



## Clinical trial results:

### Prospective phase II study of the effectiveness and safety of autologous dendritic cells vaccination in high-risk locally advanced colon adenocarcinoma

#### Summary

EudraCT number	2010-024118-73
Trial protocol	ES
Global end of trial date	21 May 2019

#### Results information

Result version number	v1 (current)
This version publication date	14 February 2023
First version publication date	14 February 2023

#### Trial information

##### Trial identification

Sponsor protocol code	CDCC/2010
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##### Additional study identifiers

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

Notes:

#### Sponsors

Sponsor organisation name	Clínica Universidad de Navarra/Universidad de Navarra
Sponsor organisation address	Avda. Pío XII, 36, Pamplona, Spain, 31008
Public contact	UCEC, Clínica Universidad de Navarra, 34 948255 400, ucicec@unav.es
Scientific contact	UCEC, Clínica Universidad de Navarra, 34 948255 400, ucicec@unav.es

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:

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**Results analysis stage**

Analysis stage	Final
Date of interim/final analysis	03 May 2021
Is this the analysis of the primary completion data?	Yes
Primary completion date	21 May 2019
Global end of trial reached?	Yes
Global end of trial date	21 May 2019
Was the trial ended prematurely?	Yes

Notes:

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**General information about the trial**

Main objective of the trial:

Relapse-free survival, calculated from the time of primary tumor surgery to the first radiological evidence of disease relapse.

Protection of trial subjects:

NA

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	05 October 2011
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

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**Population of trial subjects**

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**Subjects enrolled per country**

Country: Number of subjects enrolled	Spain: 49
Worldwide total number of subjects	49
EEA total number of subjects	49

Notes:

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**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)	32
From 65 to 84 years	17
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details: -

### Pre-assignment

Screening details:

Locally advanced colon cancer patients with adverse histopathologic and/or molecular features after complete surgical resection and adjuvant fluoropyrimidines/oxaliplatin-based chemotherapy were recruited

### Period 1

Period 1 title	Treatment period (overall period)
Is this the baseline period?	Yes
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

### Arms

<b>Arm title</b>	Experimental group
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Arm description:

Mature dendritic cells obtained from mononuclear precursors (peripheral blood monocytes) loaded with autologous tumor tissue lysate, which will be administered by intradermal injections.

Arm type	Experimental
Investigational medicinal product name	Mature dendritic cells obtained from mononuclear precursors (peripheral blood monocytes) loaded with autologous tumor tissue lysate
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intradermal use

Dosage and administration details:

The expected dose is 10 million dendritic cells, resuspended in 1-2 ml of physiological serum. If there are not enough cells to complete the treatment, those that are available will be administered, reducing the dose or the number of injections.

<b>Number of subjects in period 1</b>	Experimental group
Started	49
Completed	7
Not completed	42
Screening failures	42

## Baseline characteristics

### Reporting groups

Reporting group title	Treatment period
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Reporting group description: -

Reporting group values	Treatment period	Total	
Number of subjects	49	49	
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)	32	32	
From 65-84 years	17	17	
85 years and over	0	0	
Gender categorical			
Units: Subjects			
Female	23	23	
Male	26	26	

## End points

### End points reporting groups

Reporting group title	Experimental group
Reporting group description: Mature dendritic cells obtained from mononuclear precursors (peripheral blood monocytes) loaded with autologous tumor tissue lysate, which will be administered by intradermal injections.	

### Primary: Relapse-free survival

End point title	Relapse-free survival <sup>[1]</sup>
End point description:	

End point type	Primary
End point timeframe: Follow-up (months): Mean (SD) = 54.60 (25.98); Median (p25, p75) = 61.54 (25.49, 78.23)	

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: This is a descriptive statistical analysis of the percentage of relapse-free survival patients and follow-up.

<b>End point values</b>	Experimental group			
Subject group type	Reporting group			
Number of subjects analysed	7			
Units: 85.71%	7			

### Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

From the administration of the treatment to the end of the follow-up

Assessment type	Systematic
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### Dictionary used

Dictionary name	NA
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Dictionary version	0
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### Reporting groups

Reporting group title	Treatment
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Reporting group description: -

Serious adverse events	Treatment		
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 7 (28.57%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Surgical and medical procedures			
Salpingo-oophorectomy bilateral			
subjects affected / exposed	1 / 7 (14.29%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Pneumonia			
subjects affected / exposed	1 / 7 (14.29%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 1 %

Non-serious adverse events	Treatment		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	7 / 7 (100.00%)		
Vascular disorders			
Pulmonary embolism			
subjects affected / exposed	1 / 7 (14.29%)		
occurrences (all)	1		

Hypertension subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 2		
Varices subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Surgical and medical procedures Cytoreductive surgery subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
General disorders and administration site conditions Asthenia subjects affected / exposed occurrences (all)  Mucosal inflammation subjects affected / exposed occurrences (all)  Fatigue subjects affected / exposed occurrences (all)	7 / 7 (100.00%) 9  3 / 7 (42.86%) 3  1 / 7 (14.29%) 1		
Respiratory, thoracic and mediastinal disorders Catarrh subjects affected / exposed occurrences (all)  Dyspnoea subjects affected / exposed occurrences (all)  Upper respiratory tract infection subjects affected / exposed occurrences (all)  Cough subjects affected / exposed occurrences (all)	3 / 7 (42.86%) 3  1 / 7 (14.29%) 1  1 / 7 (14.29%) 1  2 / 7 (28.57%) 2		
Psychiatric disorders Anxiety			

subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Injury, poisoning and procedural complications Burns second degree subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Cardiac disorders Palpitations subjects affected / exposed occurrences (all)  Cardiac valve disease subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1  1 / 7 (14.29%) 1		
Nervous system disorders Dysaesthesia subjects affected / exposed occurrences (all)  Dysgeusia subjects affected / exposed occurrences (all)  Neurotoxicity subjects affected / exposed occurrences (all)  Paraesthesia subjects affected / exposed occurrences (all)  Headache subjects affected / exposed occurrences (all)  Memory impairment subjects affected / exposed occurrences (all)	6 / 7 (85.71%) 7  4 / 7 (57.14%) 4  3 / 7 (42.86%) 3  1 / 7 (14.29%) 1  1 / 7 (14.29%) 1  1 / 7 (14.29%) 1		
Blood and lymphatic system disorders Neutropenia subjects affected / exposed occurrences (all)	3 / 7 (42.86%) 6		



Leukopenia subjects affected / exposed occurrences (all)	2 / 7 (28.57%) 2		
Anaemia subjects affected / exposed occurrences (all)	2 / 7 (28.57%) 2		
Thrombocytopenia subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Ear and labyrinth disorders Vertigo subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Eye disorders Eye pruritus subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Gastrointestinal disorders Diarrhoea subjects affected / exposed occurrences (all)	5 / 7 (71.43%) 7		
Nausea subjects affected / exposed occurrences (all)	4 / 7 (57.14%) 4		
Vomiting subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 2		
Abdominal pain subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Gastrooesophageal reflux disease subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Intestinal obstruction subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Umbilical hernia			

<p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Constipation</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>1</p> <p>1 / 7 (14.29%)</p> <p>1</p>		
<p>Hepatobiliary disorders</p> <p>Non-cirrhotic portal hypertension</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>1</p>		
<p>Skin and subcutaneous tissue disorders</p> <p>palmar</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Urticaria</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Hyperhidrosis</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Erythema</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>2 / 7 (28.57%)</p> <p>2</p> <p>1 / 7 (14.29%)</p> <p>1</p> <p>1 / 7 (14.29%)</p> <p>1</p> <p>1 / 7 (14.29%)</p> <p>1</p>		
<p>Renal and urinary disorders</p> <p>Dysuria</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Pollakiuria</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Nocturia</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>1</p> <p>1 / 7 (14.29%)</p> <p>1</p> <p>1 / 7 (14.29%)</p> <p>1</p>		
<p>Musculoskeletal and connective tissue disorders</p> <p>Back pain</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>2 / 7 (28.57%)</p> <p>3</p>		

Osteopenia subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Meniscopathy subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Infections and infestations Bacteriuria subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Gastroenteritis subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Pneumonia subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Urinary tract infection subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 2		
Metabolism and nutrition disorders Decreased appetite subjects affected / exposed occurrences (all)	4 / 7 (57.14%) 4		
Hyperglycaemia subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Fluid retention subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
20 February 2012	Non substantial modification (Protocol v3)
20 June 2012	Change of sponsor. Changes in screening visit (tests in reference sites in a longer period of time). (Protocol v4)
21 June 2013	Change s in the IMPD (IMPD v4)
24 March 2014	Changes in study visits (Protocol v5)
29 April 2016	Changes in the IB and sample size (Protocol v6)

Notes:

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### 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.

It was determined that the reported protocol deviations had no impact on the interpretability of the study results. A serious deviation was notified to the corresponding authorities (pregnancy test not performed at the screening visit of 3 patients).

Notes: