Clinical trial results:
Effects of paracetamol on nociception in adolescents.

Summary

EudraCT number	2011-005086-20
Trial protocol	NL
Global end of trial date	13 August 2014

Results information

Result version number	v1 (current)
This version publication date	01 March 2022
First version publication date	01 March 2022

Trial information

Trial identification

Sponsor protocol code	CHDR1117

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Centre for Human Drug Research
Sponsor organisation address	Zernikedreef 8, Leiden, Netherlands, 2333 CL
Public contact	L. Schrier, CHDR, 0031 715246400, lschrier@chdr.nl
Scientific contact	L. Schrier, CHDR, 0031 715246400, lschrier@chdr.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	13 August 2014
Is this the analysis of the primary completion data?	Yes
Primary completion date	13 August 2014
Global end of trial reached?	Yes
Global end of trial date	13 August 2014
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

- To educate adolescents about clinical drug studies by involving them as project team members and participants in an experiment with negligible risk and minimal burden;
- To investigate the effects of paracetamol on nociception in adolescents;
- To describe saliva paracetamol concentrations in adolescents;
- To describe the PK/PD relationship of paracetamol in adolescents (using data obtained in the healthy adult volunteer study);
- To evaluate the applicability of the PainCart test battery in adolescents, including evaluation how adolescents have experienced trial participation.

Protection of trial subjects:

The proposed tests are without risks for the volunteer (e.g., do not cause tissue damage or psychological trauma).
As it is possible that in rare cases a participant might react to pain with a stress response or exaggerated pressor/baroreflex response (for example fainting), an exclusion criterion addressing risk factors for fainting have been included. In addition, participants will have unlimited access to fluids to ensure hydration prior and during the experiments to reduce the risk of fainting due to vasovagal stress responses. Also, participants will be given time to habituate to the laboratory setting before starting the tests. Therefore, the risk related to participating in this study is considered to be minimal.
The proposed tests generally cause some pain, but (1) the participant has control over the process (i.e. control of cessation during the test); (2) the pain mounts fairly slowly so that it can be terminated before it becomes severe, and (3) the discomfort subsides rapidly once the test is terminated. Also, the participant knows the maximum duration of the pain and that no harm is being done, despite the fact that the test is painful. When a volunteer displays resistance against any study related activity, the "Gedragscode verzet minderjarigen" (Code of conduct in case of resistance in minors) will be followed.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 December 2011
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	Netherlands: 12
Worldwide total number of subjects	12
EEA total number of subjects	12

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)	12
Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Start 28DEC2011 end 13AUG2014 in the Netherlands

Pre-assignment

Screening details:

Healthy male and female subjects aged 16 and 17 years, with consent from parents. Subjects indicating nociceptive tests intolerable at screening or achieving tolerance at >70% of maximum input intensity for any nociceptive test were also excluded. No alcohol or caffeine use 24 hours and no smoking 12 hours before and during studydays.

Period 1

Period 1 title	Studyperiod (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Investigator, Monitor, Subject, Data analyst, Carer, Assessor

Arms

Are arms mutually exclusive?	No
Arm title	Paracetamol

Arm description:

Paracetamol 1000mg

Arm type	Experimental
Investigational medicinal product name	Paracetamol
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Capsule
Routes of administration	Oral use

Dosage and administration details:

Single dose 1000mg

Arm title	Placebo

Arm description:

Placebo

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Capsule
Routes of administration	Oral use

Dosage and administration details:

Single dose

Number of subjects in period 1	Paracetamol	Placebo
Started	12	12
Completed	12	12

Baseline characteristics

Reporting groups	
Reporting group title	Studyperiod

Reporting group description: -

Reporting group values	Studyperiod	Total	
Number of subjects	12	12	
Age categorical Units: Subjects			
Adolescents (12-17 years)	12	12	
Gender categorical Units: Subjects			
Female	7	7	
Male	5	5	

End points

End points reporting groups

Reporting group title	Paracetamol
Reporting group description: Paracetamol 1000mg	
Reporting group title	Placebo
Reporting group description: Placebo	

Primary: Tolerance levels for heat pain

End point title	Tolerance levels for heat pain[1]
End point description:	
End point type	Primary
End point timeframe: Period 1	

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: Please refer to the uploaded PD report for the end points and analyses.

End point values	Paracetamol	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	12	12		
Units: Celcius				
number (not applicable)	12	12		

Attachments (see zip file)	CHDR1117_PD_stats_output_2014-09-

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events: From first dose to follow up.	
Assessment type	Systematic
Dictionary used	
Dictionary name	MedDRA
Dictionary version	19.1
Reporting groups	
Reporting group title	Studyperiod

Reporting group description: -

Serious adverse events	Studyperiod		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 12 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		

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

Non-serious adverse events	Studyperiod		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	2 / 12 (16.67%)		
Nervous system disorders			
Headache			
subjects affected / exposed	1 / 12 (8.33%)		
occurrences (all)	1		
Gastrointestinal disorders			
Nausea			
subjects affected / exposed	1 / 12 (8.33%)		
occurrences (all)	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? No

Limitations and caveats

None reported