSCLC, for which no treatment has yet been administered (i.e. newly diagnosed metastatic NS-NSCLC).
- 4. Measurable NS-NSCLC metastatic lesions.
- 5. Karnofsky performance status ≥ 60 or ECOG performance status 0-2.
- 6. If patient has brain metastasis, they must have been stable for at least 4 weeks.
- The patient is willing to and capable of taking the study drug by mouth.
- 8. Women of childbearing potential and men must agree to use adequate contraception (hormonal or barrier method of birth control; abstinence) prior to study entry and for the duration of study participation.

Key inclusion and exclusion criteria: Gender

Both

Key inclusion and exclusion criteria: Age minimum

18

Key inclusion and exclusion criteria: Exclusion criteria

Patients meeting any of the following exclusion criteria must not be enrolled in the study:

- 1. The patient has received prior investigational therapy, chemotherapy, surgery, or radiotherapy within 4 weeks of initiating study drug.
- 2. The patient has a significant medical history or unstable medical condition (unstable systemic disease: congestive heart failure (New York Heart Association Functional Classification class II or worse), recent myocardial infarction within 3 months, unstable angina, uncontrolled seizure disorder, uncontrolled hypertension). Patients with controlled diabetes (at the physician's discretion) will be allowed.
- 3. The patient is pregnant (confirmed by serum Beta-HCG if applicable), is breastfeeding or is not using adequate contraception (for patients of child-bearing potential).
- 4. The patient is actively taking herbal remedies or over-the-counter biologics (e.g., shark cartilage, high dose antioxidants).
- 5. The patient from a given study arm has already received the same therapy as the clinical trial.

The eligibility criteria have been broadened to allow more patients to benefit from the biomarker screening phase of the LUNG trial. However, patients who are determined to harbor an actionable mutation within the scope of this study will be further evaluated to determine whether they are candidates for the treatment, at the discretion of the investigator. The investigator might assess the patients for hematologic

Key inclusion and exclusion criteria: Specify gender

**Key inclusion and exclusion criteria: Age maximum** 100



function, hepatic function, renal function, and other parameters, before allowing them to join the treatment phase of this trial.

Type of study

Interventional

Type of intervention

Pharmaceutical

Trial scope

Therapy

Study design: Allocation Non-randomized controlled trial

Study design: Control

Active

Study design: Purpose

Treatment

Study design: Assignment

IMP has market authorization

Yes, Lebanon and Worldwide

Name of IMP

Alectinib and Entrectinib

Type of IMP

Others

Pharmaceutical class

Tyrosine kinase inhibitor

Therapeutic indication

first-line treatment of adult patients with metastatic non-squamous non-small cell lung cancer (NSCLC) who express biomarkers of interest, targeted by alectinib or entrectinib.

Therapeutic benefit

It is expected, based on promising clinical trials, that the precision therapies will improve prognosis

and prolong survival

Study model: Explain model Study model

N/A N/A

Study model: Specify model

N/A

Time perspective Time perspective: Explain time perspective

Time perspective: Specify perspective

N/A

Type of intervention: Specify type

Trial scope: Specify scope

N/A

Study design: Masking Open (masking not used)

Study phase

2 to 3

Study design: Specify purpose

N/A

Study design: Specify assignment

IMP has market authorization: Specify

Europe, USA, Lebanon

Year of authorization Month of authorization

2017



Target follow-up duration Target follow-up duration: Unit

Number of groups/cohorts

Biospecimen retention

Samples with DNA\*\*

Target sample size

162

Date of first enrollment: Type

Anticipated

Date of study closure: Type

Anticipated

Recruitment status

Pending

Date of completion

IPD sharing statement plan

No

Additional data URL

Admin comments

**Trial status** 

Approved

Biospecimen description

Archived biopsies or recently obtained biopsies from the lung tumor will be sent to the Jacques Loiselet Center for Medical Genetics and Genomics at the Saint Joseph University in Beirut. This laboratory will determine the presence of biomarkers in tumor samples, using the AVENIO Tumor Tissue CGP Kit for genomic testing of solid tumors

Actual enrollment target size

202

Date of first enrollment: Date

02/01/2024

Date of study closure: Date

31/03/2026

Recruitment status: Specify

IPD sharing statement description

Patients will not be identified by their names or date of birth on the case report form or other study documentation submitted to the sponsor; instead patients will be given a unique identification number as soon as they have signed the informed consent form (ICF). For safety reasons, the investigators will maintain a 'patient identification log' with the name and contact details of each patient. This log and the signed ICFs will be kept in strict

confidence by the investigators

Secondary Identifying Numbers	
Full name of issuing authority	Secondary identifying number
NA	NA



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

Name

Roche Lebanon

### **Secondary Sponsors**

Hotel Dieu de France

Contac	Contact for Public/Scientific Queries					
Contact type	Contact full name	Address	Country	Telephone	Email	Affiliation
Public	Virginia El Khoury	Hotel Dieu de France	Lebanon	00961 1 604 000	felkarak@yahoo. com	Principle Investigato r
Scientific	Fadi ElKarak	Hotel Dieu de France	Lebanon	009611421 229	virginia.elkhoury @usj.edu.lb	Secretary of the Ethics Committee

Centers/Hospitals Involved in the Study			
Center/Hospital name	Name of principles investigator Principles investigator speciality Ethical approval		
Hotel Dieu de France	Dr. Fadi El Karak	Oncologist	Approved

Ethics Review				
Ethics approval obtained	Approval date	Contact name	Contact email	Contact phone
Hotel Dieu de France	06/01/2024	Michel Scheuer	cue@usj.edu.lb	009611421229

## **Countries of Recruitment**

Name

Lebanon



Health Conditions or Problems Studied		
Condition Code Keyword		
Lung cancer	Carcinoma in situ of other specified sites (D09.7)	Metastatic Non-squamous non-small cell lung cancer

Interventions		
Intervention	Description	Keyword
Alectinib	Total daily dose of 1200 mg: 600 mg (4 tablets) taken twice daily Must be taken with food	150 mg
entrectininb	Total daily dose of 600 mg (3 tablets) taken once daily Taken with or without food Should not be taken with grapefruit or grapefruit juice	200 mg

Primary Outcomes			
Name	Time Points	Measure	
Proportion of oncogenic driver mutations of interest: ALK rearrangement, NTRK gene fusion, MET alteration (skip mutation at Exon 14), EGFR mutation, ROS1 gene fusion, RET gene fusion, HER-2 (ERBB2) mutations, BRAF mutations, and potentially other biomarkers	cross-sectional, one-time assessment	proportion, counts and measures	
Proportion of patients in the different oncogenic driver mutation percent brackets	cross-sectional, one-time assessment	proportion, counts and measures	
Proportion of patients with non-activating mutations	cross-sectional, one-time assessment	proportion, counts and measures	
Proportion of patients whose treatment will be based on the molecular biomarker profile	cross-sectional, one-time assessment	proportion, counts and measures	

Key Secondary Outcomes			
Name	Time Points	Measure	
Proportion of patients achieving CR (disappearance of all target lesions), PR (≥30% decrease in the sum of the longest diameter of target lesions) and OR = CR + PR; according to RECIST v1.1 (23, 24) for target lesions and assessed by imaging at 3 months, 6 months and 12 months after treatment initiation	3, 6 and 12 months after treatment initiation	proportion, counts and measures	
Proportion of patients with SD, at 3, 6 and 12 months after treatment initiation	3, 6 and 12 months after treatment initiation	proportion, counts and measures	
Proportion of patients with PD at 3 months, 6 months and 12 months after treatment initiation	3, 6 and 12 months after treatment initiation	proportion, counts and measures	
PFS estimated by the Kaplan-Meier method	3, 6 and 12 months after treatment initiation	duration	
Description of AEs and ADRs reported during the study	3, 6 and 12 months after treatment initiation	counts and percentages	
Proportion of patients who discontinued treatment due to safety concerns	3, 6 and 12 months after treatment initiation	proportion, counts and measures	
Time to treatment discontinuation	3, 6 and 12 months after treatment initiation	duration	



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	