Clinical trial results:
Functional Dyspepsia: validation of a questionnaire for symptom assessment in patients suffering from Postprandial Distress Syndrome (Functional Dyspepsia): assessment of sensitivity to change in PDS symptom severity in an interventional study

Summary

EudraCT number	2012-004296-39
Trial protocol	BE
Global end of trial date	08 January 2015

Results information

Result version number	v1 (current)
This version publication date	18 April 2021
First version publication date	18 April 2021

Trial information

Trial identification

Sponsor protocol code	LPDSItopride

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	UZLeuven
Sponsor organisation address	Herestraat 49, Leuven, Belgium, 3000
Public contact	Jan Tack, UZLeuven, 32 16344225, jan.tack@uzleuven.be
Scientific contact	Florencia Carbone, UZLeuven, 32 16330816, florencia.carbone@kuleuven.be

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	29 November 2015
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	08 January 2015
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To validate a PRO in line with the FDA guideline, according to early EMA input and with close adherence with DSSI instrument that showed responsiveness in a US phase II.

Protection of trial subjects:

not applicable

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	05 September 2013
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	Belgium: 100
Worldwide total number of subjects	100
EEA total number of subjects	100

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)	94
From 65 to 84 years	6
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Consecutive out-patients diagnosed with postprandial distress syndrome according to Rome III criteria at eleven gastroenterology practices in Belgium were eligible for the study. Both French and Dutch speaking patients between the ages of 18 and 70 years were included.

Pre-assignment

Screening details:

patients were included if they were confirmed to suffer from active postprandial distress syndrome as per LPDS scoring system during the 2 weeks eligibility period. This required the presence of at least moderate (score 2) postprandial fullness and/or early satiation symptoms on at least 4 days during the 2 weeks eligibility period.

Period 1

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

Arms

Are arms mutually exclusive?	No
Arm title	itopride

Arm description:

Itopride (100 mg three times daily)

Arm type	Active comparator
Investigational medicinal product name	itopride
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

Itopride 100 mg, three times daily

Arm title	placebo

Arm description:

placebo three times daily

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

Dosage and administration details:

placebo tablet, three times daily

Number of subjects in period 1	itopride	placebo
Started	60	60
Completed	60	60

Baseline characteristics

Reporting groups[1]	
Reporting group title	treatment period
Reporting group description: -	

Notes:

[1] - The number of subjects reported to be in the baseline period is not equal to the worldwide number of subjects enrolled in the trial. It is expected that these numbers will be the same.
Justification: Statistical analysis was performed after inclusion of the first 60 patients.

Reporting group values	treatment period	Total	
Number of subjects	60	60	
Age categorical Units: Subjects			
In utero		0	
Preterm newborn infants (gestational age < 37 wks)		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)		0	
From 65-84 years		0	
85 years and over		0	
Age continuous			
patients between the ages of 18 and 70 years			
Units: years			
arithmetic mean	38.2		
standard deviation	± 2.1	-	
Gender categorical Units: Subjects			
Female	50	50	
Male	10	10	

End points

End points reporting groups

Reporting group title	itopride
Reporting group description: Itopride (100 mg three times daily)	
Reporting group title	placebo
Reporting group description: placebo three times daily	

Primary: Validation of the Leuven Postprandial Distress Scale

End point title	Validation of the Leuven Postprandial Distress Scale

End point description:

The LPDS diary, comprising eight symptoms with verbal descriptors rated for severity (0–4), was derived from focus groups and cognitive debriefing. It was used in a 2-week run-in, 8-week double-blind placebo-controlled trial of itopride 100 mg t.d.s. Results in 60 patients, with concealed treatment allocation, were used to analyse LPDS content validity, consistency, reliability and responsiveness. Patients also filled out Patient Assessment of Gastrointestinal Symptoms (PAGI-SYM), Nepean Dyspepsia Index, overall treatment evaluation and overall symptom severity questionnaires. Construct validity was evaluated by known-group analyses and by correlating LPDS with these additional questionnaires. Minimum Clinically Important Difference was determined from threshold changes in anchor questionnaires.

End point type	Primary

End point timeframe:

The end of treatment measurements (visit 6 of the trial) were used for responsiveness.

End point values	itopride	placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	60[1]	60[2]		
Units: severity scale				
arithmetic mean (standard deviation)	0.58 (± 0.11)	0.58 (± 0.11)		

Notes:

[1] - the code was not broken for the analysis of this study aim. Analysis was performed on total of 60 pt

[2] - the code was not broken for the analysis of this study aim. Analysis was performed on total of 60 pt

Statistical analyses

Statistical analysis title	MINIMUM CLINICALLY IMPORTANT DIFFERENCE

Statistical analysis description:

The minimum clinically important difference was determined for each anchor at both visits 4 and 6 by regressing the change between visit 2 and visit 4 or 6 in the postprandial distress syndrome domain of the LPDS (dependent variable) on the corresponding change in an anchor variable (independent variable).

Comparison groups	placebo v itopride

Number of subjects included in analysis	120
Analysis specification	Pre-specified
Analysis type	superiority[3]
P-value	= 0 [4]
Method	Regression, Linear

Notes:

[3] - The slope of this
regression model defines the minimum clinically important
difference, since it estimates how much the postprandial
distress syndrome changes within patients, on
average, per unit (one point) change in the external measure.
Scatterplots of dependent and independent variables
were examined to check that there is no clear
departure from the assumption of linearity.

[4] - P value is not applicable. The study aim was the validation of a questionnaire. The code was not broken for this analysis. Statistical nalysis is performed on total of 60 subjects.

Adverse events

Adverse events information[1]

Timeframe for reporting adverse events:

For each individual, corresponds to timeframe of study participation (from signing of informed consent until last visit).

Adverse event reporting additional description:

The most common possible adverse reactions to the study drug (itopride or placebo, as the code was not broken) were headache (13%), insomnia (5%) and dizziness (3%).

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	23

Frequency threshold for reporting non-serious adverse events: 5 %

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: The most common possible adverse reactions to the study drug (itopride or placebo, as the code was not broken) were headache (13%), insomnia (5%) and dizziness (3%).

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

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

This trial was set up to investigate if The Leuven Postprandial Distress Scale (LPDS) is a sensitive and reliable patient-reported outcome instrument to assess symptoms in the functional dyspepsia/postprandial distress syndrome.

Notes:

Online references

http://www.ncbi.nlm.nih.gov/pubmed/27518319