

**Clinical trial results:****CLINICAL TRIAL RANDOMIZED, DOUBLE-BLIND CONTROLLED, PHASE III, TO EVALUATE THE USE OF PLATELET RICH PLASMA IN FRONT HYALURONIC ACID IN COXARTHROSIS.****Summary**

EudraCT number	2014-004120-21
Trial protocol	ES
Global end of trial date	09 May 2019

**Results information**

Result version number	v1 (current)
This version publication date	31 March 2021
First version publication date	31 March 2021
Summary attachment (see zip file)	Final report of results (Resumen resultados finales_COX1985_2019_05_09.pdf)

**Trial information****Trial identification**

Sponsor protocol code	COX1985
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**Additional study identifiers**

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

Notes:

**Sponsors**

Sponsor organisation name	Fundación Pública Andaluza Progreso y Salud
Sponsor organisation address	Parque Científico y Tecnológico Cartuja, Avda. Américo Vespucio, 15. Edificio S-2. 41092 Sevilla, Seville, Spain, 41092
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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	09 May 2019
Is this the analysis of the primary completion data?	Yes
Primary completion date	09 May 2019
Global end of trial reached?	Yes
Global end of trial date	09 May 2019
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

To evaluate the efficacy and safety of platelet rich plasma (PRP) in patients with coxarthrosis

Protection of trial subjects:

The trial will be conducted in accordance with the recommendations for Clinical Trials and Investigational Product Evaluation in Man, as contained in the Declaration of Helsinki, as revised at successive World Assemblies (WMA, 2013) (see Annex III), and the current Spanish Clinical Trial Legislation (RD 223/2004). The ICH-GCP standards (CPMP/ICH/135/95) will be followed.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	14 March 2016
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

## Population of trial subjects

### Subjects enrolled per country

Country: Number of subjects enrolled	Spain: 74
Worldwide total number of subjects	74
EEA total number of subjects	74

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)	74
From 65 to 84 years	0
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

We studied the population of patients of both sexes over 30 years of age diagnosed with coxarthrosis who had failed treatment with NSAIDs seen in the orthopaedic and trauma surgery department, who met the inclusion criteria, who did not meet any of the exclusion criteria, and who agreed to participate voluntarily in the study.

### Pre-assignment

Screening details:

We studied the population of patients of both sexes over 30 years of age diagnosed with coxarthrosis who had failed treatment with NSAIDs seen in the orthopaedic and trauma surgery department, who met the inclusion criteria, who did not meet any of the exclusion criteria, and who agreed to participate voluntarily in the study.

### Period 1

Period 1 title	Recruitment and follow-up
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator

### Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	Experimental

Arm description: -

Arm type	Experimental
Investigational medicinal product name	Platelet-rich plasma
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Blood fraction modifier
Routes of administration	Intravenous use

Dosage and administration details:

6mL of PRP obtained from the patient's own blood will be applied 20 minutes prior to infiltration.

<b>Arm title</b>	Comparator
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Arm description: -

Arm type	Comparator
Investigational medicinal product name	Hyaluronic acid
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Blood fraction modifier
Routes of administration	Intravenous use

Dosage and administration details:

Hyaluronic acid 60mg/6ml pre-filled syringe (Synvisc-One ®) shall be applied.

Number of subjects in period 1	Experimental	Comparator
Started	38	36
Completed	38	36

## Period 2

Period 2 title	Data analysis
Is this the baseline period?	No
Allocation method	Not applicable
Blinding used	Not blinded

## Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	Experimental

Arm description: -

Arm type	Experimental
Investigational medicinal product name	Platelet-rich plasma
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Blood fraction modifier
Routes of administration	Intravenous use

Dosage and administration details:

6mL of PRP obtained from the patient's own blood will be applied 20 minutes prior to infiltration.

<b>Arm title</b>	Comparator
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Arm description: -

Arm type	Comparator
Investigational medicinal product name	Hyaluronic acid
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Blood fraction modifier
Routes of administration	Intravenous use

Dosage and administration details:

Hyaluronic acid 60mg/6ml pre-filled syringe (Synvisc-One ®) shall be applied.

Number of subjects in period 2	Experimental	Comparator
Started	38	36
Completed	38	36



## Baseline characteristics

### Reporting groups

Reporting group title	Experimental
Reporting group description: -	
Reporting group title	Comparator
Reporting group description: -	

Reporting group values	Experimental	Comparator	Total
Number of subjects	38	36	74
Age categorical			
Units: Subjects			
Over 30 years old	38	36	74
Age continuous			
Units: years			
arithmetic mean	61.2	61.1	
standard deviation	± 9.72	± 12.3	-
Gender categorical			
Units: Subjects			
Female	24	17	41
Male	14	19	33
Affected hip			
Units: Subjects			
right	19	20	39
left	19	16	35
Cause of osteoarthritis			
Units: Subjects			
idiopathic	38	34	72
post-traumatic	0	2	2
Kellgren Lawrence Scale			
Units: Subjects			
grade I	14	13	27
grade II	18	19	37
grade III	6	4	10
grade IV	0	0	0
IMC			
Units: kg/m2			
arithmetic mean	28.6	28.4	
standard deviation	± 4.2	± 4.5	-

## End points

### End points reporting groups

Reporting group title	Experimental
Reporting group description: -	
Reporting group title	Comparator
Reporting group description: -	
Reporting group title	Experimental
Reporting group description: -	
Reporting group title	Comparator
Reporting group description: -	

### Primary: EVA

End point title	EVA <sup>[1]</sup>
End point description:	
End point type	Primary
End point timeframe:	
During the study	

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: Some of the requested data are not available. However, the report of results of the clinical trial will be published with information on the statistical analysis.

End point values	Experimental	Comparator		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	38	36		
Units: EVA				
median (confidence interval 95%)				
Basal	7 (5 to 8)	7 (5 to 8)		
1 week	4 (3 to 6)	4 (3 to 7)		
1 month	4 (2 to 6)	4.5 (2 to 7)		
6 months	5 (1.5 to 7)	5 (2 to 8)		
1 year	5 (2 to 7)	6 (3 to 8)		

### Statistical analyses

No statistical analyses for this end point

### Primary: WOMAC

End point title	WOMAC <sup>[2]</sup>
End point description:	
End point type	Primary

End point timeframe:

During the study

Notes:

[2] - 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: Some of the requested data are not available. However, the report of results of the clinical trial will be published with information on the statistical analysis.

End point values	Experimental	Comparator		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	38	36		
Units: WOMAC				
median (confidence interval 95%)				
Basal	55 (35 to 65)	50 (35 to 60)		
1 week	30 (20 to 40)	30 (20 to 40)		
1 month	30 (20 to 35)	30 (15 to 45)		
6 months	30 (20 to 60)	35 (10 to 40)		
1 year	35 (20 to 60)	40 (30 to 70)		

## Statistical analyses

No statistical analyses for this end point

## Primary: HARRS HIP Score

End point title	HARRS HIP Score <sup>[3]</sup>
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End point description:

End point type	Primary
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End point timeframe:

During the study

Notes:

[3] - 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: Some of the requested data are not available. However, the report of results of the clinical trial will be published with information on the statistical analysis.

End point values	Experimental	Comparator		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	38	36		
Units: HARRS HIP Score				
median (confidence interval 95%)				
Basal	50 (45 to 65)	55 (50 to 60)		
1 week	70 (55 to 85)	65 (55 to 80)		
1 month	70 (60 to 85)	67.5 (60 to 80)		
1 year	60 (50 to 90)	60 (45 to 70)		

## Statistical analyses





## Adverse events

### Adverse events information<sup>[1]</sup>

Timeframe for reporting adverse events:

During the study

Assessment type	Systematic
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### Dictionary used

Dictionary name	Not known
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Dictionary version	1
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### Reporting groups

Reporting group title	Both groups
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Reporting group description: -

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.

Justification: No non-serious adverse events occurred.

Serious adverse events	Both groups		
Total subjects affected by serious adverse events			
subjects affected / exposed	7 / 74 (9.46%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Musculoskeletal and connective tissue disorders			
Hip arthroplasty			
subjects affected / exposed	5 / 74 (6.76%)		
occurrences causally related to treatment / all	0 / 5		
deaths causally related to treatment / all	0 / 0		
Admission for anxiety-depressive crisis			
subjects affected / exposed	1 / 74 (1.35%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Inguinal herniorrhaphy			
subjects affected / exposed	1 / 74 (1.35%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 4 %

<b>Non-serious adverse events</b>	Both groups		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 74 (0.00%)		

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
12 August 2015	It is modified in the protocol: <ul style="list-style-type: none"><li>- The masking technique.</li><li>- The definitions related to subject security information as well as the process of communication and notification to the authorities of the same.</li></ul>
29 March 2017	It is modified in the protocol: <ul style="list-style-type: none"><li>- The participating centres: the participation of the Hospital de Pontevedra is eliminated and, consequently, the researchers from this hospital who were included in the protocol.</li><li>- The evaluating CEIm as a change of evaluating CEIm was processed during the development of the study.</li><li>- The duration and timing of the study, with an extension of the study period being processed.</li></ul>

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.

- Sample size.
- From an analytical point of view, it would have been interesting to perform the ELISA analysis.
- It would also be of interest to increase the number of growth factors and cytokines.
- Difficulties when examining analgesia

Notes: