



Clinical trial results:

Metabolic changes due to iatrogenic hypogonadism in patients with prostate cancer: orchiectomy vs. triptorelin

Summary

EudraCT number	2013-002553-29
Trial protocol	DK
Global end of trial date	12 March 2016

Results information

Result version number	v1 (current)
This version publication date	29 November 2021
First version publication date	29 November 2021

Trial information

Trial identification

Sponsor protocol code	kk-2013
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Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Department of Urology
Sponsor organisation address	Borgmester Ib Juuls vej 23, Herlev, Denmark, 2730
Public contact	Department of Urology, Herlev Hospi, Department of Urology, Herlev Hospital, 0045 38681505, peter.busch.oestergren@regionh.dk
Scientific contact	Department of Urology, Herlev Hospi, Department of Urology, Herlev Hospital, 0045 38681505, peter.busch.oestergren@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	12 November 2021
Is this the analysis of the primary completion data?	Yes
Primary completion date	12 March 2016
Global end of trial reached?	Yes
Global end of trial date	12 March 2016
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

Is to investigate if the modality of Androgen deprivation therapy is of importance when looking at body composition, glucose- and lipid metabolism.

Protection of trial subjects:

This was a phase IV trial comparing 2 well known treatments (surgical orchiectomy vs. triptorelin). Patients were monitored closely for any AEs and SAEs.

Background therapy:

None

Evidence for comparator: -

Actual start date of recruitment	01 September 2013
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: 58
Worldwide total number of subjects	58
EEA total number of subjects	58

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)	4
From 65 to 84 years	52
85 years and over	2

Subject disposition

Recruitment

Recruitment details:

58 patients were recruited from september 18 2013 until April 3 2015.

78 patients were screened for eligibility. All screening and inclusion was done from a single center in Denmark.

Pre-assignment

Screening details:

Principle inclusion criteria:

1. diagnosed prostate cancer, where life long ADT is indicated. 2. Age 18 - 90 Years. 3. ECOG Performance status 0-2

Principal exclusion criteria:

1. Previous androgen deprivation therapy. 2. Known diabetes mellitus or HbA1c > 48.

Period 1

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

Blinding implementation details:

The study was not blinded.

Arms

Are arms mutually exclusive?	Yes
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Arm title	Subcapsular orchiectomy
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Arm description:

Subcapsular orchiectomy

Arm type	Surgical comparator
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No investigational medicinal product assigned in this arm

Arm title	Triptorelin
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Arm description:

Triptorelin 22.5 mg intramuscular every 24 weeks

Arm type	Experimental
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Investigational medicinal product name	Triptorelin
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Investigational medicinal product code	PR1
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Other name	Pamorelin
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Pharmaceutical forms	Concentrate and solvent for solution for injection/infusion
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Routes of administration	Intramuscular use
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Dosage and administration details:

22.5mg every 24 weeks

Number of subjects in period 1	Subcapsular orchiectomy	Triptorelin
Started	29	29
Completed	23	25
Not completed	6	4
Consent withdrawn by subject	1	-
Disease progression	4	4
Diabetes mellitus	1	-

Baseline characteristics

Reporting groups

Reporting group title

Overall trial

Reporting group description: -

Reporting group values	Overall trial	Total	
Number of subjects	58	58	
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			
Eligible men were between the age of 18 to 90 years			
Units: years			
arithmetic mean	73		
standard deviation	± 7.5	-	
Gender categorical			
Men with prostate cancer			
Units: Subjects			
Female	0	0	
Male	58	58	

End points

End points reporting groups

Reporting group title	Subcapsular orchiectomy
Reporting group description:	
Subcapsular orchiectomy	
Reporting group title	Triptorelin
Reporting group description:	
Triptorelin 22.5 mg intramuscular every 24 weeks	

Primary: Fasting plasma glucose

End point title	Fasting plasma glucose
End point description:	
End point type	Primary
End point timeframe:	
Measured at baseline, 12, 24 and 48 weeks	

End point values	Subcapsular orchiectomy	Triptorelin		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	28	29		
Units: mmol/L				
arithmetic mean (standard deviation)	6.0 (\pm 0.7)	6.1 (\pm 0.7)		

Attachments (see zip file)	Between group differences in changed glucose measu/Table 2a.
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Statistical analyses

Statistical analysis title	Between group difference in fasting glucose
Statistical analysis description:	
Linear mixed models using generalized least squares were used to analyse the between-group differences in the changes in the primary endpoint with repeated measures data.	
Comparison groups	Subcapsular orchiectomy v Triptorelin
Number of subjects included in analysis	57
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.05
Method	Mixed models analysis
Parameter estimate	Mean difference (final values)
Point estimate	0.2

Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.1
upper limit	0.4

Adverse events

Adverse events information^[1]

Timeframe for reporting adverse events:

Adverse event assessment was done from trial start (01.09.2013 until 48 weeks after last patient was included (04.03.2015))

Adverse event reporting additional description:

AEs were assessed by the Common Terminology Criteria for Adverse Events (CTCAE) version 4.0

Assessment type	Systematic
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Dictionary used

Dictionary name	CTCAE
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Dictionary version	4.0
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Reporting groups

Reporting group title	Entire cohort
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Reporting group description:

Men undergo either orchiectomy or triptorelin injection therapy

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: Only SAE were systematically reported to sponsor as this was a phase IV trial comparing two well known, and approved, modalities of androgen deprivation therapy (orchiectomy vs. triptorelin).

Serious adverse events	Entire cohort		
Total subjects affected by serious adverse events			
subjects affected / exposed	14 / 57 (24.56%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Investigations			
All SAE			
subjects affected / exposed	14 / 57 (24.56%)		
occurrences causally related to treatment / all	1 / 35		
deaths causally related to treatment / all	0 / 0		

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

Non-serious adverse events	Entire cohort		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 57 (0.00%)		

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/30388320>

<http://www.ncbi.nlm.nih.gov/pubmed/27939836>