A randomized double-blind, placebocontrolled study of LEE011 in combination with letrozole for the treatment of postmenopausal women with hormone receptor positive, HER2negative, advanced breast cancer who received no prior therapy for advanced disease (CLEE011A2301)

Published: 07-01-2014 Last updated: 24-04-2024

Primary objective: Progression free survival (PFS) of treatment with letrozole plus LEE011 compared to treatment with letrozole plus placebo .Secondary objectives: Overall survival (OS), overall response rate (OR), overall clinical benefit rate,...

**Ethical review** Approved WMO **Status** Recruitment stopped

**Health condition type** Breast neoplasms malignant and unspecified (incl nipple)

Study type Interventional

# Summary

#### ID

NL-OMON55670

Source

ToetsingOnline

**Brief title** 

CLEE011A2301 - MONALEESA-2

#### Condition

• Breast neoplasms malignant and unspecified (incl nipple)

#### **Synonym**

advanced breast cancer

### Research involving

Human

### **Sponsors and support**

**Primary sponsor:** Novartis

Source(s) of monetary or material Support: Novartis Pharma BV

### Intervention

**Keyword:** advanced, breast cancer, LEE011, letrozole

#### **Outcome measures**

#### **Primary outcome**

Progression free survival.

### **Secondary outcome**

Overall survival, response, clinical benefit, ECOG performance status,

side-effects, result quality of life questinnaires.

# **Study description**

#### **Background summary**

The purpose of this study is to characterize the anti-proliferative activity of LEE011 600 mg when combined with letrozole 2.5 mg in postmenopausal women with advanced HR+, HER2-negative breast cancer.

Hormone dependence is a fundamental hallmark of the majority of breast cancers, and tumor growth can be inhibited either by deprivation of circulating estrogens or by antagonising the effect of these hormones on their receptors. For postmenopausal women with breast cancer, aromatase inhibitors are an important treatment option. Letrozole is an aromatase inhibitor. In breast cancer, genetic alterations such as amplifications and deletions occur at high frequencies, and are closely related to poor clinical outcome. One such region of amplification is with Cyclin D1, which plays a crucial role as a cell cycle regulator, promoting progression through the G1-S phase, following complex formation with CDK4/6 and phosphorylation of the retinoblastoma (rb) protein.

LEE011 is a highly soluble, potent, selective inhibitor of CDK4/6 kinases. LEE011 inhibits CDK4/6 specific phosphorylation of pRb, thereby halting cell cycle progression in the G1 phase.

### Study objective

Primary objective: Progression free survival (PFS) of treatment with letrozole plus LEE011 compared to treatment with letrozole plus placebo. Secondary objectives: Overall survival (OS), overall response rate (OR), overall clinical benefit rate, time to deterioration of ECOG performance status, safety and tolerability, quality of life.

### Study design

Randomized double blind placebo controlled phase III study. Approximately 650 patients.

Randomization (1:1) to treatment in cycles of 4 weeks with

- letrozole 2.5 mg QD continuously plus LEE011 600 mg QD during the 1st 3 weeks of a cycle
- letrozole 2.5 mg QD continuously plus placebo during the 1st 3 weeks of a cycle

Treatment duration until disease progression or unacceptable side-effects. Follow-up for survival.

#### Intervention

Treatment with letrozole with or without LEE.

### Study burden and risks

Risk: Adverse events of study medication.

Burden:

Visits cycle 1 day 1 and 15, next cycles day 1 only. Duration approx. 2-4 h. Each visit fasting blood draw(s) 15-30 mL/occasion and collection of urine Optional Blood draw for PK during cycle 1 day 15, pre-dose and 2 h post-dose and optional blood draw for biomarker research during screening and day 15 ECG cycle 1 day 15, cycle 2 day 1, cycle 3 day 1, cycle 6 day 1, cycle 9 day 1 and end of study pre-dose and 2 hrs post-dose. Pre dose during cycle 4 day 1, cycle 5 day 1, cycle 7 day 1 and cycle 8 day 1

MUGA-scan of echocardiogram during screening

Quality of life questionnaires (3x)(every 8-12 weeks)

Daily completion of diary

Tumor measurements (CT- or MRI-scans during the first 18 months every 8 weeks and thereafter conform standard treatment (every 12 weeks).

Optional tumor biopsy at screening and disease progression.

In case the subjects discontinues the study medication prior to disease

progression: follow-up until progression with tumor measurements every 8-12 weeks.

### **Contacts**

#### **Public**

**Novartis** 

Haaksbergweg 16 Amsterdam 1101 BX NL

#### Scientific

**Novartis** 

Haaksbergweg 16 Amsterdam 1101 BX NL

# **Trial sites**

### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

### Inclusion criteria

- Women >=18 years old, with advanced breast cancer.
- No prior therapy for advanced disease
- Postmenopausal. See protocol page 34 for details.
- Confirmed diagnosis of estrogen-receptor positive and/or progesterone receptor positive, HER2 negative breast cancer.
- Measurable disease or at least one predominantly lytic bone lesion.
- ECOG performance status 0 or 1.
- Adequate bone marrow and organ function (based on central
  - 4 A randomized double-blind, placebo-controlled study of LEE011 in combination wit ... 13-05-2025

# **Exclusion criteria**

- Received any CDK4/6 inhibitor.
- Any prior systemic anti-cancer therapy (including hormonal therapy and chemotherapy) for advanced breast cancer. See protocol page 45 for details.
- Known history of HIV infection (testing not mandatory).
- Patient has CNS metastases
- Active cardiac disease or a history of cardiac dysfunction. See protocol page 46 for details.
- Prohibited medication. See protocol page 36 for details.

# Study design

### **Design**

Study phase: 3

Study type: Interventional

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Placebo

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 06-06-2014

Enrollment: 24

Type: Actual

# Medical products/devices used

Product type: Medicine
Brand name: Femara
Generic name: letrozole

Registration: Yes - NL intended use

Product type: Medicine
Brand name: LEE011

Generic name: LEE011

Registration: Yes - NL intended use

# **Ethics review**

Approved WMO

Date: 07-01-2014

Application type: First submission

Review commission: METC NedMec

Approved WMO

Date: 14-04-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 18-04-2014

Application type: First submission

Review commission: METC NedMec

Approved WMO

Date: 14-05-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 16-05-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 19-06-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 15-07-2014

Approved WMO

Date: 25-08-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 06-11-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 14-11-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 17-11-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 24-11-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 09-01-2015

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 15-01-2015

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 20-01-2015

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 29-05-2015

Approved WMO

Date: 19-08-2015

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 27-08-2015

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 25-02-2016

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 02-03-2016

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 21-03-2016

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 30-03-2016

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 11-04-2016

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 12-05-2016

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 15-06-2016

Approved WMO

Date: 03-08-2016

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 18-11-2016

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 24-02-2017

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 14-03-2017

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 10-04-2017

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 28-04-2017

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 07-08-2017

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 09-08-2017

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 13-10-2017

Approved WMO

Date: 10-01-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 11-01-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 25-01-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 30-03-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 31-10-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 14-12-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 12-08-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 13-09-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 01-04-2020

Approved WMO

Date: 02-04-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 09-04-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 10-12-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 26-01-2021

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 25-02-2021

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 06-10-2021

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 14-10-2021

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 01-12-2021

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 09-12-2021

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

# Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register ID

EudraCT EUCTR2013-003084-61-NL

ClinicalTrials.gov NCT01958021 CCMO NL46891.031.13