

**Clinical trial results:****Kan behandling med lavmolekylært heparin under graviditet med intrauterin væksthæmning øge fostervæksten?****Summary**

EudraCT number	2011-000818-20
Trial protocol	DK
Global end of trial date	30 December 2016

**Results information**

Result version number	v1 (current)
This version publication date	27 December 2020
First version publication date	27 December 2020

**Trial information****Trial identification**

Sponsor protocol code	2009/318
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**Additional study identifiers**

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

Notes:

**Sponsors**

Sponsor organisation name	Aarhus University Hospital
Sponsor organisation address	palle Juul-jensens Boulevard 99, Aarhus N, Denmark, 8200
Public contact	Anette Tarp Hansen, Aarhus University Hospital , anette.tarp.hansen@dadlnet.dk
Scientific contact	Anette Tarp Hansen, Aarhus University Hospital , anette.tarp.hansen@dadlnet.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	30 December 2016
Is this the analysis of the primary completion data?	Yes
Primary completion date	30 December 2016
Global end of trial reached?	Yes
Global end of trial date	30 December 2016
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

Fødselsvægt/Birth weight

Protection of trial subjects:

Monitoring by center for Good Clinical Practice, Aarhus University Hospital.

Upon first injection of active drug, study participants stayed 30 minutes for taking care of hypothetical allergic reactions.

Control of platelets 14 days after randomisation to exclude heparin induced thrombocytopenia

Plasma creatinine measured upon inclusion to exclude renal impairment

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	11 November 2011
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	Denmark: 53
Worldwide total number of subjects	53
EEA total number of subjects	53

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)	53
From 65 to 84 years	0
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

Inclusion criteria:

1. Singleton pregnancy
2. FGR: Estimated fetal weight is  $-22\%$  of expected or increased resistance in the uterine arteries: pulsatility index  $>1.7$ .
3. Can understand and read Danish

### Pre-assignment

Screening details:

Inclusion criteria:

1. Singleton pregnancy
2. FGR: Estimated fetal weight is  $-22\%$  of expected or increased resistance in the uterine arteries: pulsatility index  $>1.7$ .
3. Can understand and read Danish

### Pre-assignment period milestones

Number of subjects started	53
Number of subjects completed	53

### Period 1

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

### Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	Treatment arm

Arm description:

Tinzaparin 4,500 IE daily subcutaneously until 37 gestational weeks or delivery

Arm type	Experimental
Investigational medicinal product name	Innohep
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

Innohep 4,500 IE once daily dose subcutaneously

<b>Arm title</b>	No treatment
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Arm description:

No intervention

Arm type	No intervention
No investigational medicinal product assigned in this arm	

<b>Number of subjects in period 1</b>	Treatment arm	No treatment
Started	27	26
Completed	27	26

## Baseline characteristics

### Reporting groups

Reporting group title	Treatment arm
Reporting group description: Tinzaparin 4,500 IE daily subcutaneously until 37 gestational weeks or delivery	
Reporting group title	No treatment
Reporting group description: No intervention	

Reporting group values	Treatment arm	No treatment	Total
Number of subjects	27	26	53
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)	27	26	53
From 65-84 years	0	0	0
85 years and over	0	0	0
Age continuous			
Units: years			
arithmetic mean	33	32	
standard deviation	± 6	± 6	-
Gender categorical			
Units: Subjects			
Female	27	26	53
Male	0	0	0

## End points

### End points reporting groups

Reporting group title	Treatment arm
Reporting group description: Tinzaparin 4,500 IE daily subcutaneously until 37 gestational weeks or delivery	
Reporting group title	No treatment
Reporting group description: No intervention	

### Primary: Birth weight

End point title	Birth weight <sup>[1]</sup>
End point description:	
End point type	Primary
End point timeframe: At delivery	

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: The statistical analysis are described in the published paper (please follow the attached link)

End point values	Treatment arm	No treatment		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	27	26		
Units: grams	2222	1968		

### Statistical analyses

No statistical analyses for this end point

### Primary: Birthweight % of expected

End point title	Birthweight % of expected <sup>[2]</sup>
End point description:	
End point type	Primary
End point timeframe: At delivery	

Notes:

[2] - 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: The statistical analysis are described in the published paper (please follow the attached link)

<b>End point values</b>	Treatment arm	No treatment		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	27	26		
Units: percentage	71	69		

### Statistical analyses

No statistical analyses for this end point

### Primary: Average fetal growth rate

End point title	Average fetal growth rate <sup>[3]</sup>
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End point description:

End point type	Primary
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End point timeframe:

The measurable unit is really a growth rate, e.g., grams/week as measured from baseline to delivery.

Notes:

[3] - 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: The statistical analysis are described in the published paper (please follow the attached link)

<b>End point values</b>	Treatment arm	No treatment		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	27	26		
Units: grams				
arithmetic mean (confidence interval 95%)	124 (110 to 138)	119 (99 to 139)		

### Statistical analyses

No statistical analyses for this end point

## Adverse events

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### Adverse events information<sup>[1]</sup>

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Timeframe for reporting adverse events:

Every second week from randomisation until date of delivery

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Assessment type	Systematic
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### Dictionary used

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Dictionary name	MedDRA
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Dictionary version	13
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Frequency threshold for reporting non-serious adverse events: 0 %

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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: We observed no non-serious or serious adverse events related to the trial or trial drug. In the linked published paper, we describe adverse events not related to the trial and trial drug.

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
11 June 2014	Adding of additional study center for improving the number of eligible patients
13 January 2016	Change of data sources

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported

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### Online references

<http://www.ncbi.nlm.nih.gov/pubmed/30114561>