Clinical trial results:
A randomised, double-blind, multi-centre, placebo controlled parallel group study to evaluate the efficacy and tolerability of a new Ibuprofen patch in patients with acute sports related traumatic blunt soft tissue injury/contusion to the upper or lower limbs

Summary

EudraCT number	2012-003257-29
Trial protocol	DE
Global end of trial date	02 March 2014

Results information

Result version number	v1 (current)
This version publication date	28 June 2017
First version publication date	28 June 2017

Trial information

Trial identification

Sponsor protocol code	NL1208

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Reckitt Benckiser Healthcare (UK) Ltd
Sponsor organisation address	Dansom Lane, Hull, United Kingdom, HU8 7DS
Public contact	Clinical Research Director, Clinical Research, Reckitt Benckiser Healthcare (UK) Ltd, 49 2282074318,
Scientific contact	Clinical Research Director, Clinical Research, Reckitt Benckiser Healthcare (UK) Ltd, 49 2282074318,

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	24 September 2014
Is this the analysis of the primary completion data?	Yes
Primary completion date	02 March 2014
Global end of trial reached?	Yes
Global end of trial date	02 March 2014
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective of the study is to assess the efficacy of a new ibuprofen patch versus placebo in the topical treatment of acute sports impact injuries/contusions.

Protection of trial subjects:

This study was conducted in accordance with ICH Good Clinical Practice and the ethical principles contained within the Declaration of Helsinki, as referenced in EU Directive 2001/20/EC.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	24 May 2013
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	Germany: 132
Worldwide total number of subjects	132
EEA total number of subjects	132

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)	132
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

The trial was conducted in 3 centres in Germany.

Pre-assignment

Screening details:

A total of 133 participants were screened of which 132 were randomized and 1 subject withdrew due to Psychotic illness (depression).

Period 1

Period 1 title	Overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator

Arms

Are arms mutually exclusive?	Yes
Arm title	Ibuprofen topical patch 200 mg

Arm description:

Ibuprofen Topical patch 200 mg for 5 days

Arm type	Experimental
Investigational medicinal product name	Nurofen topical patch
Investigational medicinal product code	
Other name	Ibuprofen topical patch
Pharmaceutical forms	Medicated plaster
Routes of administration	Topical use

Dosage and administration details:

Ibuprofen Topical patch 200 mg once every 24 hours for 5 days

Arm title	Placebo topical patch

Arm description:

Placebo topical patch for 5 days

Arm type	Placebo
Investigational medicinal product name	Placebo topical patch
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Medicated plaster
Routes of administration	Topical use

Dosage and administration details:

Placebo topical patch once every 24 hours for 5 days

Number of subjects in period 1	Ibuprofen topical patch 200 mg	Placebo topical patch
Started	64	68
Completed	64	67
Not completed	0	1
Adverse event, non-fatal	-	1

Baseline characteristics

Reporting groups	
Reporting group title	Ibuprofen topical patch 200 mg
Reporting group description:	
Ibuprofen Topical patch 200 mg for 5 days	
Reporting group title	Placebo topical patch
Reporting group description:	
Placebo topical patch for 5 days	

Reporting group values	Ibuprofen topical patch 200 mg	Placebo topical patch	Total
Number of subjects	64	68	132
Age categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	64	68	132
From 65-84 years	0	0	0
85 years and over	0	0	0
Age continuous Units: years			
arithmetic mean	33.2	30.8	
standard deviation	± 12.1	± 11.2	-
Gender categorical Units: Subjects			
Female	31	39	70
Male	33	29	62
Smocking History Units: Subjects			
Number of cigarettes/day: None	43	46	89
Number of cigarettes/day: ≤10	10	12	22
Number of cigarettes/day: 11-30	11	10	21
Ethnic origin Units: Subjects			
Caucasian	64	67	131
other	0	1	1
Height Units: cm			
arithmetic mean	175	173.3	
standard deviation	± 9.2	± 10.1	-
Weight Units: kg			
arithmetic mean	72.5	74.2	

standard deviation	± 13.6	± 16.3	-
BMI			
BMI (Body mass index)			
Units: kg/m²			
arithmetic mean	23.5	24.7	
standard deviation	± 3.3	± 3.9	-

End points

End points reporting groups

Reporting group title	Ibuprofen topical patch 200 mg
Reporting group description:	
Ibuprofen Topical patch 200 mg for 5 days	
Reporting group title	Placebo topical patch
Reporting group description:	
Placebo topical patch for 5 days	

Primary: VAS assessment of pain on movement - Area under curve over 0-72 hours (AUC0-72h)

End point title	VAS assessment of pain on movement - Area under curve over 0-72 hours (AUC0-72h)

End point description:

Intention to treat (ITT) population: All patients who were randomised to the study and received at least one dose of the study medication and had efficacy data for at least one post-baseline assessments.

Pain on movement was assessed using a 100 mm Visual Analogue Scale (VAS), by drawing a perpendicular line according to the method of Huskisson, with anchors at 0 = 'No pain' and 100 = 'Unbearable pain'.

End point type	Primary

End point timeframe:

0 (pre-dose) to 72 hour (post-dose)

End point values	Ibuprofen topical patch 200 mg	Placebo topical patch		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	64	68		
Units: mm*h				
least squares mean (standard error)	2399.4 (± 124.8)	4078.9 (± 120.4)		

Statistical analyses

Statistical analysis title	Pain on movement - VAS AUC0-72h
Comparison groups	Ibuprofen topical patch 200 mg v Placebo topical patch
Number of subjects included in analysis	132
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.0001
Method	ANCOVA

Secondary: VAS assessment of pain on movement at Hour 48

End point title	VAS assessment of pain on movement at Hour 48

End point description:

ITT population.

Pain on movement was assessed using a 100 mm Visual Analogue Scale (VAS), by drawing a perpendicular line according to the method of Huskisson, with anchors at 0 = 'No pain' and 100 = 'Unbearable pain'.

End point type	Secondary

End point timeframe:

At 48 hour (post-dose)

End point values	Ibuprofen topical patch 200 mg	Placebo topical patch		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	64	68		
Units: mm				
least squares mean (standard error)	23.9 (± 2.1)	50.7 (± 2)		

Statistical analyses

Statistical analysis title	Pain on movement - VAS at hour 48
Comparison groups	Ibuprofen topical patch 200 mg v Placebo topical patch
Number of subjects included in analysis	132
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.0001
Method	ANCOVA

Adverse events

Adverse events information	
Timeframe for reporting adverse events: Up to Day 5	
Assessment type	Systematic
Dictionary used	
Dictionary name	MedDRA
Dictionary version	16.0
Reporting groups	
Reporting group title	Ibuprofen topical patch 200 mg
Reporting group description: Ibuprofen Topical patch 200 mg once every 24 hours for 5 days	
Reporting group title	Placebo topical patch
Reporting group description: Placebo topical patch once every 24 hours for 5 days	

Serious adverse events	Ibuprofen topical patch 200 mg	Placebo topical patch	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 64 (0.00%)	0 / 68 (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 topical patch 200 mg	Placebo topical patch	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	3 / 64 (4.69%)	6 / 68 (8.82%)	
General disorders and administration site conditions			
Application site erythema			
subjects affected / exposed	1 / 64 (1.56%)	3 / 68 (4.41%)	
occurrences (all)	1	3	
Application site pruritus			
subjects affected / exposed	1 / 64 (1.56%)	5 / 68 (7.35%)	
occurrences (all)	1	5	
Application site rash			

subjects affected / exposed	0 / 64 (0.00%)	1 / 68 (1.47%)	
occurrences (all)	0	1	
Eye disorders			
Panophthalmitis			
subjects affected / exposed	1 / 64 (1.56%)	0 / 68 (0.00%)	
occurrences (all)	1	0	
Scleral haemorrhage			
subjects affected / exposed	1 / 64 (1.56%)	0 / 68 (0.00%)	
occurrences (all)	1	0	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
20 February 2013	Protocol updated to stipulate there was a separate dispenser/applier at each site who was not the investigator and that the delegated personnel who did not perform any efficacy assessments was responsible for the handling, storage, dispensing, collecting and administration of the IMP/NIMP
17 October 2013	The update to the RB SOP 'Safety Reporting and Definitions' required an amendment to the RB protocol template and therefore updates to the protocols for On going trials

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported