Clinical trial results:
Evaluation of the speed of action of Ibuprofen Arginine in comparison to Ibuprofen in the acute pain relief after mini invasive orthopaedic arthroscopic knee surgery in adults.

Summary

EudraCT number	2011-003051-19
Trial protocol	IT
Global end of trial date	15 July 2014

Results information

Result version number	v1 (current)
This version publication date	17 December 2016
First version publication date	17 December 2016
Summary attachment (see zip file)	CSR synopsis 7190M01 (CLINICAL STUDY REPORT SYNOPSIS.pdf)

Trial information

Trial identification

Sponsor protocol code	Z7190M01

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Zambon SpA
Sponsor organisation address	via Lillo Del Duca 10, Bresso, Italy,
Public contact	Sponsor Contact Person, Zambon S.p.A., 39 026652.41, clinicaltrials@zambongroup.com
Scientific contact	Sponsor Contact Person, Zambon S.p.A., 39 026652.41, massimo.bagolan@zambongroup.com

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	13 April 2015
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	15 July 2014
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

To assess the speed of action and global clinical efficacy of ibuprofen arginine (IBA) in comparison with ibuprofen (IBU) in patients with postoperative acute pain.

Protection of trial subjects:

Paracetamol 500 mg tablets were allowed as rescue medication after the first 60 minutes from the study medication intake, and during the following period of study observation according to medical prescription

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	19 March 2012
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	Italy: 43
Worldwide total number of subjects	43
EEA total number of subjects	43

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)	43
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

The study population was targeted to include male and female subjects suffering from post-operative acute pain due to mini invasive orthopaedic arthroscopic surgery (meniscectomy) and meeting all the inclusion and exclusion criteria

Pre-assignment

Screening details:

Subjects candidate for elective meniscectomy were enrolled at Orthopedic departments

Period 1

Period 1 title	Treatment period (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Single blind
Roles blinded	Assessor[1]

Arms

Are arms mutually exclusive?	Yes
Arm title	Ibuprofen arginine

Arm description:

Ibuprofen Arginine (IBA) apricot 600 mg granules for oral solution (sachets); single dose of one sachet

Arm type	Experimental
Investigational medicinal product name	Ibuprofen arginie
Investigational medicinal product code	7190
Other name	
Pharmaceutical forms	Granules for oral solution
Routes of administration	Oral use

Dosage and administration details:

single dose of one sachet 600 mg given by oral route (dissolved in 50 - 100 ml of water) in the post-surgical period

Arm title	Ibuprofen

Arm description:

Ibuprofen (IBU) orange 600 mg granules for oral solution (sachets)

Arm type	Active comparator
Investigational medicinal product name	Ibuprofen
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Granules for oral solution
Routes of administration	Oral use

Dosage and administration details:

single dose of one sachet 600 mg given by oral route (dissolved in 50 - 100 ml of water) in the post-surgical period

Notes:

[1] - The roles blinded appear inconsistent with a simple blinded trial.

Justification: Only the evaluating investigator (observer) was blinded to the treatment administered.

Number of subjects in period 1	Ibuprofen arginine	Ibuprofen
Started	20	23
Completed	20	23

Baseline characteristics

Reporting groups	
Reporting group title	Ibuprofen arginine
Reporting group description:	
Ibuprofen Arginine (IBA) apricot 600 mg granules for oral solution (sachets); single dose of one sachet	
Reporting group title	Ibuprofen
Reporting group description:	
Ibuprofen (IBU) orange 600 mg granules for oral solution (sachets)	

Reporting group values	Ibuprofen arginine	Ibuprofen	Total
Number of subjects	20	23	43
Age categorical			
Units: Subjects			
In utero			0
Preterm newborn infants (gestational age < 37 wks)			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)			0
From 65-84 years			0
85 years and over			0
Age continuous			
Units: years			
arithmetic mean	42.4	40.2	
standard deviation	± 9.9	± 9.2	-
Gender categorical			
Units: Subjects			
Female	1	6	7
Male	19	17	36

Subject analysis sets	
Subject analysis set title	Safety set
Subject analysis set type	Safety analysis
Subject analysis set description:	
all subjects randomized and treated with one dose of IMP	

Reporting group values	Safety set		
Number of subjects	43		
Age categorical			
Units: Subjects			
In utero			
Preterm newborn infants (gestational age < 37 wks)			
Newborns (0-27 days)			

Infants and toddlers (28 days-23 months) Children (2-11 years) Adolescents (12-17 years) Adults (18-64 years) From 65-84 years 85 years and over			
Age continuous Units: years arithmetic mean standard deviation	 41.2 ± 16.3		
Gender categorical Units: Subjects			
Female Male	7 36		

End points

End points reporting groups

Reporting group title	Ibuprofen arginine
Reporting group description:	
Ibuprofen Arginine (IBA) apricot 600 mg granules for oral solution (sachets); single dose of one sachet	
Reporting group title	Ibuprofen
Reporting group description:	
Ibuprofen (IBU) orange 600 mg granules for oral solution (sachets)	
Subject analysis set title	Safety set
Subject analysis set type	Safety analysis
Subject analysis set description:	
all subjects randomized and treated with one dose of IMP	

Primary: Onset of pain relief

End point title	Onset of pain relief[1]
End point description:	
The primary endpoint of the study was the time to onset of pain relief (when the subject began to feel any pain relieving effect from the drug) in the first 60 minutes after study medication intake. The effect of IBA or IBU was assessed, for this first 60 minute observation period, in absence of intake of any rescue medication, using a stopwatch clock	
End point type	Primary
End point timeframe:	
0-360 minutes	

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: The study was prematurely terminated and therefore the sample size is not sufficient for a statistical analysis.
Only mean values and SD are reported.

End point values	Ibuprofen arginine	Ibuprofen		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	20	23		
Units: mm				
arithmetic mean (standard deviation)	-34.8 (± 23.4)	-25 (± 23.1)		

Statistical analyses

No statistical analyses for this end point

Secondary: achievement of at least 50% pain relief

End point title	achievement of at least 50% pain relief
End point description:	
The proportion of subjects with at least 50% pain relief	
End point type	Secondary
End point timeframe:	
0-60 minutes	

End point values	Ibuprofen arginine	Ibuprofen		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	20	23		
Units: subjects				
Yes	11	10		
NO	9	13		

Statistical analyses

No statistical analyses for this end point

Secondary: Meaningful pain relief

End point title	Meaningful pain relief

End point description:

The time to achievement of the "meaningful pain relief" (when the subject felt his/her pain relief was meaningful) using a stopwatch clock

End point type	Secondary

End point timeframe:

0-360 minutes

End point values	Ibuprofen arginine	Ibuprofen		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	20	23		
Units: subjects				
Yes	18	19		
No	2	4		

Statistical analyses

No statistical analyses for this end point

Secondary: Clinical Global Impression

End point title	Clinical Global Impression

End point description:

The Clinical Global Impression (CGI) of the subject at the end of the study, using a 7-point scale

End point type	Secondary

End point timeframe:

0-360 minutes

End point values	Ibuprofen arginine	Ibuprofen		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	20	23		
Units: subjects				
Very much improved	10	10		
much improved	5	8		
minimally improved	4	3		
minimally worse	0	1		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events: From signature of Informed Consent to end of study.	
Assessment type	Systematic
Dictionary used	
Dictionary name	MedDRA
Dictionary version	16.1
Reporting groups	
Reporting group title	Ibuprofen arginine
Reporting group description: -	
Reporting group title	Ibuprofen
Reporting group description: -	

Serious adverse events	Ibuprofen arginine	Ibuprofen	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 20 (0.00%)	0 / 23 (0.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	Ibuprofen arginine	Ibuprofen	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	1 / 20 (5.00%)	1 / 23 (4.35%)	
Vascular disorders			
Hypertension			
subjects affected / exposed	1 / 20 (5.00%)	0 / 23 (0.00%)	
occurrences (all)	1	0	
Gastrointestinal disorders			
nausea			
subjects affected / exposed	0 / 20 (0.00%)	1 / 23 (4.35%)	
occurrences (all)	0	1	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? Yes

Date	Interruption	Restart date
15 July 2014	The study was interrupted because of slow recruitment and difficulty in enrolling subjects	-

Notes:

Limitations and caveats

None reported