Clinical trial results:
Perhexiline therapy in patients with heart failure with preserved left ventricular ejection fraction(HFpEF syndrome)

Summary

EudraCT number	2006-001109-28
Trial protocol	GB
Global end of trial date	03 February 2014

Results information

Result version number	v1 (current)
This version publication date	18 August 2018
First version publication date	18 August 2018

Trial information

Trial identification

Sponsor protocol code	pgrf/141/09

Additional study identifiers

ISRCTN number	ISRCTN25678870
ClinicalTrials.gov id (NCT number)	NCT00839228
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	University of Aberdeen
Sponsor organisation address	Research Governance, Foresterhill House Annexe, Aberdeen, United Kingdom, AB25 2ZB
Public contact	Michael P Frenneaux, University of Aberdeen, 0121 4146926, M.P.Frenneaux@bham.ac.uk
Scientific contact	Michael P Frenneaux, University of Aberdeen, 0121 4146926, M.P.Frenneaux@bham.ac.uk
Sponsor organisation name	NHS Grampian
Sponsor organisation address	R&D Office, Foresterhill House Annexe, Aberdeen, United Kingdom, AB25 2ZB
Public contact	Professor Frenneaux, NHS Grampian Health Board, 0121 4146926, M.P.Frenneaux@bham.ac.uk
Scientific contact	Professor Frenneaux, NHS Grampian Health Board, 0121 4146926, M.P.Frenneaux@bham.ac.uk

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	01 August 2014
Is this the analysis of the primary completion data?	Yes
Primary completion date	03 February 2014
Global end of trial reached?	Yes
Global end of trial date	03 February 2014
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To test whether perhexiline improve exercise capacity (peak vo2) in patients with heart failure with preserved left ventricular ejection fraction(HFpEFsyndrome)

Protection of trial subjects:

A total of 72 patients who meet the selection criteria will be recruited from NHS Grampian and University Hospitals Birmingham NHS trust. Informed consent will be obtained from each patient.

Background therapy:

We postulate that perhexiline-induced shifts in metabolism will lead to improved cardiac energetic, exercise capacity, quality of like and myocardial function in HFpEF patients.

Evidence for comparator: -

Actual start date of recruitment	01 July 2011
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	United Kingdom: 72
Worldwide total number of subjects	72
EEA total number of subjects	72

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)	19

From 65 to 84 years	51
85 years and over	2

Subject disposition

Recruitment

Recruitment details:

A total of 72 patients who meet the selection criteria will be recruited from NHS Grampian and University Hospitals Birmingham NHS trust.

Pre-assignment

Screening details:

Clinical symptoms and signs consistent with HF; LVEF >50%, with no evidence of significant valvular disease, no hypertrophic cardiomyopathy and no evidence of pericardial constriction; A peak VO2 <80% predicted, with RER >1 and with a pattern of gas exchange on metabolic exercise testing indicating a cardiac cause for limitation; All patient recrui

Period 1

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

Arms

Arm title	Perhexiline vs Placebo

Arm description:

Perhexiline 100mg o bd for 3 months

Arm type	Active comparator
Investigational medicinal product name	Perhexiline Maleate
Investigational medicinal product code	021418
Other name	PEXSIG
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

Diameter 8.5mm. Each tablet contains 100mg Perhexiline Maleate (100mg o bd 3 months)

Number of subjects in period 1	Perhexiline vs Placebo
Started	72
Completed	72

Baseline characteristics

Reporting groups	
Reporting group title	Overall trial

Reporting group description: -

Reporting group values	Overall trial	Total	
Number of subjects	72	72	
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)	19	19	
From 65-84 years	51	51	
85 years and over	2	2	
Gender categorical Units: Subjects			
Female	48	48	
Male	24	24	

End points

End points reporting groups

Reporting group title	Perhexiline vs Placebo
Reporting group description:	
Perhexiline 100mg o bd for 3 months	

Primary: Peak oxygen consumption (Vo2max)

End point title	Peak oxygen consumption (Vo2max)[1]
End point description:	

End point type	Primary
End point timeframe:	
Not documented.	

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: No publication has been submitted to date therefore unable to specify statistical analysis.

End point values	Perhexiline vs Placebo			
Subject group type	Reporting group			
Number of subjects analysed	72			
Units: carbon dioxide re-breathing				
number (not applicable)	72			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

All SAEs will be reported to the sponsor and PI within 1 working day of discovery or notification of the event. All AEs occurring during the study observed by the investigator or reported by the patient will be reported on the CRF.

Assessment type	Systematic

Dictionary used

Dictionary name	None
Dictionary version	0

Reporting groups

Reporting group title	Perhexiline vs Placebo

Reporting group description: -

Serious adverse events	Perhexiline vs Placebo		
Total subjects affected by serious adverse events			
subjects affected / exposed	3 / 5 (60.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Cardiac disorders			
Muskuloskeletal Chest Pain			
subjects affected / exposed	1 / 5 (20.00%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Blood and lymphatic system disorders			
Pulmonary embolism			
subjects affected / exposed	1 / 5 (20.00%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Endocrine disorders			
Pancreatic cancer			
subjects affected / exposed	1 / 5 (20.00%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		

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

Non-serious adverse events	Perhexiline vs Placebo		
Total subjects affected by non-serious adverse events subjects affected / exposed	2 / 5 (40.00%)		
Surgical and medical procedures Knee Replacement subjects affected / exposed occurrences (all)	1 / 5 (20.00%) 1		
Spinal Surgery subjects affected / exposed occurrences (all)	1 / 5 (20.00%) 1		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
27 June 2012	AM05 - Addition of BNP tests at baseline and post exercise.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported