



## Clinical trial results: Treatment of bile acid malabsorption with liraglutid Summary

EudraCT number	2018-003575-34
Trial protocol	DK
Global end of trial date	01 February 2021

### Results information

Result version number	v1 (current)
This version publication date	09 September 2022
First version publication date	09 September 2022

### Trial information

#### Trial identification

Sponsor protocol code	301084
-----------------------	--------

#### Additional study identifiers

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

Notes:

#### Sponsors

Sponsor organisation name	Herlev og Gentofte Hospital
Sponsor organisation address	Gentofte Hospitalsvej 7, Hellerup, Denmark, 2900
Public contact	Stene Diabetes Center Copenhagen,, Gentofte Hospital, University of Copenhagen, martin.lund.kaarhus@regionh.dk
Scientific contact	Stene Diabetes Center Copenhagen,, Gentofte Hospital, University of Copenhagen, 0045 38674266, martin.lund.kaarhus@regionh.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	06 May 2022
Is this the analysis of the primary completion data?	Yes
Primary completion date	29 January 2021
Global end of trial reached?	Yes
Global end of trial date	01 February 2021
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

The aim of this study is to examine the influence of liraglutide on individuals suffering from bile acid malabsorption (BAM), in a randomised double-blinded, double dummy parallel Group non-inferiority study.

Protection of trial subjects:

Visits at the experimental site

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	09 January 2019
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

## Population of trial subjects

### Subjects enrolled per country

Country: Number of subjects enrolled	Denmark: 52
Worldwide total number of subjects	52
EEA total number of subjects	52

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)	45
From 65 to 84 years	7
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

diagnosed Subjects were asked if a MD was allowed to contact them for further information about the study

### Pre-assignment

Screening details:

Lægelig vurdering samt opfyldelse af inklusionskriterier

### Pre-assignment period milestones

Number of subjects started	52
Number of subjects completed	52

### Period 1

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

### Arms

<b>Arm title</b>	baseline
Arm description: -	
Arm type	baseline
Investigational medicinal product name	none
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Not assigned
Routes of administration	Not mentioned

Dosage and administration details:

0

<b>Number of subjects in period 1</b>	baseline
Started	52
Completed	52

**Period 2**

Period 2 title	intervention
Is this the baseline period?	No
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Monitor, Data analyst, Carer, Assessor

**Arms**

Are arms mutually exclusive?	Yes
------------------------------	-----

<b>Arm title</b>	Liraglutide
------------------	-------------

Arm description: -

Arm type	Experimental
Investigational medicinal product name	liraglutide
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Concentrate and solvent for dispersion for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

0.6 to 1.8 mg

<b>Arm title</b>	Colesevelam
------------------	-------------

Arm description: -

Arm type	Active comparator
Investigational medicinal product name	colesevelam
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Capsule, soft + tablet
Routes of administration	Oral use

Dosage and administration details:

1.875 g twice daily

<b>Number of subjects in period 2</b>	Liraglutide	Colesevelam
Started	26	26
Completed	25	25
Not completed	1	1
Adverse event, non-fatal	1	1

## Baseline characteristics

### Reporting groups

Reporting group title	baseline
-----------------------	----------

Reporting group description: -

Reporting group values	baseline	Total	
Number of subjects	52	52	
Age categorical			
Units: Subjects			
Adults (18-64 years)	45	45	
From 65-84 years	7	7	
Age continuous			
Units: years			
arithmetic mean	51.7		
standard deviation	± 13.3	-	
Gender categorical			
Units: Subjects			
Female	33	33	
Male	19	19	

## End points

### End points reporting groups

Reporting group title	baseline
Reporting group description: -	
Reporting group title	Liraglutide
Reporting group description: -	
Reporting group title	Colesevelam
Reporting group description: -	

### Primary: Risk difference between interventions

End point title	Risk difference between interventions
End point description:	
End point type	Primary
End point timeframe:	
6 weeks of intervention	

End point values	Liraglutide	Colesevelam		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: %	56	23		

### Statistical analyses

Statistical analysis title	Risk difference
Comparison groups	Liraglutide v Colesevelam
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	non-inferiority
Parameter estimate	Risk difference (RD)
Point estimate	0
Confidence interval	
level	95 %
sides	1-sided
lower limit	-1

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

From intervention start and three weeks after last intervention

Assessment type	Non-systematic
-----------------	----------------

### Dictionary used

Dictionary name	no specific
-----------------	-------------

Dictionary version	1
--------------------	---

### Reporting groups

Reporting group title	Liraglutide
-----------------------	-------------

Reporting group description: -

Reporting group title	Colesevelam
-----------------------	-------------

Reporting group description: -

Serious adverse events	Liraglutide	Colesevelam	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 26 (0.00%)	0 / 26 (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: 5 %

Non-serious adverse events	Liraglutide	Colesevelam	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	6 / 26 (23.08%)	1 / 26 (3.85%)	
Gastrointestinal disorders			
Nausea			
subjects affected / exposed	6 / 26 (23.08%)	1 / 26 (3.85%)	
occurrences (all)	26	26	

## 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
16 March 2020	SARSCOV2 virus paused the project for 4 months	-

Notes:

### Limitations and caveats

None reported

---

### Online references

<http://www.ncbi.nlm.nih.gov/pubmed/35868334>