

# Effects of growth hormone treatment after final height in Prader-Willi Syndrome

Gepubliceerd: 16-08-2007 Laatst bijgewerkt: 18-08-2022

GH treatment after reaching final height is beneficial for body composition and social wellbeing in young adults with PWS

<b>Ethische beoordeling</b>	Niet van toepassing
<b>Status</b>	Werving nog niet gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON28633

### Bron

NTR

### Verkorte titel

n/a

### Aandoening

Prader-Willi Syndrome  
Prader-Willi Syndroom

### Ondersteuning

**Primaire sponsor:** Dutch Growth Foundation

**Overige ondersteuning:** Pfizer

### Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

- To assess effects of GH-treatment versus placebo on
- a. body composition
  - b. carbohydrate metabolism
  - c. psychosocial functioning
  - d. sleep-related breathing disorders
  - e. circulating lipids
  - f. blood pressure

## Toelichting onderzoek

### Achtergrond van het onderzoek

Background: GH improves height velocity, and body composition in PWS children. Preliminary data also suggest improvement of psychosocial functioning during GH. When epiphyseal fusion is complete and final height is reached, GH-treatment has to be discontinued. However, discontinuation of GH results in a decrease of lean body mass, an increase of body fat percentage and a deterioration of psychosocial behaviour. A preliminary study showed that also young adults with PWS might benefit from GH-treatment, with regard to body composition, and psychosocial wellbeing.

Objectives:

Primary objectives

To assess effects of GH-treatment versus placebo on

- body composition
- carbohydrate metabolism
- psychosocial functioning
- sleep-related breathing disorders
- circulating lipids
- blood pressure

Secondary objectives

- To study the effects of GH-treatment versus placebo on thyroid hormone levels, IGF-I and IGF binding proteins, adiponectin, ghrelin.
- To study compliance to the diet.

Patients: subjects with PWS, aged 18-24 years, who reached final height after they were treated with GH according to the Dutch National GH study in children with PWS (ISRCTN49726762), or after they were otherwise treated with GH (at least 2 years) during childhood.

Intervention: Treatment with GH: Genotropin 0.67 mg/m<sup>2</sup>/day s.c. or placebo

Design/Assessments: After stratification for BMI, gender, originally followed in the GH study vs. otherwise GH-treated patients, subjects will be randomized to either placebo or GH-treatment group, according to a double blind, placebo-controlled cross-over design during the first 2 years. After 2 years, all patients receive GH treatment in a dose of 0.67 mg/m<sup>2</sup>/day, after ATT-GHRH test has been performed. Anthropometric assessments and blood pressure will be performed every 3 months. Six-monthly, assessment of body composition (DXA), carbohydrate metabolism and circulating lipids and other laboratory parameters will be

performed. Yearly, evaluation of sleep-related breathing (polysomnography), and cognition and behaviour (GIT, TVZ) will be performed.

## **Doel van het onderzoek**

GH treatment after reaching final height is beneficial for body composition and social wellbeing in young adults with PWS

## **Onderzoeksproduct en/of interventie**

Treatment with GH: Genotropin 0.67 mg/m<sup>2</sup>/day s.c. or placebo

## **Contactpersonen**

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## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

1. Young adults, originally participating in the Dutch GH study in PWS children

- (ISRCTN49726762) or otherwise GH-treated patients and
2. Final height is reached or epiphysial fusion is complete and
  3. Treated with GH during childhood for at least 2 years

## **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

1. non cooperative behaviour
2. extremely low dietary intake of less than minimal required intake according to WHO
3. medication to reduce weight (fat)

## **Onderzoeksopzet**

### **Opzet**

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Blindering:	Dubbelblind
Controle:	Placebo

### **Deelname**

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-10-2007
Aantal proefpersonen:	20
Type:	Verwachte startdatum

## **Ethische beoordeling**

Niet van toepassing	
Soort:	Niet van toepassing

## **Registraties**

## **Opgevolgd door onderstaande (mogelijk meer actuele) registratie**

Geen registraties gevonden.

## **Andere (mogelijk minder actuele) registraties in dit register**

Geen registraties gevonden.

## **In overige registers**

<b>Register</b>	<b>ID</b>
NTR-new	NL1009
NTR-old	NTR1038
Ander register	: n/a
ISRCTN	ISRCTN24648386

## **Resultaten**

### **Samenvatting resultaten**

n/a