



## Clinical trial results:

### **A Multicenter, Open-Label, Randomized, Two Arm Cross-Over Study Assessing Dyad (Subject and Caregiver) and Adult Subject Perception of Convenience and Preference of the Newly Developed Genotropin Mark VII Pen**

#### **Summary**

EudraCT number	2009-017354-12
Trial protocol	SE CZ SK DE GB NL
Global end of trial date	26 October 2011

#### **Results information**

Result version number	v1 (current)
This version publication date	15 March 2016
First version publication date	09 July 2015

#### **Trial information**

##### **Trial identification**

Sponsor protocol code	A6281297
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##### **Additional study identifiers**

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01112865
WHO universal trial number (UTN)	-

Notes:

##### **Sponsors**

Sponsor organisation name	Pfizer Inc.
Sponsor organisation address	235 E 42nd Street, New York, United States, NY 10017
Public contact	Pfizer ClinicalTrials.gov Call Center, Pfizer Inc., 1 800-718-1021, ClinicalTrials.gov_Inquiries@pfizer.com
Scientific contact	Pfizer ClinicalTrials.gov Call Center, Pfizer Inc., 1 800-718-1021, ClinicalTrials.gov_Inquiries@pfizer.com

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?	Yes

Notes:

## Results analysis stage

Analysis stage	Final
Date of interim/final analysis	09 March 2012
Is this the analysis of the primary completion data?	No
Global end of trial reached?	Yes
Global end of trial date	26 October 2011
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

To evaluate the ease of use or convenience of the new Genotropin Mark VII pen compared to the current Genotropin Pen.

Protection of trial subjects:

The study was in compliance with the ethical principles derived from the Declaration of Helsinki and in compliance with all International Conference on Harmonization (ICH) Good Clinical Practice (GCP) Guidelines. All the local regulatory requirements pertinent to safety of trial subjects were followed.

Background therapy: -

Evidence for comparator:

Comparison of subject acceptance of the Genotropin Mark VII pen and the current marketed Genotropin pen.

Actual start date of recruitment	06 August 2010
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	Netherlands: 5
Country: Number of subjects enrolled	Slovakia: 13
Country: Number of subjects enrolled	Sweden: 14
Country: Number of subjects enrolled	United Kingdom: 17
Country: Number of subjects enrolled	Czech Republic: 32
Country: Number of subjects enrolled	Germany: 19
Country: Number of subjects enrolled	Turkey: 20
Worldwide total number of subjects	120
EEA total number of subjects	100

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	0

months)	
Children (2-11 years)	51
Adolescents (12-17 years)	27
Adults (18-64 years)	40
From 65 to 84 years	2
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details: -

### Pre-assignment

Screening details:

A total of 120 subjects were screened from 23 centers of 7 countries worldwide and all subjects were included in the trial. Study started on 06 August 2010 and completed on 26 October 2011.

### Period 1

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

### Arms

<b>Arm title</b>	Entire Study Population
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Arm description:

Included all subjects which were randomized to use either the Mark VII pen first or the current Genotropin® pen first.

Arm type	Experimental
Investigational medicinal product name	Genotropin Mark VII pen
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder and solution for solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Subjects randomized to use the Mark VII pen subcutaneous injections daily for 2 months. Pen provided in 5, 5.3, and 12 mg doses of Genotropin (somatropin [rDNA origin]), doses received by subjects based on body weight.

Investigational medicinal product name	Genotropin Pen
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder and solvent for solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

Subjects randomized to use the current Genotropin® pen subcutaneous injections daily for 2 months. Pen provided in 5, 5.3, and 12 mg doses of Genotropin (somatropin [rDNA origin]), doses received by subjects based on body weight.

<b>Number of subjects in period 1</b>	Entire Study Population
Started	120
Completed	120



## Baseline characteristics

### Reporting groups

Reporting group title	Overall study
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Reporting group description: -

Reporting group values	Overall study	Total	
Number of subjects	120	120	
Age categorical			
Included all subjects which were randomized to use either the Mark VII pen first or the current Genotropin® pen first.			
Units: Subjects			
Less than or equal to ( $\leq$ ) 7 years	28	28	
Between 8 and 17 years	50	50	
Between 18 and 44 years	18	18	
Between 45 and 64 years	22	22	
Greater than or equal to ( $\geq$ ) 5 years	2	2	
Gender categorical			
Units: Subjects			
Female	51	51	
Male	69	69	

## End points

### End points reporting groups

Reporting group title	Entire Study Population
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Reporting group description:

Included all subjects which were randomized to use either the Mark VII pen first or the current Genotropin® pen first.

Subject analysis set title	Mark VII Pen
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Subject analysis set type	Full analysis
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Subject analysis set description:

Subjects who used the Mark VII pen any time during the study. Pens provided in 5, 5.3, and 12 mg doses of Genotropin (somatropin [rDNA origin]), doses were received by subjects based on body weight.

Subject analysis set title	Genotropin® Pen
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Subject analysis set type	Full analysis
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Subject analysis set description:

Subjects who used the current Genotropin® pen anytime during the study. Pens provided in 5, 5.3, and 12 mg doses of Genotropin (somatropin [rDNA origin]); doses were received by subjects based on body weight.

### Primary: Percentage of Dyads (Subject and Caregiver or Parent) and Adult Subjects Reporting no Difference or Easier to Use for the New Genotropin Mark VII Injection Pen Compared to the Genotropin Pen®

End point title	Percentage of Dyads (Subject and Caregiver or Parent) and Adult Subjects Reporting no Difference or Easier to Use for the New Genotropin Mark VII Injection Pen Compared to the Genotropin Pen® <sup>[1]</sup>
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End point description:

Subjects were asked the following question from Section II of the Injection Pen Assessment Questionnaire (IPAQ) patient-reported outcome (PRO) tool, "Thinking about the Genotropin pen and the new injection pen you used over the past few months, please compare both injection pens and choose which one is easier to use overall?" Choices included: Genotropin Pen® easier to use, new injection pen easier to use, or no difference. Full Analysis Set (FAS): randomized subjects who used a study pen at least once to administer somatropin. Dyad defined as the subject (child being treated) and adult partner (parent or caregiver).

End point type	Primary
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End point timeframe:

Month 4

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: Only descriptive data was planned to be reported for this end point.

End point values	Entire Study Population			
Subject group type	Reporting group			
Number of subjects analysed	119 <sup>[2]</sup>			
Units: percentage of dyads, adult subjects				
number (confidence interval 95%)	67.23 (58.79 to 75.66)			

Notes:

[2] - Number of subjects analyzed (N)= subjects with evaluable data.

### Statistical analyses

No statistical analyses for this end point

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**Secondary: Percentage of Dyads and Adult Subjects Reporting no Preference or Preference for the New Genotropin Mark VII Injection Pen Compared to the Genotropin Pen®**

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End point title	Percentage of Dyads and Adult Subjects Reporting no Preference or Preference for the New Genotropin Mark VII Injection Pen Compared to the Genotropin Pen®
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End point description:

Subjects were asked the following question from Section II of the IPAQ PRO tool, "Thinking about both injection pens over the past few months, please choose which injection pen you prefer overall." Choices included: prefer Genotropin Pen®, prefer new injection pen, or no preference. FAS population.

End point type	Secondary
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End point timeframe:

Month 4

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End point values	Entire Study Population			
Subject group type	Reporting group			
Number of subjects analysed	120			
Units: percentage of dyads, adult subjects				
number (confidence interval 95%)	64.17 (55.59 to 72.75)			

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**Statistical analyses**

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No statistical analyses for this end point

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**Secondary: Percentage of Dyads and Adult Subjects Reporting the New Genotropin Mark VII Injection Pen Easier to Use Compared to the Genotropin Pen®**

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End point title	Percentage of Dyads and Adult Subjects Reporting the New Genotropin Mark VII Injection Pen Easier to Use Compared to the Genotropin Pen®
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End point description:

Subjects were asked the following question from Section II of the IPAQ PRO tool, "Thinking about the Genotropin pen and the new injection pen you used over the past few months, please compare both injection pens and choose which one is easier to use overall?" Choices included: Genotropin Pen® easier to use, new injection pen easier to use, or no difference. FAS population.

End point type	Secondary
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End point timeframe:

Month 4

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<b>End point values</b>	Entire Study Population			
Subject group type	Reporting group			
Number of subjects analysed	119 <sup>[3]</sup>			
Units: percentage of dyads, adult subjects				
number (confidence interval 95%)	51.26 (42.28 to 60.24)			

Notes:

[3] - Number of subjects analyzed (N)= subjects with evaluable data.

### Statistical analyses

No statistical analyses for this end point

### Secondary: Percentage of Dyads and Adult Subjects Reporting the New Genotropin Mark VII Injection Pen Preferable Compared to the Genotropin Pen®

End point title	Percentage of Dyads and Adult Subjects Reporting the New Genotropin Mark VII Injection Pen Preferable Compared to the Genotropin Pen®
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End point description:

Subjects were asked the following question from Section II of the IPAQ PRO tool, "Thinking about both injection pens over the past few months, please choose which injection pen you prefer overall." Choices included: prefer Genotropin Pen®, prefer new injection pen, or no preference. FAS population.

End point type	Secondary
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End point timeframe:

Month 4

<b>End point values</b>	Entire Study Population			
Subject group type	Reporting group			
Number of subjects analysed	120			
Units: percentage of dyads, adult subjects				
number (confidence interval 95%)	54.17 (45.25 to 63.08)			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Percentage of Dyads and Adult Subjects Who Would Choose the New Genotropin Mark VII Injection Pen in Preference to the Genotropin® Pen

End point title	Percentage of Dyads and Adult Subjects Who Would Choose the New Genotropin Mark VII Injection Pen in Preference to the Genotropin® Pen
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End point description:

Investigators were asked the following study treatment continuation question, "Which device did the subject choose for continued treatment?" Choices included the Genotropin® Pen or the new injection pen. FAS subset of subjects located in areas where the new device was available.

End point type	Secondary
End point timeframe:	
Month 4	

<b>End point values</b>	Entire Study Population			
Subject group type	Reporting group			
Number of subjects analysed	55			
Units: percentage of dyads, adult subjects				
number (confidence interval 95%)	47.27 (34.08 to 60.47)			

<b>Attachments (see zip file)</b>	Statistical Analysis/Percentage of Dyads and Adult Subjects
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### Statistical analyses

No statistical analyses for this end point

### Secondary: Ease of Use of Each Injection Pen

End point title	Ease of Use of Each Injection Pen
End point description:	Subjects were asked the following question from Section I of the IPAQ PRO tool, "Thinking about the injection pen you have been using for the past few months, how easy or difficult it is for you to use the injection pen overall?" Responses were provided using a 5 point scale which ranged from very easy (5), somewhat easy (4), neither easy nor difficult (3), somewhat difficult (2), or very difficult (1). FAS population.
End point type	Secondary
End point timeframe:	
Month 2 and Month 4	

<b>End point values</b>	Mark VII Pen	Genotropin® Pen		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	119 <sup>[4]</sup>	119 <sup>[5]</sup>		
Units: scores on a scale				
arithmetic mean (standard deviation)	4.5 (± 0.64)	4.2 (± 0.71)		

Notes:

[4] - Number of subjects analyzed (N)= subjects with evaluable data.

[5] - Number of subjects analyzed (N)= subjects with evaluable data.

### Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Baseline up to 7 days after last dose

Adverse event reporting additional description:

The same event may appear as both an adverse event (AE) and a serious AE (SAE). An event may be categorized as serious in one subject and as nonserious in another subject. EU BR specific AE tables were generated separately as per EU format. Latest coding dictionary has been used for EU BR tables.

Assessment type	Non-systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	17.1
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### Reporting groups

Reporting group title	Safety Population
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Reporting group description:

All randomized participants who used a study pen (Genotropin® pen or the new Mark VII injection pen) at least once to administer Genotropin.

<b>Serious adverse events</b>	Safety Population		
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 120 (1.67%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Gastrointestinal disorders			
Diarrhoea			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Laryngitis			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 0 %

<b>Non-serious adverse events</b>	Safety Population		
Total subjects affected by non-serious adverse events subjects affected / exposed	48 / 120 (40.00%)		
Neoplasms benign, malignant and unspecified (incl cysts and polyps) Melanocytic naevus subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Injury, poisoning and procedural complications Accidental overdose subjects affected / exposed occurrences (all)  Foot fracture subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1  1 / 120 (0.83%) 1		
Vascular disorders Flushing subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Nervous system disorders Dizziness subjects affected / exposed occurrences (all)  Headache subjects affected / exposed occurrences (all)  Paraesthesia subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 2  11 / 120 (9.17%) 26  1 / 120 (0.83%) 2		
General disorders and administration site conditions Application site pain subjects affected / exposed occurrences (all)  Fatigue subjects affected / exposed occurrences (all)  Injection site bruising	1 / 120 (0.83%) 1  1 / 120 (0.83%) 1		

subjects affected / exposed occurrences (all)	2 / 120 (1.67%) 2		
Injection site haemorrhage subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Injection site injury subjects affected / exposed occurrences (all)	4 / 120 (3.33%) 12		
Injection site pain subjects affected / exposed occurrences (all)	4 / 120 (3.33%) 13		
Injection site reaction subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Oedema peripheral subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Pyrexia subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Ear and labyrinth disorders			
Ear pain subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 3		
Vertigo subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Gastrointestinal disorders			
Abdominal pain subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 4		
Diarrhoea subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Food poisoning			

<p>subjects affected / exposed occurrences (all)</p> <p>Inguinal hernia subjects affected / exposed occurrences (all)</p> <p>Nausea subjects affected / exposed occurrences (all)</p> <p>Vomiting subjects affected / exposed occurrences (all)</p>	<p>1 / 120 (0.83%) 1</p> <p>1 / 120 (0.83%) 1</p> <p>2 / 120 (1.67%) 2</p> <p>2 / 120 (1.67%) 2</p>		
<p>Respiratory, thoracic and mediastinal disorders</p> <p>Cough subjects affected / exposed occurrences (all)</p> <p>Oropharyngeal pain subjects affected / exposed occurrences (all)</p>	<p>3 / 120 (2.50%) 3</p> <p>1 / 120 (0.83%) 1</p>		
<p>Psychiatric disorders</p> <p>Attention deficit/hyperactivity disorder subjects affected / exposed occurrences (all)</p>	<p>1 / 120 (0.83%) 1</p>		
<p>Musculoskeletal and connective tissue disorders</p> <p>Back pain subjects affected / exposed occurrences (all)</p> <p>Muscle spasms subjects affected / exposed occurrences (all)</p> <p>Myalgia subjects affected / exposed occurrences (all)</p> <p>Pain in extremity subjects affected / exposed occurrences (all)</p>	<p>1 / 120 (0.83%) 1</p> <p>2 / 120 (1.67%) 2</p> <p>1 / 120 (0.83%) 1</p> <p>3 / 120 (2.50%) 3</p>		

<p>Infections and infestations</p> <p>Conjunctivitis</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 120 (0.83%)</p> <p>1</p>		
<p>Gastroenteritis</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 120 (0.83%)</p> <p>1</p>		
<p>Nasopharyngitis</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>7 / 120 (5.83%)</p> <p>8</p>		
<p>Otitis media</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 120 (0.83%)</p> <p>1</p>		
<p>Otitis media acute</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>2 / 120 (1.67%)</p> <p>2</p>		
<p>Pharyngitis</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>4 / 120 (3.33%)</p> <p>4</p>		
<p>Respiratory tract infection viral</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 120 (0.83%)</p> <p>1</p>		
<p>Rhinitis</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 120 (0.83%)</p> <p>2</p>		
<p>Urinary tract infection</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 120 (0.83%)</p> <p>1</p>		
<p>Viral infection</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>6 / 120 (5.00%)</p> <p>7</p>		
<p>Metabolism and nutrition disorders</p> <p>Hypocalcaemia</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 120 (0.83%)</p> <p>1</p>		



## **More information**

### **Substantial protocol amendments (globally)**

Were there any global substantial amendments to the protocol? No

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### **Interruptions (globally)**

Were there any global interruptions to the trial? No

### **Limitations and caveats**

None reported