

# Short term recombinant human Growth Hormone administration increases strength and power, but does it improve sporting performance in anabolic-androgenic steroid users?

<b>Submission date</b> 19/10/2006	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 27/10/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 29/06/2016	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Michael Graham

**Contact details**  
1 Lantwit Road  
Treforrest  
Cardiff  
United Kingdom  
CF37 1DL

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

## Secondary identifying numbers

280361999

# Study information

## Scientific Title

Short term recombinant human Growth Hormone administration increases strength and power, but does it improve sporting performance in anabolic-androgenic steroid users?

## Acronym

rhGH on performance

## Study objectives

Short-term recombinant human Growth Hormone (rhGH) administration increases strength, power and endurance performance in healthy, abstinent Anabolic-Androgenic Steroid (AAS) using weight lifters.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

University of Glamorgan ethics committee. Originally approved on the 22nd January 2002 (ref: SEC3), amended and final approval was granted on the 20th November 2002 (ref: SEC7).

## Study design

Double blind experimental trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Not specified

## Study type(s)

Quality of life

## Participant information sheet

## Health condition(s) or problem(s) studied

Anabolic-Androgenic Steroid (AAS) users

## Interventions

All physiological tests were performed in the same order for both the experimental group and the controls. Subjects were familiarised with testing procedures. Subjects were examined daily over a period of six weeks between the hours of 09:00 and 11:00 and were anonymous to each other.

Subjects were administered rhGH, under supervision, by subcutaneous abdominal injection, in a controlled hygienic environment, for six consecutive days in a dosage of 0.058 International Units (IU)/kg/day (0.019 mg/kg/day). Subjects were examined prior to the commencement of rhGH administration (day one), one day after six days administration (day seven), and eight days after cessation (day 14). Dietary intake was strictly monitored, using a fourteen day dietary recall.

The control group were an exercise control group and did not take an active substance.

**Intervention Type**

Drug

**Phase**

Not Specified

**Drug/device/biological/vaccine name(s)**

Recombinant human Growth Hormone

**Primary outcome measure**

Increased strength, power and endurance performance indices.

**Secondary outcome measures**

1. Reduced body fat
2. Increased fat free mass
3. Increased heart rate

**Overall study start date**

01/08/2004

**Completion date**

01/10/2004

**Eligibility****Key inclusion criteria**

Healthy individual weight lifters, who were previous experienced users of AAS, in a 12 week abstinent phase

**Participant type(s)**

Patient

**Age group**

Not Specified

**Sex**

Not Specified

**Target number of participants**

48

**Key exclusion criteria**

Positive urinalysis for ergogenic aids

**Date of first enrolment**

01/08/2004

**Date of final enrolment**

01/10/2004

## **Locations**

**Countries of recruitment**

United Kingdom

Wales

**Study participating centre**

**University of Glamorgan**

1 Lantwit Road

Treforrest

Cardiff

United Kingdom

CF37 1DL

## **Sponsor information**

**Organisation**

University of Glamorgan

**Sponsor details**

1 Lantwit Road

Treforrest

Cardiff

Wales

United Kingdom

CF37 1DL

**Sponsor type**

University/education

**Website**

<http://www.glam.ac.uk/>

**ROR**

<https://ror.org/02mzn7s88>

# Funder(s)

## Funder type

University/education

## Funder Name

University of Glamorgan (UK)

# Results and Publications

## Publication and dissemination plan

Not provided at time of registration

## Intention to publish date

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/06/2007		Yes	No