



## Clinical trial results:

### A phase II trial evaluating the Activity of Abiraterone Acetate plus Prednisone in Patients with a Molecular Apocrine HER2-negative locally advanced or metastatic Breast Cancer.

#### Summary

EudraCT number	2012-002525-29
Trial protocol	FR
Global end of trial date	15 July 2015

#### Results information

Result version number	v1 (current)
This version publication date	24 September 2022
First version publication date	24 September 2022

#### Trial information

##### Trial identification

Sponsor protocol code	UC-0140/1206
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##### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01842321
WHO universal trial number (UTN)	-

Notes:

#### Sponsors

Sponsor organisation name	UNICANCER
Sponsor organisation address	101 RUE DE TOLBIAC, PARIS, France, 75013
Public contact	Nourredine AIT RAHMOUNE, UNICANCER, +33 171936704, n.ait-rahmoune@unicancer.fr
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Notes:

#### Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

## Results analysis stage

Analysis stage	Final
Date of interim/final analysis	17 May 2018
Is this the analysis of the primary completion data?	Yes
Primary completion date	15 July 2015
Global end of trial reached?	Yes
Global end of trial date	15 July 2015
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

To estimate antitumor activity of abiraterone acetate, as measured by the 6 months clinical benefit rate (CBR) in molecular apocrine HER2-negative locally advanced or metastatic breast cancer.

Protection of trial subjects:

In order to ensure the protection of the rights, safety and well-being of trial subjects, this clinical trial was performed in compliance with the principles laid down in the declaration of Helsinki, good Clinical Practice and European regulation.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	26 June 2013
Long term follow-up planned	Yes
Long term follow-up rationale	Efficacy
Long term follow-up duration	24 Months
Independent data monitoring committee (IDMC) involvement?	No

Notes:

## Population of trial subjects

### Subjects enrolled per country

Country: Number of subjects enrolled	France: 34
Worldwide total number of subjects	34
EEA total number of subjects	34

Notes:

### Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	18
From 65 to 84 years	15

85 years and over	1
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## Subject disposition

### Recruitment

Recruitment details:

Recruitment only in France,

Date of first inclusion: 26-Jun-2013

Date of last inclusion: 24-Dec-2014

### Pre-assignment

Screening details:

All women 18+, with a confirmed locally advanced or metastatic Triple Negative Breast Cancer (TNBC), will be screened and invited to participate. Only patients with a centralized confirmation of ER-/PR-/HER2- and evaluation of AR+ were included.

### Period 1

Period 1 title	overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

### Arms

Arm title	Abiraterone Acetate
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Arm description:

Only one arm in this trial

Treatment: abiraterone acetate plus prednisone

Arm type	Experimental
Investigational medicinal product name	ABIRATERONE
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

Patients will receive abiraterone acetate at 1,000 mg (four 250 mg tablets daily in the morning after an overnight fast) concurrently with prednisone(1) at 10 mg once daily

Number of subjects in period 1	Abiraterone Acetate
Started	34
Completed	30
Not completed	4
Discontinuation before end of first cycle	1
Disease progression before end of first cycle	3

## Baseline characteristics

### Reporting groups

Reporting group title	overall trial
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Reporting group description: -

Reporting group values	overall trial	Total	
Number of subjects	34	34	
Age categorical			
Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	18	18	
From 65-84 years	15	15	
85 years and over	1	1	
Gender categorical			
Units: Subjects			
Female	34	34	
Male	0	0	

## End points

### End points reporting groups

Reporting group title	Abiraterone Acetate
Reporting group description:	
Only one arm in this trial	
Treatment: abiraterone acetate plus prednisone	

### Primary: Primary endpoint

End point title	Primary endpoint <sup>[1]</sup>
End point description:	
CBR is defined as:	
<ul style="list-style-type: none"><li>• Numerator: total number of patients who show a complete response (CR), partial response (PR), or stable disease (SD) for <math>\geq 6</math> months.</li><li>• Denominator: total number of assessable patients for the primary endpoint</li></ul>	
End point type	Primary

End point timeframe:

The primary endpoint was the clinical benefit rate (CBR) defined as the percentage of patients who had a complete response (CR), partial response, or stable disease (SD)  $\geq 6$  months, according to RECIST v1.1.

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: No statistical analyses for the primary end point.

A single stage study design was used to discriminate between a 15 and 35% clinical benefit rate (CBR).

<b>End point values</b>	Abiraterone Acetate			
Subject group type	Reporting group			
Number of subjects analysed	30			
Units: Number	6			

### Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Reporting from the signing of the 1st consent form, until 30 days following the last administration of the experimental treatment

Adverse event reporting additional description:

Occurrences all number for each non serious adverse event is not available. the number of subject affected by the non serious adverse event is reported in the "Occurrences all number" field.

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	13
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### Reporting groups

Reporting group title	all patients
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Reporting group description: -

Serious adverse events	all patients		
Total subjects affected by serious adverse events			
subjects affected / exposed	15 / 34 (44.12%)		
number of deaths (all causes)	6		
number of deaths resulting from adverse events	6		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Metastatic bone pain			
subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Tumor progression			
subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
Injury, poisoning and procedural complications			
Iatrogenic pneumothorax			
subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Knee fracture			

subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
General disorders and administration site conditions			
Disease progression			
subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
General physical health deterioration			
subjects affected / exposed	3 / 34 (8.82%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 3		
Blood and lymphatic system disorders			
Lymphocele			
subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Hepatobiliary disorders			
Acute cholecystitis			
subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
Pneumopathy			
subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Respiratory failure			
subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
Endocrine disorders			
Adrenal insufficiency			



subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Musculoskeletal and connective tissue disorders			
Bone pain			
subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Metabolism and nutrition disorders			
Hypokalemia			
subjects affected / exposed	1 / 34 (2.94%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 5 %

<b>Non-serious adverse events</b>	all patients		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	34 / 34 (100.00%)		
Investigations			
Hypokalaemia			
subjects affected / exposed	3 / 34 (8.82%)		
occurrences (all)	3		
Hypophosphataemia			
subjects affected / exposed	2 / 34 (5.88%)		
occurrences (all)	2		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
metastatic pain			
subjects affected / exposed	2 / 34 (5.88%)		
occurrences (all)	2		
Vascular disorders			
Hypertension			
subjects affected / exposed	4 / 34 (11.76%)		
occurrences (all)	4		
Nervous system disorders			

Neuralgia			
subjects affected / exposed	2 / 34 (5.88%)		
occurrences (all)	2		
Paraesthesia			
subjects affected / exposed	3 / 34 (8.82%)		
occurrences (all)	3		
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	5 / 34 (14.71%)		
occurrences (all)	5		
Breast pain			
subjects affected / exposed	2 / 34 (5.88%)		
occurrences (all)	2		
Fatigue			
subjects affected / exposed	10 / 34 (29.41%)		
occurrences (all)	10		
Insomnia			
subjects affected / exposed	3 / 34 (8.82%)		
occurrences (all)	3		
pain			
subjects affected / exposed	5 / 34 (14.71%)		
occurrences (all)	5		
Pain in extremity			
subjects affected / exposed	7 / 34 (20.59%)		
occurrences (all)	7		
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	8 / 34 (23.53%)		
occurrences (all)	9		
Constipation			
subjects affected / exposed	9 / 34 (26.47%)		
occurrences (all)	9		
Diarrhoea			
subjects affected / exposed	2 / 34 (5.88%)		
occurrences (all)	2		
Nausea			

<p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Vomiting</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>7 / 34 (20.59%)</p> <p>7</p> <p>3 / 34 (8.82%)</p> <p>3</p>		
<p>Reproductive system and breast disorders</p> <p>Vulvovaginal mycotic infection</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>2 / 34 (5.88%)</p> <p>2</p>		
<p>Respiratory, thoracic and mediastinal disorders</p> <p>Chest pain</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Dyspnoea</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Pleural effusion</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>2 / 34 (5.88%)</p> <p>2</p> <p>4 / 34 (11.76%)</p> <p>4</p> <p>2 / 34 (5.88%)</p> <p>2</p>		
<p>Musculoskeletal and connective tissue disorders</p> <p>Back pain</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Muscle spasms</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Musculoskeletal pain</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>5 / 34 (14.71%)</p> <p>5</p> <p>2 / 34 (5.88%)</p> <p>2</p> <p>4 / 34 (11.76%)</p> <p>4</p>		
<p>Metabolism and nutrition disorders</p> <p>Decreased appetite</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>5 / 34 (14.71%)</p> <p>5</p>		

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
03 December 2013	This translational research program is aiming 1. To validate or identify a "molecular apocrine signature" using a variety of methods including a RT-qPCR (ER, AR, FOXA1 and 5 genes involved in the AR pathway) and IHC markers (ER, PR, HER2, CK5/6, CK17, EGFR, Ki67, AR, FOXA1 et GCDFP15) which identified molecular apocrine tumours with an excellent accuracy in a recent publication (Lehmann-Che J BCR 2013). In their series androgen receptors (AR) assessment by immunohistochemistry (IHC) was negative in 42% of molecular apocrine tumours (defined by expression arrays). In AMA trial (Caduseime 02) we will not change the first inclusion criteria which is "molecular apocrine tumour defined by IHC" but we will analyse by RT-PCR quantitative and IHC as mentioned above in tumour samples from eligible patients, and non-eligible patients (meaning not identified as molecular apocrine after central review with standard IHC analysis including AR). The identification of a "molecular apocrine signature" with a high accuracy should have important consequences for patient selection in further trials.
16 May 2014	The protocol and the information sheet were updated in order to take into account last modifications on investigator's brochure
07 January 2015	clarifications made to an inclusion criterion and to the main evaluation criterion

Notes:

### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

Occurrences all number for each non serious adverse event is not available. the number of subject affected by the non serious adverse event is reported in the "Occurrences all number" field.

Notes: