

# Serenoa repens, lycopene and selenium vs. tamsulosin for the treatment of lower urinary tract symptoms (LUTS)/ Benign prostatic hyperplasia (BPH)

<b>Submission date</b> 06/11/2013	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 11/12/2013	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 25/05/2017	<b>Condition category</b> Urological and Genital Diseases	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Lower urinary tract symptoms can greatly reduce the quality of life in men and cause issues with urinating. They can be a sign of a benign prostatic hyperplasia (BPH) or an enlarged prostate. Even today, the exact reasons underlying the development and progression of LUTS / BPH have not been fully understood. Recent studies have shown that chronic inflammation (swelling) represents a crucial part in BPH, probably determining the hyperplasia (enlargement) of prostate cells. The inflammatory cells in fact, produce growth factors such as VEGF or TGF-  $\beta$  , which can support the fibromuscular growth in BPH. This is treated by using medication that block the growth such as alpha-blockers and 5-alpha reductase inhibitors or combination therapy have been used to relief symptoms and to prevent complications. Other studies have demonstrated the significant benefits of the combination therapy if compared with individual single therapies. However, despite the improvement in symptoms, side effects (erectile dysfunction, ejaculatory disorders, loss of libido) may limit adherence (sticking to) to treatment. For these reasons, some phytotherapies (using herbs for treatment), like the lipid extract (LE) of *Serenoa repens* (SeR) , selenium (Se) and lycopene (Ly) are currently used with the aim of improving symptoms and to limit the possible adverse effects. The aim of this study is to evaluate the efficacy and tolerability of a combination therapy of phytotherapies versus the single therapies in patients with LUTS/BPH.

### Who can participate?

Adult men aged between 55 to 80 years old who have LUTS/BPH

### What does the study involve?

Participants are randomly allocated to one of three groups. Those in the first group receive Ser 320 mg, Ly and Se ( Profluss ®) 1 tablet per day for 1 year. Those in the second group receive tamsulosin 0.4 mg 1 tablet a day for 1 year. Those in the last group receive Ser 320 mg , Ly and Se ( Profluss ®) 1 tablet per day for 1 year + tamsulosin 0.4 mg 1 tablet per day for 1 year. Participants are assessed for IPSS, IPSS quality of life, IIEF-5, Qmax, post-void residual and

ejaculation.

What are the possible benefits and risks of participating?

Participants may benefit from a reduction of IPSS and PVR and increase in Qmax and quality of life. Risks would

Where is the study run from?

Via Santa Sofia 78 (Italy)

When is the study starting and how long is it expected to run for?

March 2011 to March 2012

Who is funding the study?

Konpharma (Italy)

Who is the main contact?

Professor Giuseppe Morgia

## Contact information

### Type(s)

Scientific

### Contact name

Prof Giuseppe Morgia

### Contact details

Via Santa Sofia 78

Catania

Italy

95100

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

618/12

## Study information

### Scientific Title

Serenoa repens, lycopene and selenium vs. tamsulosin for the treatment of (LUTS)/ (BPH): An Italian multicenter comparative randomized study between single or combination therapy

### Acronym

PROCOMB

**Study objectives**

To evaluate the efficacy and tolerability of the combination therapy between SeR, Ly and Se (Profluss ®) + tamsulosin versus the individual monotherapies with Ser, Ly and Se (Profluss ®) or tamsulosin in patients with LUTS/BPH.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Polyclinic Hospital, University of Catania, 09 Oct 2011, ref: Identification Number 618

**Study design**

Randomized double-blinded multicenter study

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Hospital

**Study type(s)**

Not Specified

**Participant information sheet**

Not available in web format, please use the contact details below to request a patient information sheet

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

Benign prostatic hyperplasia (BPH) / lower urinary tract symptoms (LUTS)

**Interventions**

Participants were randomized with a 1:1:1 ratio into three treatment arms each consisting of 75 patients: group A (Ser 320 mg, Ly and Se ( Profluss ®) 1 tablet per day for 1 year), group B (tamsulosin 0.4 mg 1 tablet a day for 1 year), group C (Ser 320 mg , Ly and Se ( Profluss ®) 1 tablet per day for 1 year + tamsulosin 0.4 mg 1 tablet per day for 1 year.

**Intervention Type**

Drug

**Phase**

Not Applicable

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

Serenoa repens, lycopene and selenium, tamsulosin

**Primary outcome measure**

Reduction of IPSS ( $\geq 3$  points from baseline), a percentage reduction of IPSS (IPSS%)  $\geq 25\%$ , increase of Qmax ( $\geq 30\%$  from the baseline) and the reduction of PVR in patients treated with SeR, Ly and Se (Profluss®) + tamsulosin compared to those treated with SeR, Ly and Se (Profluss®) or tamsulosin monotherapies after 1 year

### **Secondary outcome measures**

Secondary endpoints of the study were considered the change in erectile function (assessed by the International Index of Erectile Function-5 questionnaire), prostate volume, serum PSA and QoL at 1 year

### **Overall study start date**

01/03/2011

### **Completion date**

01/03/2012

## **Eligibility**

### **Key inclusion criteria**

1. Age between 55 and 80 years old
2. Digital rectal examination negative for prostate cancer
3. Prostate-specific antigen (PSA)  $\geq 4$  ng / ml, International Prostate Symptom Score (IPSS)  $\geq 12$ , prostate volume  $\leq 60$  cc (assessed by suprapubic ultrasound), Qmax  $\leq 15$  ml / s, post -void residual urine  $<150$  ml.

### **Participant type(s)**

Patient

### **Age group**

Adult

### **Sex**

Male

### **Target number of participants**

225

### **Key exclusion criteria**

1. Prostate cancer, previous bladder cancer, diabetes mellitus, neurogenic disorders, severe liver disease, history of orthostatic hypotension or syncope, symptomatic urinary tract infection
2. Anti-androgens, antidepressants (neuroleptics, anticholinergics) therapy, recent treatment with an  $\alpha$  blocker (within 1 month) or phytotherapy including saw palmetto extract (within 3 months), previous medical therapy with 5-ARI or surgical treatment for LUTS/BPH
3. Patients with catheter or with an episode of acute retention of urine in the last 4 weeks.

### **Date of first enrolment**

01/03/2011

### **Date of final enrolment**

01/03/2012

## Locations

### Countries of recruitment

Italy

### Study participating centre

Via Santa Sofia 78

Catania

Italy

95100

## Sponsor information

### Organisation

Konpharma (Italy)

### Sponsor details

via Pietro Della Valle, 1

Roma

Italy

00193

### Sponsor type

Industry

### ROR

<https://ror.org/052hty126>

## Funder(s)

### Funder type

Industry

### Funder Name

Konpharma (Italy)

## 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	01/11/2014		Yes	No