# The Effects of Long term testosterone supplementation In testosterone deficient men on Quality of life, Sarcopenia, cognitive function, Obesity and vasculaR ageing

Submission date 16/05/2005	Recruitment status No longer recruiting	Prospectively registered		
		[X] Protocol		
Registration date 16/05/2005	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	Individual participant data		
27/10/2022	Urological and Genital Diseases			

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

### Contact name

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# Additional identifiers

# Protocol serial number

NTR31

# Study information

# Scientific Title

The effects of testosterone supplementation on functional mobility, quality of life, body composition, cognitive function, aortic stiffness and cardiovascular risk factors, and bone mineral density in ageing men with an age-related decline of testosterone

# Acronym

The ELIQSOR study

# **Study objectives**

Serum testosterone levels decline gradually after the age of 50 years. This decline coincides with increasing signs and symptoms of aging, including tiredness and lack of energy, diminished libido, erectile dysfunction, reduced muscle mass and strength, reduced bone density, depression and diminished well-being. Androgen replacement might have a beneficial influence on these organs and functions in the aging male, but there are only limited clinical data available on the effects of testosterone replacement in males with a age-related decline of testosterone. Moreover, the results of this data are conflicting, insignificant or the study design has been insufficient.

Therefore, we conducted this randomised, placebo-controlled trial to assess the effects of testosterone supplementation on functional mobility, quality of life, body composition, cognitive function, aortic stiffness and cardiovascular risk factors, bone mineral density and safety (prostate, liver enzymes, haematological parameters) in ageing men with an age-related decline of testosterone.

The hypothesis is that testosterone supplementation improves functional mobility, quality of life, body composition, cognitive function, aortic stiffness and cardiovascular risk factors, and bone mineral density compared to placebo.

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

The Institutional Review Board of the University Medical Center Utrecht approved the study protocol.

# Study design

Randomised, placebo controlled, parallel group, double blinded trial

# Primary study design

Interventional

# Study type(s)

Treatment

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

Age-related decline of testosterone

### **Interventions**

Four capsules of 40 mg testosterone undecanoate (TU) or placebo will be administered daily for 26 weeks.

# **Intervention Type**

Drug

# **Phase**

**Not Specified** 

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

Testosterone

# Primary outcome(s)

Functional mobility and quality of life.

# Key secondary outcome(s))

- 1. Body composition
- 2. Cognitive function
- 3. Aortic stiffness and cardiovascular risk factors
- 4. Bone mineral density and safety (prostate, liver enzymes and haematological parameters)

# Completion date

01/04/2005

# **Eligibility**

# Key inclusion criteria

- 1. Men with testosterone level below the 50th percentile cut-off point (study population-based testosterone distribution)
- 2. Age more than 60 years

# Participant type(s)

Patient

# Healthy volunteers allowed

No

# Age group

Senior

### Sex

Male

# Key exclusion criteria

- 1. Severe diseases or conditions interfering with conduct of study
- 2. Conditions for which increase of androgen-like substances are contra-indicated
- 3. Symptomatic prostate hypertrophy, serious renal and liver function disturbances, heart failure, prostate or breast cancer
- 4. Diabetes mellitus de novo or already treated. A fasting capillary glucose level of 6.9 mmol/l or higher.

- 5. Diseases of adrenal gland, hypothalamo-pituitary-adrenal or -gonadal axis
- 6. Use of steroids or androgens six months before study

# Date of first enrolment

01/01/2004

# Date of final enrolment

01/04/2005

# Locations

# Countries of recruitment

Netherlands

# Study participating centre

**Julius Centrum** 

Utrecht Netherlands 3508 BA

# Sponsor information

# Organisation

University Medical Centre Utrecht (UMCU) (The Netherlands)

# **ROR**

https://ror.org/04pp8hn57

# Funder(s)

# Funder type

Research organisation

### Funder Name

The Netherlands Organisation for Health Research and Development (ZonMw) (The Netherlands)

# **Results and Publications**

# Individual participant data (IPD) sharing plan

Not provided at time of registration

**IPD sharing plan summary**Not provided at time of registration

# Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		01/12/2007		Yes	No
Results article		02/01/2008		Yes	No
Protocol article	Protocol	03/08/2006		Yes	No