Clinical trial results:
Amino acids in ileal pouch-anal anastomosis for ulcerative colitis: a randomized, double-blind placebo-controlled trial

Summary

EudraCT number	2014-000784-41
Trial protocol	DK
Global end of trial date	01 December 2017

Results information

Result version number	v1 (current)
This version publication date	21 September 2019
First version publication date	21 September 2019

Trial information

Trial identification

Sponsor protocol code	2014010113

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Department of medicine and endocrinology
Sponsor organisation address	Palle Juul-Jensens Boulevard 99, Aarhus, Denmark, 8200
Public contact	Colorectal research unit, Anders Mark Christensen, Department of surgery P, Aarhus University Hospital, +45 78467712, amch@clin.au.dk
Scientific contact	Colorectal research unit, Anders Mark Christensen, Department of surgery P, Aarhus University Hospital, +45 78467712, amch@clin.au.dk

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 2019
Is this the analysis of the primary completion data?	Yes
Primary completion date	01 December 2017
Global end of trial reached?	Yes
Global end of trial date	01 December 2017
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

To investigate the metabolic effects of intravenous amino acids given during ileal pouch-anal anastomosis surgery for ulcerative colitis.

Protection of trial subjects:

Trial subjects were either under general anesthesia (as part of the planned operation) or received infiltration anasthesia during biopsy collection, while they were still under some influence of general anesthesia.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	06 January 2016
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	Denmark: 8
Worldwide total number of subjects	8
EEA total number of subjects	8

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)	8
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Seventy-two subjects screened with only eight included. Reasons for exclusion were primarily age (>50) and an unwillingness to participate in the trial.

Period 1

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

Arms

Are arms mutually exclusive?	Yes
Arm title	Vaminolac

Arm description:

Amino acids

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

Dosage and administration details:

Weight-adjusted: Weight (in kilograms) x 1,6 = infusion rate (ml/hour)

Arm title	Placebo

Arm description:

Saline

Arm type	Placebo
Investigational medicinal product name	Saline
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Infusion
Routes of administration	Intravenous use

Dosage and administration details:

Weight-adjusted: Weight (in kilograms) x 1,6 = infusion rate (ml/hour).

Investigational medicinal product name	Vaminolac
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Infusion
Routes of administration	Intravenous use

Dosage and administration details:

Weight-adjusted: Weight (in kilograms) x 1,6 = infusion rate (ml/hour)

Number of subjects in period 1	Vaminolac	Placebo
Started	5	3
Completed	5	3

Baseline characteristics

Reporting groups	
Reporting group title	Vaminolac
Reporting group description: Amino acids	
Reporting group title	Placebo
Reporting group description: Saline	

Reporting group values	Vaminolac	Placebo	Total
Number of subjects	5	3	8
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)	5	3	8
From 65-84 years	0	0	0
85 years and over	0	0	0
Gender categorical Units: Subjects			
Female	0	1	1
Male	5	2	7

Subject analysis sets	
Subject analysis set title	Change in insulin
Subject analysis set type	Full analysis
Subject analysis set description: Placebo/saline.	
Subject analysis set title	Change in insulin
Subject analysis set type	Full analysis
Subject analysis set description: Amino acids.	

Reporting group values	Change in insulin	Change in insulin	
Number of subjects	3	5	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	

Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	3	5	
From 65-84 years	0	0	
85 years and over	0	0	
Gender categorical Units: Subjects			
Female			
Male			

End points

End points reporting groups

Reporting group title	Vaminolac
Reporting group description: Amino acids	
Reporting group title	Placebo
Reporting group description: Saline	
Subject analysis set title	Change in insulin
Subject analysis set type	Full analysis
Subject analysis set description: Placebo/saline.	
Subject analysis set title	Change in insulin
Subject analysis set type	Full analysis
Subject analysis set description: Amino acids.	

Primary: Changes in amino acid and fat rate of appearance

End point title	Changes in amino acid and fat rate of appearance[1]
End point description:	
End point type	Primary
End point timeframe: Not applicable. Analyses not performed owing to too few trial subjects (futility in recruiting).	

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: Primary end-point not analyzed owing to premature end of trial (futility in recruiting patients).

End point values	Change in insulin	Change in insulin		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	5[2]	3[3]		
Units: NA				
number (not applicable)	00	00		

Notes:

[2] - Not performed.

[3] - Not performed.

Statistical analyses

No statistical analyses for this end point

Secondary: Change in insulin

End point title	Change in insulin
End point description:	
End point type	Secondary
End point timeframe: Change from value at one 60 minutes before intervention to 300 minutes after.	

End point values	Change in insulin	Change in insulin		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	3[4]	5[5]		
Units: pmol/L				
median (full range (min-max))	2 (-27 to 7)	20 (-4 to 79)		

Notes:

[4] - Placebo/saline

[5] - Amino acids.

Statistical analyses

Statistical analysis title	Wilcoxon rank sum
Comparison groups	Change in insulin v Change in insulin
Number of subjects included in analysis	8
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	= 0.1
Method	Wilcoxon (Mann-Whitney)
Parameter estimate	Median difference (net)

Adverse events

Adverse events information[1]

Timeframe for reporting adverse events:

Adverse events were ascertained from the time tracer infusions were initiated until reversal of loop ileostomy or first out-patient visit.

Adverse event reporting additional description:

As per CT3.

Assessment type	Systematic

Dictionary used

Dictionary name	CT3
Dictionary version	NA

Reporting groups

Reporting group title	Amino acids

Reporting group description: -

Reporting group title	Placebo (saline)

Reporting group description: -

Serious adverse events	Amino acids	Placebo (saline)	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 5 (0.00%)	0 / 3 (0.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events			

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

Non-serious adverse events	Amino acids	Placebo (saline)	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 5 (0.00%)	0 / 3 (0.00%)	

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.

Justification: It is impossible to register this on here. Six non-serious adverse events in the amino acid group and two in the placebo group.

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
01 December 2017	Premature termination of the trial due to futility in recruiting patients.	-

Notes:

Limitations and caveats

None reported