ENOTprost®

FOR MALE WELLNESS

www.eposrl.com

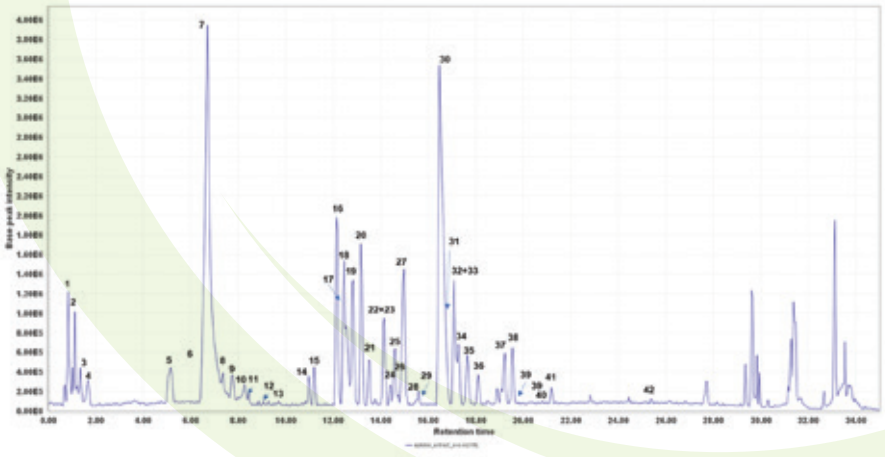
ENOTprost® is a dry extract with a very rich phytocomplex containing more than 15% of Oenothein B

PROSTATIC AILMENTS

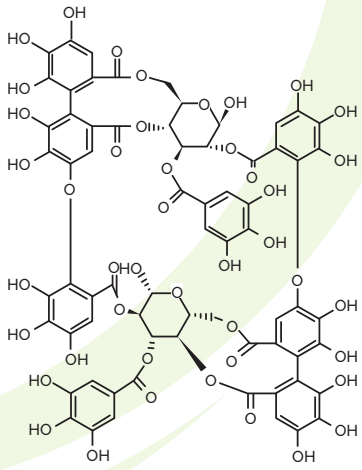
Prostatic ailments are among the most common urologic problems in adult males. BPH (benign prostatic hyperplasia) is the third most frequent urologic diagnosis in men over 50, although prostatitis can also affect young people, especially sportsmen and cyclists. Prostatic ailments share inflammation and oxidative stress as risk factors and cause of chronicity.

EPILOBIUM

Epilobium angustifolium L. (*Onagraceae*) is a well-known European plant traditionally used for prostatic ailments such as prostatitis and BPH.
ENOTprost® is a dry extract with a very rich phytocomplex containing more than 15% of Oenothein B.
It is a strong anti-inflammatory and antioxidant ingredient for innovative food supplements.



The first Epilobium dry extract standardized to contain 15% Oenothein B



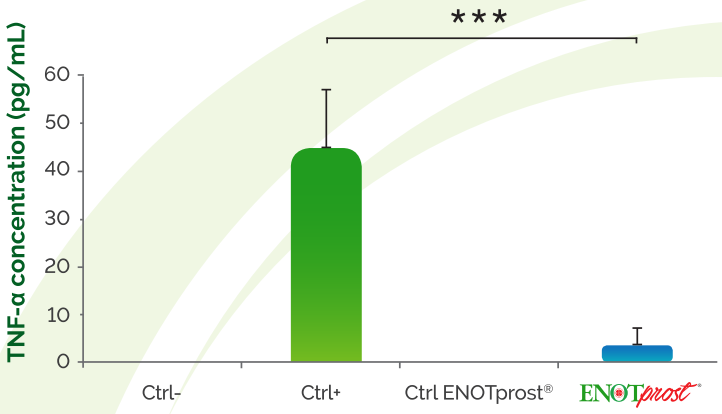
The metabolic profile of ENOTprost® was analyzed by means of UHPLC- LTQ Orbitrap and 42 compounds were identified: 8 organic and phenolic acids, 1 sugar, 1 tannin, 3 ellagitannins and 29 flavonoids. Moreover, miquelianin, the major flavonoid glycoside that only characterizes the *E. angustifolium* species, was found (Esposito et al., 2021).
The bioaccessibility and bioavailability studies suggested the use of a gastro-resistant dosage form, since polyphenols suffered from degradation after both oro-gastric and duodenal digestion processes (Dacrema et al., 2020).

IN VITRO STUDY

ENOTprost® has proven strong antioxidant and anti-inflammatory activities

ENOTprost® HAS STRONG ANTI-INFLAMMATORY ACTIVITY

In vitro tests demonstrated that pre-treatment of prostatic cells with ENOTprost® followed by LPS-induced inflammation, strongly reduces TNF-α production. TNF-α is one of the most important pro-inflammatory cytochines (Insolia et al., 2020).

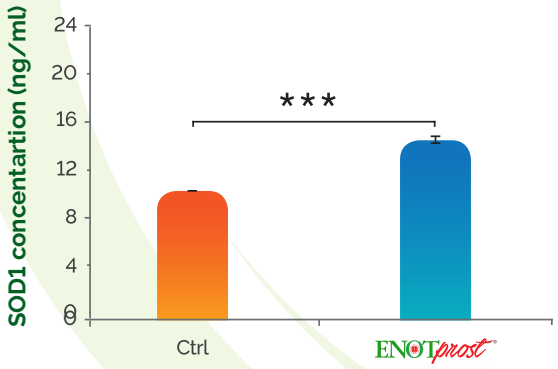


LEGEND

- Ctrl-: not inflamed and not treated cells;
- Ctrl+: inflamed but not treated cells with ENOTprost®;
- Ctrl ENOTprost®: not inflamed but treated with ENOTprost®
- ENOTprost®: pre-treated with ENOTprost® and inflamed cells

ENOTprost® ENHANCES CELLULAR ANTIOXIDANT DEFENSE

In vitro test demonstrated that treatment of prostatic cells with ENOTprost® enhances cellular antioxidant defenses by increasing the level of SOD1. This enzyme is one of the most important endogenous antioxidant defense mechanisms (Insolia et al., 2020).

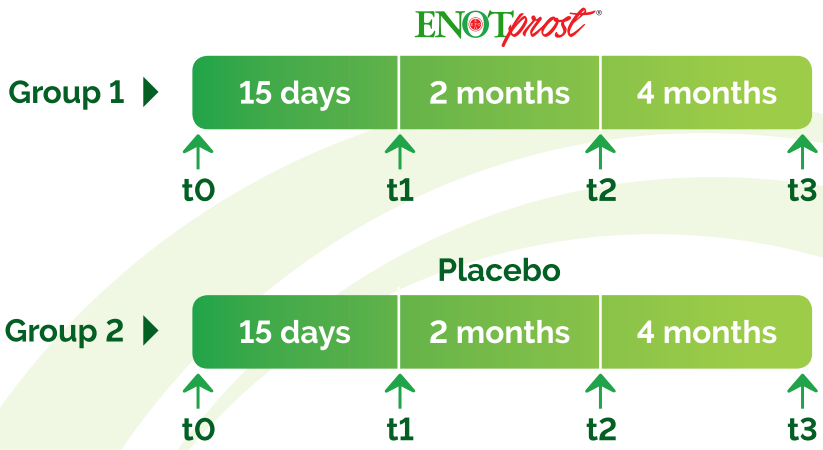


LEGEND

- Ctrl: not treated cells;
- ENOTprost®: pre-treated with ENOTprost® and inflamed cells

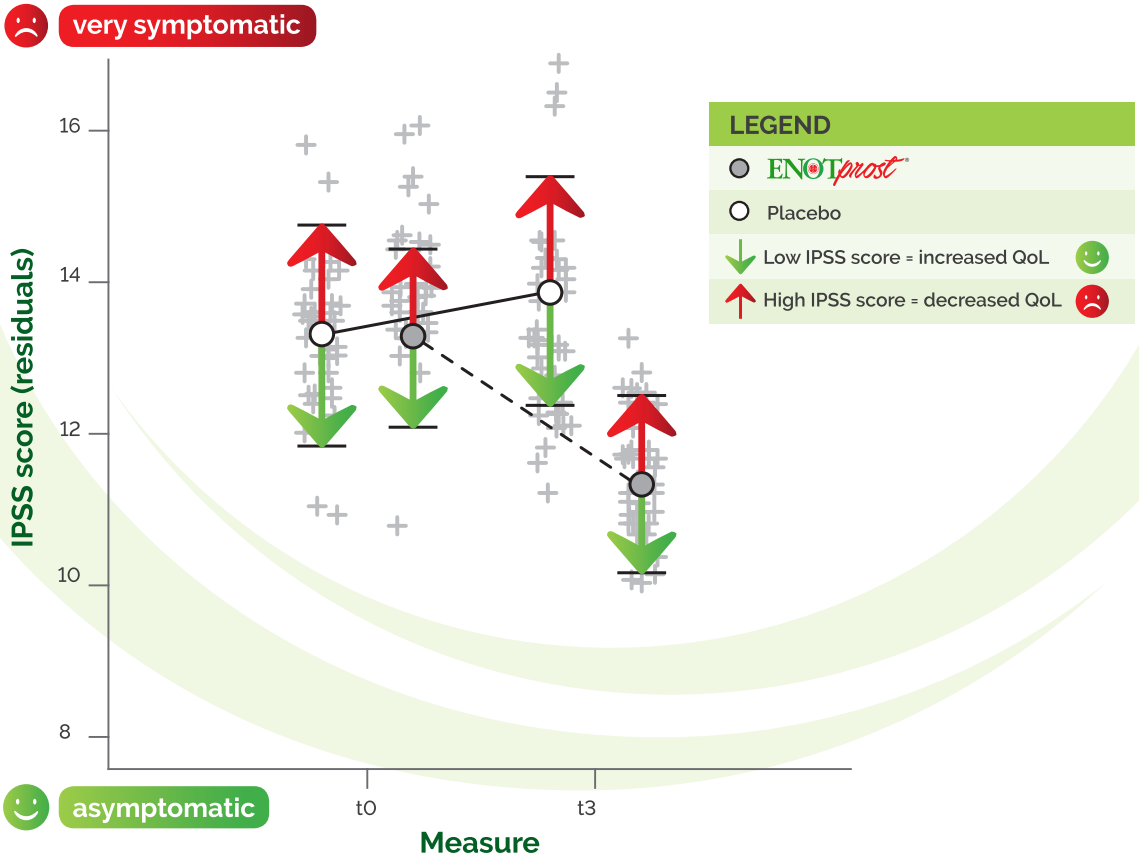
CLINICAL TRIAL

A monocentric, randomized, double-blind, placebo-controlled clinical trial was conducted on 128 Italian volunteers with BPH to demonstrate the effects of ENOTprost®.



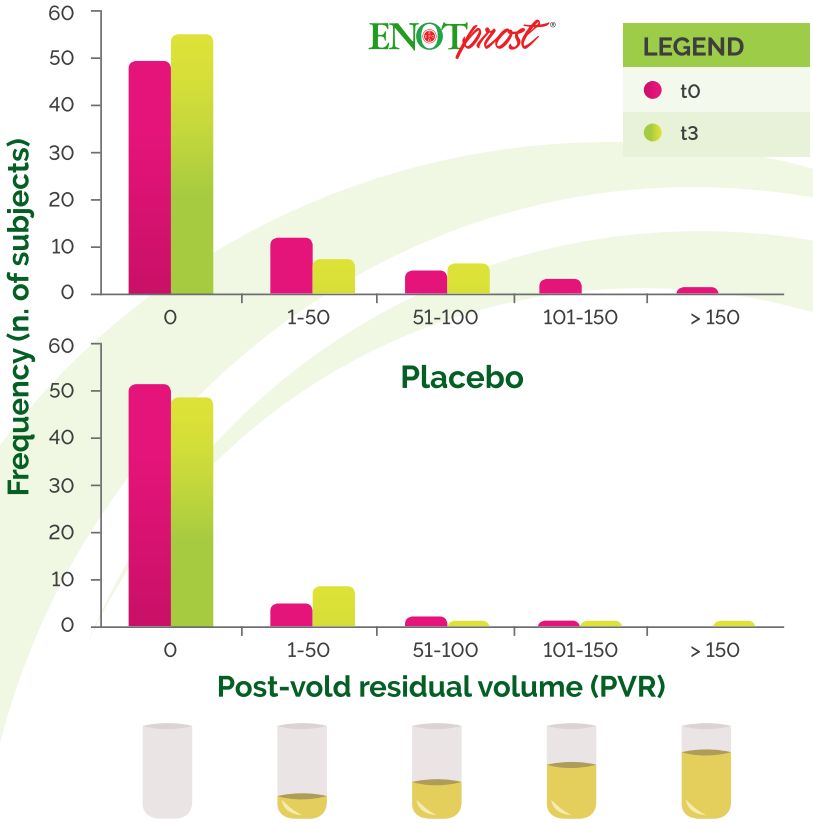
Dosage form: 500 mg dayly in a gastro-resistant capsule.

The International Prostate Specific Score (IPSS) is a validated questionnaire to assess BHP symptoms in men with urinary complaints. The score can range from 0 to 35, indicating asymptomatic to very symptomatic subjects. The results are represented by arrows to indicate generally the QoL (Quality of Life) of participants.



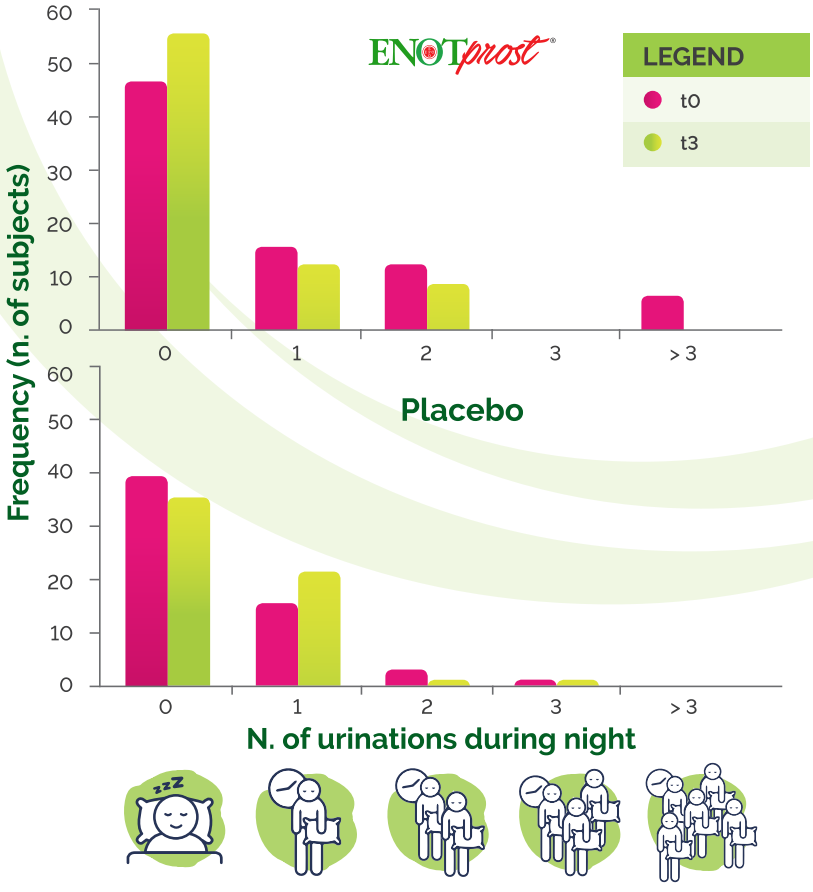
IPSS score significantly decreased by nearly 2 points between t0 and t3 in the ENOTprost® treated group and slightly increased (0.6 points) in the placebo group, showing an improvement in the quality of life of the subjects treated with the ENOTprost® and highlighting the protective effect of this supplementation.

Subjects with BPH may have difficulties in bladder emptying. The narrowing of the urethra may cause acute/chronic urinary retention, which is the most important complication associated with BPH. The bladder post-void residual volume (PVR) was monitored by prostate ultrasound to assess the efficiency of bladder emptying.



In the ENOTprost® group the number of subjects with a low residual urine volume in the bladder significantly increased, while there was a decreasing in the number of subjects with residual urine volume higher than 100 ml.

Nocturia (the need to urinate two or more times per night) is a serious problem with a high impact on the quality of sleep, leading to sleep disorders, decreased quality of life and depression.



In the ENOTprost® group, the frequency of subjects without urination overnight increased by 21,7%, whereas it decreased by 10.2% in the placebo group.
Moreover, the number of subjects urinating three or more times per night was completely wiped out in the treated group but remained unchanged in the placebo group.

ESTRATTI PIANTE OFFICINALI

Our Quality Your Safety

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www.eposrl.com

THREE MAIN REASONS TO CHOOSE EPO EXTRACTS:

QUALITY

- Manufacturing process entirely made in Italy
- Full traceability from the field to the final packaging
- Production chain checked at every step
- Accurate quantification of bioactive compounds by sophisticated analytical methods
- Compliance with EU legislation on Food and Food Supplements

SAFETY

- Botanical species certified by DNA barcoding analysis
- No harmful solvent used in the manufacturing process

EFFICACY

- Pre-clinical and clinical studies proving its prostate-specific activity

DNA® CERTIFIED EXTRACTS

ENOTprost® technical datasheet is available at www.eposrl.com

REFERENCES:

1. Dacrema M, Sommella E, Santarcangelo C, Bruno B, Marano MG, Insolia V, Saviano A, Campiglia P, Stornaiuolo M, Daglia M. Metabolic profiling, in vitro bioaccessibility and in vivo bioavailability of a commercial bioactive *Epilobium angustifolium* L. extract. Biomed Pharmacother. 2020 Nov; 131:110670.

2. Esposito C, Santarcangelo C, Masselli R, Buonomo G, Nicotra G, Insolia V, D'Avino M, Caruso G, Buonomo AR, Sacchi R, Sommella E, Campiglia P, Tenore GC, Daglia M. *Epilobium angustifolium* L. extract with high content in oenothein B on benign prostatic hyperplasia: A monocentric, randomized, double-blind, placebo-controlled clinical trial. Biomedicine & Pharmacotherapy, 138 (2021) 111414.

3. Insolia V, Nicotra G, Vicentini SF, Bruno B, Marano MG, Dacrema M, Santarcangelo C, Daglia M. Attività antinfiammatoria di un estratto commerciale di *Epilobium angustifolium* L. (ENOTprost®). Pharmanutrition and Functional Foods 2020 (anno V, n.4) p56; X Congresso Nazionale SINut.