Clinical trial results:
Estudio de la eficacia de la administración prolongada de antibióticos betalactámicos frente a la administración intermitente en el tratamiento de la infección causada por microorganismo sensibles pero con concentraciones mínimas inhibitorias altas

Summary

EudraCT number	2010-024117-31
Trial protocol	ES
Global end of trial date	10 June 2014

Results information

Result version number	v1 (current)
This version publication date	25 November 2021
First version publication date	25 November 2021
Summary attachment (see zip file)	APROVECHA publication (Final report Aprobecha.pdf)

Trial information

Trial identification

Sponsor protocol code	APROBECHA

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Clínica Universidad de Navarra
Sponsor organisation address	Avda. Pío XII, 36, Pamplona, Spain, 31008
Public contact	UCEC (ucicec@unav.es), Clínica Universidad de Navarra, 34 948255 400, ucicec@unav.es
Scientific contact	UCEC (ucicec@unav.es), Clínica Universidad de Navarra, 34 948255 400, ucicec@unav.es

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 May 2014
Is this the analysis of the primary completion data?	Yes
Primary completion date	13 May 2014
Global end of trial reached?	Yes
Global end of trial date	10 June 2014
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

Comparar los parámetros farmacocinéticos/farmacodinámicos (PK/PD) de los betalactámicos en infusión prolongada con los de betalactámicos en infusión intermitente

Protection of trial subjects:

The patients participating in the study consented after adequate information about the study. After inclusion, they were under the surveillance of the investigated team, among whose members were the infectious diseases area staff of the center, so they continued to receive the assistance that their clinical situation required. No other health protection measures were necessary.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	21 February 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	Spain: 3
Worldwide total number of subjects	3
EEA total number of subjects	3

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)	1
From 65 to 84 years	2
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

3 patients were examined and finally included in the study. All of them gave their written consent to participate in the study. Two of the patients were randomized to receive beta-lactam in the experimental group, while the third patient participated in the control group.

Pre-assignment

Screening details:

Before the treatment was assigned, the presence of an infectious process was verified with the isolation of a microorganism with a MIC close to the reference cut-off point according to the CLSI (1-2 dilutions). In all cases, Pseudomonas aeruginosa was isolated in the evaluated samples, with a MIC between 8 and 16 for piperacillin-tazobactam.

Period 1

Period 1 title	Treatment (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Not blinded

Blinding implementation details:

NA

Arms

Are arms mutually exclusive?	Yes
Arm title	Control

Arm description:

patients with a beta-lactam antibiotic in intermittent infusion following the classic administration guidelines

Arm type	Active comparator
Investigational medicinal product name	beta-lactams
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Infusion
Routes of administration	Intravenous use

Dosage and administration details:

In all cases, the drug was administered diluted in a volume of 100 ml of physiological saline. Administration according to the classical regimen involves administration of the product as a short 30-minute intravenous infusion.

Arm title	Treatment

Arm description:

Experimental arm, patients with a beta-lactam antibiotic in prolonged infusion.

Arm type	Experimental
Investigational medicinal product name	beta-lactams
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Infusion
Routes of administration	Intravenous use

Dosage and administration details:

In all cases, the drug was administered diluted in a volume of 100 ml of physiological saline. La administración prolongada suponía la administración del producto en una infusión de 240 minutos.

Number of subjects in period 1	Control	Treatment
Started	1	2
Completed	1	2

Baseline characteristics

Reporting groups	
Reporting group title	Treatment

Reporting group description: -

Reporting group values	Treatment	Total	
Number of subjects	3	3	
Age categorical Units: Subjects			
> 18 years	3	3	
Gender categorical Units: Subjects			
Female	1	1	
Male	2	2	

End points

End points reporting groups

Reporting group title	Control
Reporting group description:	
patients with a beta-lactam antibiotic in intermittent infusion following the classic administration guidelines	
Reporting group title	Treatment
Reporting group description:	
Experimental arm, patients with a beta-lactam antibiotic in prolonged infusion.	

Primary: Difference between long infusion and intermittent infusion

End point title	Difference between long infusion and intermittent infusion[1]
End point description:	
After steady equilibrium was reached, blood samples were drawn to measure beta-lactam concentrations. The extractions were carried out in the stipulated times, obtaining the concentrations (µg / ml) of piperacillin	
End point type	Primary
End point timeframe:	
Day of extraaction: Extraction in 30 minutes, 1 hour, 2 hours, 4 hours	

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: It was not possible to perform any analysis of the results, given the low number of patients included in the study. The data of the three patients are presented in a descriptive way.

End point values	Control	Treatment		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	1	2		
Units: Hours				
number (not applicable)	1	2		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events: 30 days	
Assessment type	Systematic

Dictionary used	
Dictionary name	NA
Dictionary version	0

Reporting groups	
Reporting group title	Treatment

Reporting group description: -

Serious adverse events	Treatment		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 3 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		

Frequency threshold for reporting non-serious adverse events: 1 %

Non-serious adverse events	Treatment		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	1 / 3 (33.33%)		
Gastrointestinal disorders			
abdominal pain			
subjects affected / exposed	1 / 3 (33.33%)		
occurrences (all)	1		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
05 July 2012	Changes in protocol and patient information sheet
23 April 2013	Changes in inclusion criteria

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? Yes

Date	Interruption	Restart date
10 June 2014	Inability to recruit patients	-

Notes:

Limitations and caveats

None reported