



## Clinical trial results: Pain management after operative treatment of extremity fractures, a randomized clinical trial

### Summary

EudraCT number	2012-000680-24
Trial protocol	NL
Global end of trial date	01 October 2015

### Results information

Result version number	v1 (current)
This version publication date	06 January 2017
First version publication date	06 January 2017

### Trial information

#### Trial identification

Sponsor protocol code	POSTrct_ORTGH
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#### Additional study identifiers

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

Notes:

#### Sponsors

Sponsor organisation name	Academisch Medisch Centrum
Sponsor organisation address	Meibergdreef 9, Amsterdam, Netherlands,
Public contact	P. Kloen, Academisch Medisch Centrum, +31 205663374, p.kloen@amc.uva.nl
Scientific contact	P. Kloen, Academisch Medisch Centrum, +31 205663374, p.kloen@amc.uva.nl

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	11 November 2016
Is this the analysis of the primary completion data?	Yes
Primary completion date	20 March 2015
Global end of trial reached?	Yes
Global end of trial date	01 October 2015
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

The primary objective of this study is to determine (differences in) patient satisfaction with pain relief and pain intensity (Numeric Rating Scale).

Protection of trial subjects:

Escape medication could be provided

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 April 2012
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

## Population of trial subjects

### Subjects enrolled per country

Country: Number of subjects enrolled	Netherlands: 52
Worldwide total number of subjects	52
EEA total number of subjects	52

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)	45
From 65 to 84 years	6
85 years and over	1

## Subject disposition

### Recruitment

Recruitment details:

Patients were recruited worldwide from July 2012 to March 2015

### Pre-assignment

Screening details:

Patients were screened after extremity fractures occurred

### Period 1

Period 1 title	Overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Single blind <sup>[1]</sup>
Roles blinded	Investigator, Monitor, Carer <sup>[2]</sup>

### Arms

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

Arm description:

Patients received a prescription for acetaminophen with a maximum dose of 1000mg every 6 hours

Arm type	Active comparator
Investigational medicinal product name	acetaminophen
Investigational medicinal product code	
Other name	Paracetamol
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

1000mg every 6 hours

<b>Arm title</b>	Tramadol
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Arm description:

Patients received a prescription for tramadol 50mg every 8 hours as needed

Arm type	Active comparator
Investigational medicinal product name	Tramadol
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

50mg every 8 hours as needed

Notes:

[1] - The number of roles blinded appears inconsistent with a single blinded trial. It is expected that there will be one role blinded in a single blind trial.

Justification: Only subjects were not blinded

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

Justification: No blinding of subjects

<b>Number of subjects in period 1</b>	Acetaminophen	Tramadol
Started	27	25
Completed	25	14
Not completed	2	11
No step 2 medication taken	-	9
Lost to follow-up	2	2

## Baseline characteristics

### Reporting groups

Reporting group title	Acetaminophen
Reporting group description:	
Patients received a prescription for acetaminophen with a maximum dose of 1000mg every 6 hours	
Reporting group title	Tramadol
Reporting group description:	
Patients received a prescription for tramadol 50mg every 8 hours as needed	

Reporting group values	Acetaminophen	Tramadol	Total
Number of subjects	27	25	52
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			
log mean	45	42	
standard deviation	± 18	± 19	-
Gender categorical			
Units: Subjects			
Female	14	10	24
Male	13	15	28
Pain at this moment			
Units: 11			
median	3	3	
inter-quartile range (Q1-Q3)	1 to 5.3	1 to 6	-
Worst pain			
Units: 11			
median	6	5	
inter-quartile range (Q1-Q3)	3 to 8	4 to 7.8	-
Average pain			
Units: 11			
median	4.5	3.5	
inter-quartile range (Q1-Q3)	3 to 5	2 to 5	-
Expected pain intensity			
Units: 11			
median	4	4	
inter-quartile range (Q1-Q3)	2.8 to 5	3 to 5.5	-



## End points

### End points reporting groups

Reporting group title	Acetaminophen
Reporting group description:	Patients received a prescription for acetaminophen with a maximum dose of 1000mg every 6 hours
Reporting group title	Tramadol
Reporting group description:	Patients received a prescription for tramadol 50mg every 8 hours as needed

### Primary: Satisfaction after pain relief

End point title	Satisfaction after pain relief
End point description:	
End point type	Primary
End point timeframe:	2 weeks post-operative

End point values	Acetaminophen	Tramadol		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	27	25		
Units: Numeric rating scale				
number (not applicable)	8.3	8.5		

### Statistical analyses

Statistical analysis title	Non-inferiority
Statistical analysis description:	Non-inferiority
Comparison groups	Tramadol v Acetaminophen
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	non-inferiority
P-value	< 0.05
Method	Chi-squared
Parameter estimate	Mean difference (final values)
Point estimate	0.2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.78
upper limit	1.3



## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

2 weeks post-operative

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	15
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### Reporting groups

Reporting group title	Acetaminophen
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Reporting group description:

Patients received a prescription for acetaminophen with a maximum dose of 1000mg every 6 hours

Reporting group title	Tramadol
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Reporting group description:

Patients received a prescription for tramadol 50mg every 8 hours as needed

<b>Serious adverse events</b>	Acetaminophen	Tramadol	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 25 (0.00%)	0 / 14 (0.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events			

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

<b>Non-serious adverse events</b>	Acetaminophen	Tramadol	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 25 (0.00%)	10 / 14 (71.43%)	
Gastrointestinal disorders			
Nausea			
subjects affected / exposed	0 / 25 (0.00%)	10 / 14 (71.43%)	
occurrences (all)	0	10	

## **More information**

### **Substantial protocol amendments (globally)**

Were there any global substantial amendments to the protocol? No

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### **Interruptions (globally)**

Were there any global interruptions to the trial? No

### **Limitations and caveats**

None reported