

## Format:

Abstract ▾

## Send to ▾

## Full text links



*Maturitas*. 2011 Apr;68(4):355-61. doi: 10.1016/j.maturitas.2010.12.001. Epub 2010 Dec 21.

## Beneficial effects of testosterone therapy in women measured by the validated Menopause Rating Scale (MRS).

Glaser R<sup>1</sup>, York AE, Dimitrakakis C.

### Author information

### Abstract

**OBJECTIVES:** This study was designed to measure the beneficial effects of continuous testosterone therapy, delivered by subcutaneous implant, in the relief of somatic, psychological and urogenital symptoms in both pre- and post-menopausal patients, utilizing the validated Health Related Quality of Life (HRQOL), Menopause Rating Scale (MRS).

**STUDY DESIGN:** 300 pre- and post-menopausal women with symptoms of relative androgen deficiency, were asked to self-administer the 11-item MRS, at baseline and 3 months after their first insertion of the subcutaneous testosterone implant. Baseline hormone measurements, menopausal status and BMI, were assessed to determine correlation with symptoms and clinical outcome.

**MAIN OUTCOME MEASUREMENTS:** Changes related to therapy were determined. Total MRS scores as well as psychological, somatic and urogenital subscale scores were compared prior to therapy and following testosterone implant therapy.

**RESULTS:** Pre-menopausal and post-menopausal females reported similar hormone deficiency symptoms. Both groups demonstrated similar improvement in total score, as well as psychological, somatic and urogenital subscale scores with testosterone therapy. Better effect was noted in women with more severe complaints. Higher doses of testosterone correlated with greater improvement in symptoms.

**CONCLUSION:** Continuous testosterone alone, delivered by subcutaneous implant, was effective for the relief of hormone deficiency symptoms in both pre- and post-menopausal patients. The validated, HRQOL questionnaire, Menopause Rating Scale (MRS), proved a valuable tool in the measurement of the beneficial effects of testosterone therapy in both cohorts.

Copyright © 2010 Elsevier Ireland Ltd. All rights reserved.

PMID: 21177051 DOI: [10.1016/j.maturitas.2010.12.001](https://doi.org/10.1016/j.maturitas.2010.12.001)

[Indexed for MEDLINE]



## Save items

★ Add to Favorites ▾

## Similar articles

The Menopause Rating Scale  
health Qual Life Outcomes. 2004]

Application and factor analysis of  
the menopause [Maturitas. 2000]

The attitudes of menopausal  
[Clin Exp Obstet Gynecol. 2011]

**Review** Psychological and  
Baillieres Clin Obstet Gynaeco...

**Review** Climacteric: concept,  
conseq [J Med Assoc Thai. 2002]

See reviews...

See all...

### Cited by 5 PubMed Central articles

**Review** Has testosterone  
pas: [Int J Womens Health. 2016]

Effect of testosterone therapy on  
the female voi [Climacteric. 2016]

Rapid response of breast cancer to  
neoadjuvai [Menopause. 2014]

See all...

### Related information

MedGen

PubChem Compound

PubChem Compound (MeSH)

Publication type, MeSH terms, Substance



LinkOut - more resources



Keyword)

PubChem Substance

Cited in PMC

## PubMed Commons

[PubMed Commons home](#)

0 comments

[How to join PubMed Commons](#)

## Recent Activity

[Turn Off](#) [Clear](#)

Beneficial effects of testosterone therapy i PubMed

Testosterone and the aging male: to treat or not t PubMed

[No increase in the incidence of breast PubMed

Point of care blood gases with electrolytes and

Red blood cell profile of elite olympic distance triatl PubMed

[See more...](#)

You are here: [NCBI](#) > [Literature](#) > [PubMed](#)

[Support Center](#)

### GETTING STARTED

- [NCBI Education](#)
- [NCBI Help Manual](#)
- [NCBI Handbook](#)
- [Training & Tutorials](#)
- [Submit Data](#)

### RESOURCES

- [Chemicals & Bioassays](#)
- [Data & Software](#)
- [DNA & RNA](#)
- [Domains & Structures](#)
- [Genes & Expression](#)
- [Genetics & Medicine](#)
- [Genomes & Maps](#)
- [Homology](#)
- [Literature](#)
- [Proteins](#)
- [Sequence Analysis](#)
- [Taxonomy](#)
- [Variation](#)

### POPULAR

- [PubMed](#)
- [Bookshelf](#)
- [PubMed Central](#)
- [PubMed Health](#)
- [BLAST](#)
- [Nucleotide](#)
- [Genome](#)
- [SNP](#)
- [Gene](#)
- [Protein](#)
- [PubChem](#)

### FEATURED

- [Genetic Testing Registry](#)
- [PubMed Health](#)
- [GenBank](#)
- [Reference Sequences](#)
- [Gene Expression Omnibus](#)
- [Map Viewer](#)
- [Human Genome](#)
- [Mouse Genome](#)
- [Influenza Virus](#)
- [Primer-BLAST](#)
- [Sequence Read Archive](#)

### NCBI INFORMATION

- [About NCBI](#)
- [Research at NCBI](#)
- [NCBI News](#)
- [NCBI FTP Site](#)
- [NCBI on Facebook](#)
- [NCBI on Twitter](#)
- [NCBI on YouTube](#)

National Center for Biotechnology Information, U.S. National Library of Medicine  
8600 Rockville Pike, Bethesda MD, 20894 USA

[Policies and Guidelines](#) | [Contact](#)

