Clinical trial results:
The prevalence of bile acid diarrhéa and the effect of budesonid on the bile acid homeostasis in patients with microscopic colitis

Summary

EudraCT number	2019-002762-12
Trial protocol	DK
Global end of trial date	23 September 2023

Results information

Result version number	v1 (current)
This version publication date	04 December 2024
First version publication date	04 December 2024

Trial information

Trial identification

Sponsor protocol code	SJ-674

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Zealand University Hospital
Sponsor organisation address	Lykkebaekvej 1, Koege, Denmark, 4600
Public contact	Department of Medicine, Zealand University Hospital, rubenlorentsen@hotmail.com
Scientific contact	Department of Medicine, Zealand University Hospital, rubenlorentsen@hotmail.com

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	07 October 2024
Is this the analysis of the primary completion data?	Yes
Primary completion date	09 February 2023
Global end of trial reached?	Yes
Global end of trial date	23 September 2023
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To investigate the prevalence of bile acid diarrhea (BAD) in patients with active microscopic colitis (MC). The apperance of BAD is defined by watery stools and a raised level of 7alpha-hydroxy-4-cholesten-3-on (C4).

Protection of trial subjects:

Patients with flare in microscopic colitis were included and we studied the bile acid homeostasis alongside standard treatment with budesonide. If patients after end oftreatment had relapse in diarrhoea, treatment was initiated by the local responsible phycisian

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 April 2020
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: 60
Worldwide total number of subjects	60
EEA total number of subjects	60

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)	30
From 65 to 84 years	29
85 years and over	1

Subject disposition

Recruitment

Recruitment details:

Patients with suspected active diarrhea due to microscopic colitis were included. During the baseline periode, we screened away patients who did not have diarrhea by objective measure (diary recirdings)

Pre-assignment

Screening details:

We pre-screened 134 patient charts for possible inclusion. 31 did not meeyt inclusion cretiera, 11 met exclusion criteria, 28 declined participation on first contact, 6 were already started on treatment (exlusion criterion), 1 had too old a colonoscopy diagnostic of MC. 60 were eligible for baseline screenining

Period 1

Period 1 title	Baseline screening
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

Arms

Arm title	No Rx

Arm description:

No treatment given, the system does not allow a baseline periode without treamtnet. Info added to circumvent hardstop

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

Dosage and administration details:

Treatment not started during baseline. 3 tablets of 3 mg each (total 9mg) each morning for 6 weeks

Number of subjects in period 1	No Rx
Started	60
Completed	49
Not completed	11
Consent withdrawn by subject	7
No diarrhea	4

Period 2	
Period 2 title	Budesonide treatment
Is this the baseline period?	No
Allocation method	Not applicable
Blinding used	Not blinded

Arms

Arm title	Budesonide
Arm description: -	
Arm type	Experimental
Investigational medicinal product name	Budesonide
Investigational medicinal product code	
Other name	EntoCort
Pharmaceutical forms	Capsule
Routes of administration	Oral use

Dosage and administration details:

3 tablets of 3 mg each (total 9mg) each morning for 6 weeks

Number of subjects in period 2	Budesonide
Started	49
Completed	49

Period 3	
Period 3 title	After treatment
Is this the baseline period?	No
Allocation method	Not applicable
Blinding used	Not blinded

Arms

Arm title	No Rx
Arm description: -	
Arm type	No intervention
No investigational medicinal product assigned in this arm	

Number of subjects in period 3	No Rx
Started	49
Completed	49

Baseline characteristics

End points

End points reporting groups

Reporting group title	No Rx
Reporting group description:	
No treatment given, the system does not allow a baseline periode without treamtnet. Info added to circumvent hardstop	
Reporting group title	Budesonide
Reporting group description: -	
Reporting group title	No Rx
Reporting group description: -	
Subject analysis set title	Primary endpoint
Subject analysis set type	Intention-to-treat
Subject analysis set description:	
All patients who started treatment	

Primary: Co-existing bile acid diarrhea

End point title	Co-existing bile acid diarrhea[1]
End point description:	

End point type	Primary
End point timeframe:	
Baseline C4	

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: The primary end point was the prevalence of co-existing bile acid diarrhea in patients with flare in microscopic colitis. This system only allows creation of statistital analyses with a comparator/control group, however, the needed analysis (Wilson's CI of binary data) does not have a control group. 6 (12%) of 49 patients (95%CI 5-25%) had co-existing bile acid diarrhea

End point values	Budesonide			
Subject group type	Reporting group			
Number of subjects analysed	49			
Units: Bile acid diarrhea				
MC and BAD	6			
MC no BAD	43			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events:	
From treatment start (period2) until end of the 'after treatment' period	
Assessment type	Systematic

Dictionary used	
Dictionary name	SNOMED CT
Dictionary version	20240925

Reporting groups	
Reporting group title	AE reporting

Reporting group description: -

Serious adverse events	AE reporting		
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 49 (4.08%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Breast cancer metastatic	Additional description: SCTID: 254837009. Patient with prior breast cancer. During follow-up a recurrence in an axillary lymph node is discovered		
subjects affected / exposed	1 / 49 (2.04%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Migraine without aura	Additional description: SCTID: 425007008		
subjects affected / exposed	1 / 49 (2.04%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 2 %

Non-serious adverse events	AE reporting		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	4 / 49 (8.16%)		
Respiratory, thoracic and mediastinal disorders			

Rhinitis	Additional description: SCTID: 254837009		
subjects affected / exposed	4 / 49 (8.16%)		
occurrences (all)	4		

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