Clinical trial results:
The effect of testosterone replacement in patients with hypogonadotroph hypogonadism due to opioid treatment for non-malignant disease
A double-blinded, randomized and placebo-controlled trial

Summary

EudraCT number	2014-004729-42
Trial protocol	DK
Global end of trial date	04 July 2019

Results information

Result version number	v1 (current)
This version publication date	26 November 2020
First version publication date	26 November 2020

Trial information

Trial identification

Sponsor protocol code	22102014

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT02433730
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Odense University Hospital
Sponsor organisation address	kløvervænget 6, Odense, Denmark, 5000
Public contact	Department of endocrinology, Odense University Hospital, department of endocrinology, +45 65412502, MSA@rsyd.dk
Scientific contact	Marianne Andersen, Odense University Hospital, department of endocrinology, +45 65412502, MSA@rsyd.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	01 August 2019
Is this the analysis of the primary completion data?	Yes
Primary completion date	04 July 2019
Global end of trial reached?	Yes
Global end of trial date	04 July 2019
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To evaluate the efficacy of testosterone replacement therapy in men with OPIAD on body composition, the haemostatic system, glucose metabolism, muscle function, pain sensitivity, pain modulation, lipids, sexual function and quality of life.

Protection of trial subjects:

NA

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 January 2015
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: 41
Worldwide total number of subjects	41
EEA total number of subjects	41

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)	41
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Deltagere inviteres fra smerteklinikken OUH

Pre-assignment

Screening details:

lægelig vurdering

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, Monitor, Data analyst

Arms

Are arms mutually exclusive?	Yes
Arm title	Testosterone

Arm description:

Modtager Nebido i 6 mdr

Arm type	Active comparator
Investigational medicinal product name	Nebido
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection in pre-filled injector
Routes of administration	Intramuscular use

Dosage and administration details:

1000 mg intramuscular injection

Arm title	Placebo

Arm description:

injektions with placebo

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

Dosage and administration details:

4ml intramuscular injection

Number of subjects in period 1	Testosterone	Placebo
Started	20	21
Completed	18	20
Not completed	2	1
Adverse event, non-fatal	2	1

Baseline characteristics

Reporting groups	
Reporting group title	Testosterone
Reporting group description: Modtager Nebido i 6 mdr	
Reporting group title	Placebo
Reporting group description: injektions with placebo	

Reporting group values	Testosterone	Placebo	Total
Number of subjects	20	21	41
Age categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	20	21	41
From 65-84 years	0	0	0
85 years and over	0	0	0
Gender categorical Units: Subjects			
Female	0	0	0
Male	20	21	41

End points

End points reporting groups	
Reporting group title	Testosterone
Reporting group description: Modtager Nebido i 6 mdr	
Reporting group title	Placebo
Reporting group description: injektions with placebo	

Primary: muscle mass	
End point title	muscle mass
End point description:	
End point type	Primary
End point timeframe: 6 months	

End point values	Testosterone	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	20	20		
Units: kilo units				
median (inter-quartile range (Q1-Q3))	60.4 (53.7 to 66.3)	58.6 (53.9 to 63.7)		

Statistical analyses

Statistical analysis title	Statistical analysis
Comparison groups	Testosterone v Placebo
Number of subjects included in analysis	40
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.05
Method	Wilcoxon (Mann-Whitney)

Primary: weight	
End point title	weight
End point description:	
End point type	Primary

End point timeframe:
6 months

End point values	Testosterone	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	21		
Units: kg				
median (inter-quartile range (Q1-Q3))	97.6 (88.6 to 107.8)	100.9 (87.8 to 112.2)		

Statistical analyses

Statistical analysis title	Statistical analysis
Comparison groups	Testosterone v Placebo
Number of subjects included in analysis	39
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.05
Method	Wilcoxon (Mann-Whitney)

Adverse events

Adverse events information	
Timeframe for reporting adverse events: Within 24 h	
Assessment type	Systematic
Dictionary used	
Dictionary name	MedDRA
Dictionary version	1
Reporting groups	
Reporting group title	placebo
Reporting group description: -	
Reporting group title	testosterone
Reporting group description: -	

Serious adverse events	placebo	testosterone	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 21 (0.00%)	0 / 20 (0.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0		

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

Non-serious adverse events	placebo	testosterone	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	1 / 21 (4.76%)	2 / 20 (10.00%)	
Skin and subcutaneous tissue disorders			
Rash			
subjects affected / exposed	1 / 21 (4.76%)	2 / 20 (10.00%)	
occurrences (all)	1	2	

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/32213659