Clinical trial results:
Safety and Tolerability of Sildenafil in Patients with Eisenmenger Physiology

Summary

EudraCT number	2006-004705-26
Trial protocol	GB
Global end of trial date	27 February 2009

Results information

Result version number	v1 (current)
This version publication date	06 June 2020
First version publication date	06 June 2020

Trial information

Trial identification

Sponsor protocol code	CRO529

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Imperial College London
Sponsor organisation address	South Kensington Campus, London, United Kingdom, SW7 2AZ
Public contact	PROFESSOR MICHAEL GATZOULIS, Imperial College London, +44 (0)20 7352 8121, m.gatzoulis@imperial.ac.uk
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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 February 2010
Is this the analysis of the primary completion data?	Yes
Primary completion date	27 February 2009
Global end of trial reached?	Yes
Global end of trial date	27 February 2009
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To examine safety and tolerability of oral sildenafil in patients with Eisenmenger physiology.

Primary endpoint:
Effects of sildenafil on systemic oxygen saturation in patients with pulmonary arterial hypertension related to Eisenmenger physiology

Protection of trial subjects:

None

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 April 2008
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	United Kingdom: 12
Worldwide total number of subjects	12
EEA total number of subjects	12

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)	12
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Patients with Eisenmenger physiology (non-restrictive intra- or extra-cardiac communication with a right-to-left shunt at rest), in New York Heart Association (NYHA) class III and followed at a single tertiary center were recruited. Twelve patients with Eisenmenger physiology were recruited between April 2008 and February 2009.

Pre-assignment

Screening details:

All participants were admitted to the hospital for 2 days at the start of the study. Baseline assessment consisted of a QoL questionnaire, transthoracic echocardiogram, six-minute walk test (6MWT) and blood test.

Period 1

Period 1 title	Overall (overall period)
Is this the baseline period?	Yes
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

Blinding implementation details:

Open-label study

Arms

Arm title	all patients

Arm description:

All participants received Sildenafil for 3 months.

Arm type	Experimental
Investigational medicinal product name	Sildenafil
Investigational medicinal product code	
Other name	Revatio ® 20 mg film-coated tablets
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

20 mg three times daily for 3 months

Number of subjects in period 1	all patients
Started	12
Completed	12

Baseline characteristics

Reporting groups	
Reporting group title	Overall

Reporting group description: -

Reporting group values	Overall	Total	
Number of subjects	12	12	
Age categorical Units: Subjects			
Adults (18-64 years)	12	12	
Age continuous Units: years			
arithmetic mean	34.3		
standard deviation	± 10.2	-	
Gender categorical Units: Subjects			
Female	10	10	
Male	2	2	

End points

End points reporting groups

Reporting group title	all patients
Reporting group description: All participants received Sildenafil for 3 months.	
Subject analysis set title	Baseline
Subject analysis set type	Sub-group analysis
Subject analysis set description: Baseline data of the participants	

Primary: Oxygen saturation

End point title	Oxygen saturation
End point description:	
End point type	Primary
End point timeframe: 3 months	

End point values	all patients	Baseline		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	12	12		
Units: percent				
arithmetic mean (standard deviation)	82.6 (± 11)	83.8 (± 3.8)		

Statistical analyses

Statistical analysis title	Oxigen saturation
Statistical analysis description: Baseline compare to 3 months	
Comparison groups	all patients v Baseline
Number of subjects included in analysis	24
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.76
Method	Fisher exact

Secondary: Camphor scores Symptoms

End point title	Camphor scores Symptoms
End point description:	
End point type	Secondary

End point timeframe:
3 months

End point values	all patients	Baseline		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	12	12		
Units: scores				
arithmetic mean (standard deviation)	5.3 (± 3.6)	11 (± 2.7)		

Statistical analyses

Statistical analysis title	Symptome scores
Statistical analysis description: Compare baseline to 3 months	
Comparison groups	all patients v Baseline
Number of subjects included in analysis	24
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.002
Method	Fisher exact

Adverse events

Adverse events information	
Timeframe for reporting adverse events: 3 months	
Assessment type	Systematic
Dictionary used	
Dictionary name	MedDRA
Dictionary version	10
Reporting groups	
Reporting group title	all patients

All participants received Sildenafil for 3 months.Reporting roup title

Respiratory, thoracic and mediastinal disorders			
Nasal congestion			
subjects affected / exposed	2 / 12 (16.67%)		
occurrences (all)	2		
Musculoskeletal and connective tissue disorders			
Myalgia			
subjects affected / exposed	4 / 12 (33.33%)		
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

Online references

http://www.ncbi.nlm.nih.gov/pubmed/20304507