

First Congress

*International Society of
Diamagnetic Therapy*

“Benign prostate
hyperplasia”

Dr Gianmarco Marcianò



13th – 14th September 2024
Magna Graecia University - Catanzaro

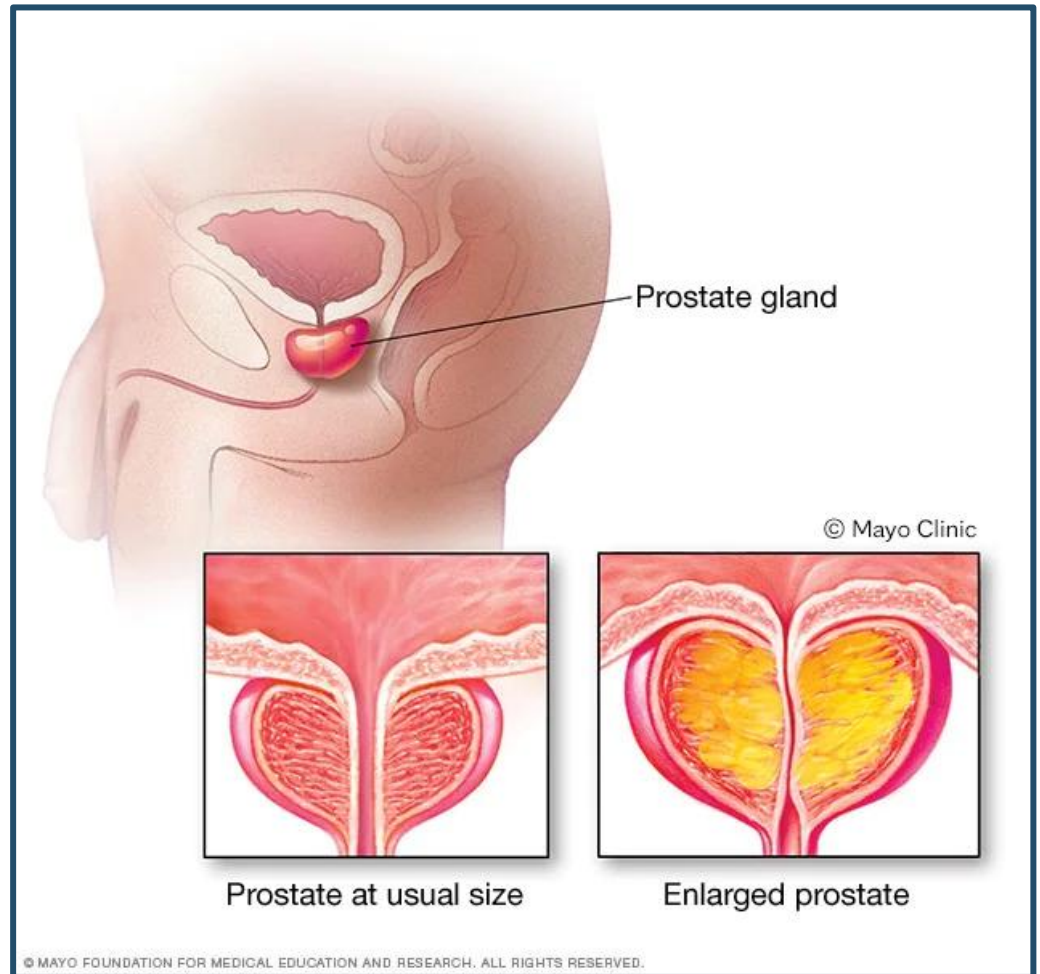


ISDT
International Society of
Diamagnetic Therapy



UMG
Dubium sapientiae initium

Benign prostate hyperplasia



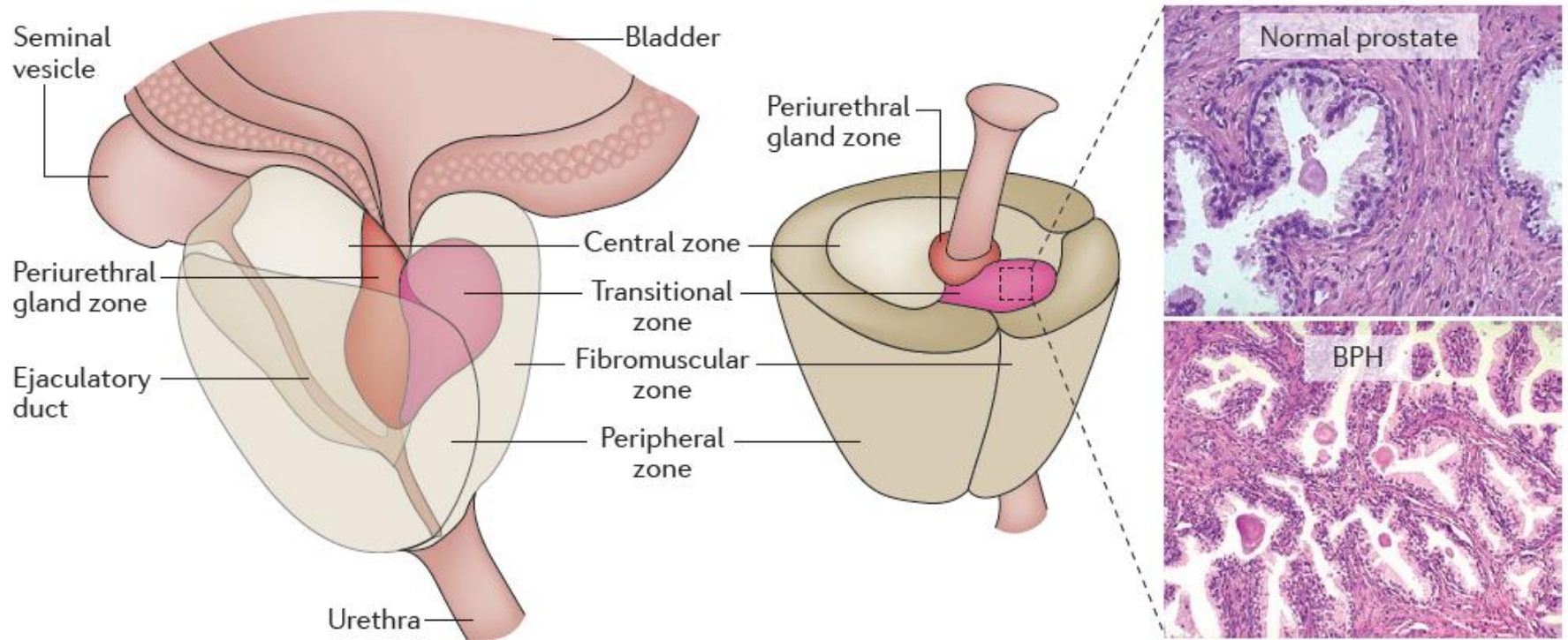
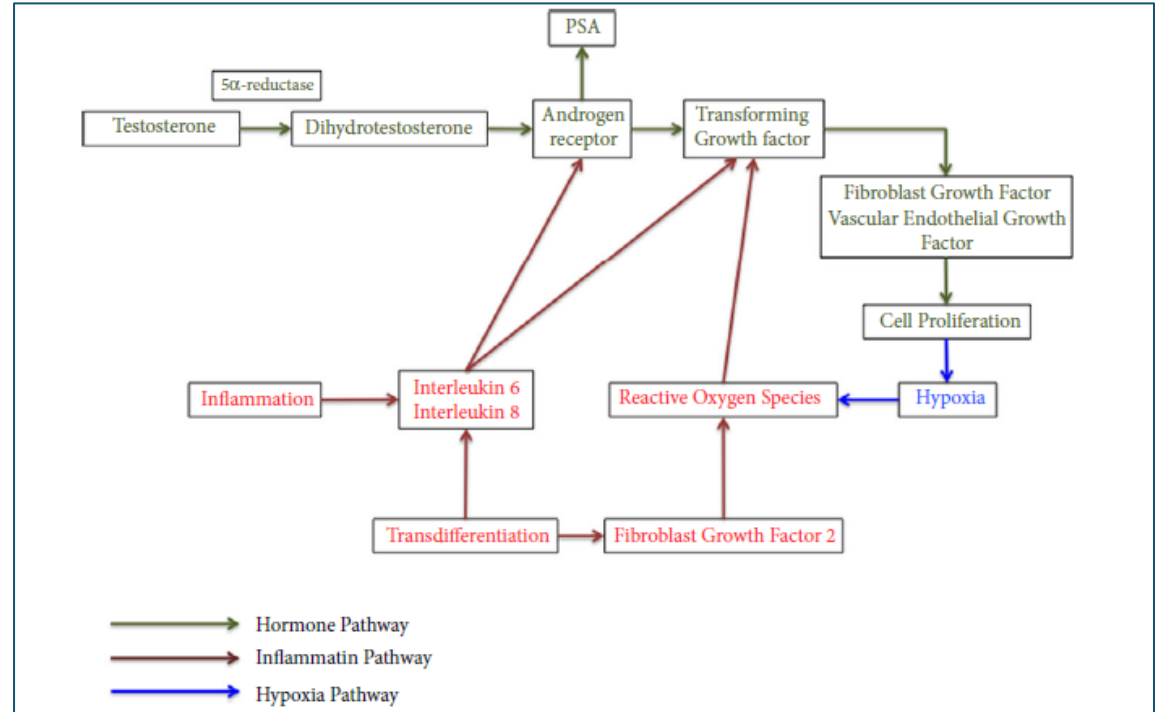


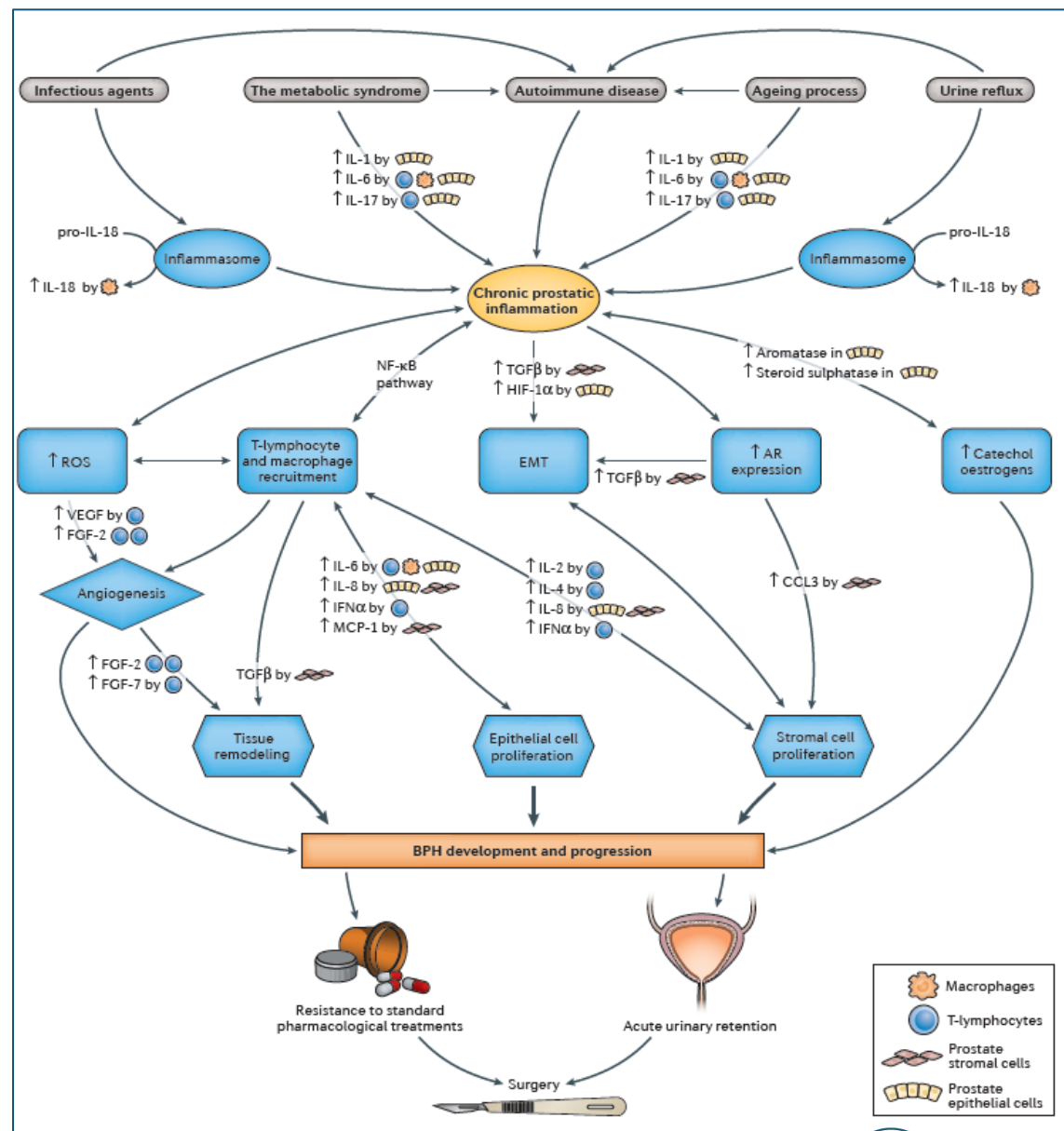
Figure 1 | **BPH**. The commonly used concept of zonal anatomy of the prostate was first proposed in 1968 by McNeal¹⁴⁴. He proposed that the prostate has four distinct regions: the non-glandular anterior fibromuscular zone (or stroma) and the glandular peripheral, central and transitional zones. Later work by McNeal¹⁴⁵ introduced the anatomical concept of the transitional zone as the principal site of benign prostatic hyperplasia (BPH). The size of the prostate remains stable until

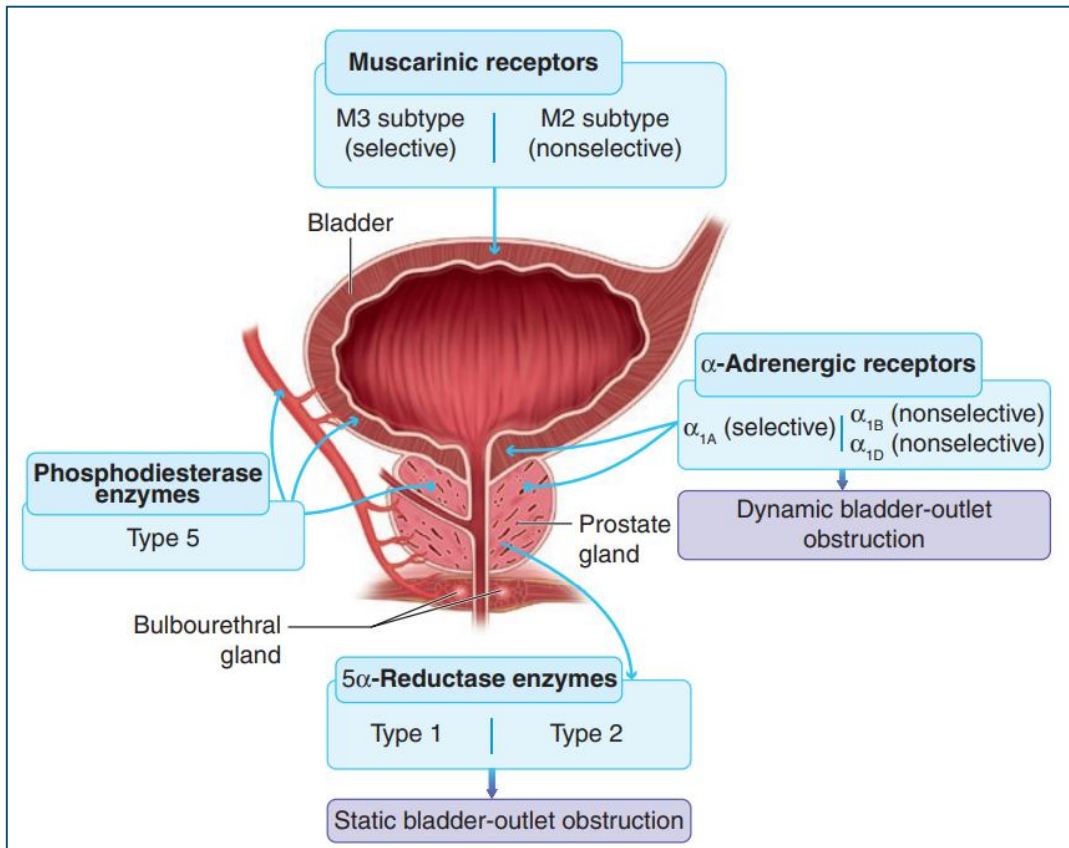
Chughtai, B., Forde, J., Thomas, D. et al. Benign prostatic hyperplasia. *Nat Rev Dis Primers* **2**, 16031 (2016).
<https://doi.org/10.1038/nrdp.2016.31>

Devlin CM, Simms MS, Maitland NJ.
Benign prostatic hyperplasia - what do we know? *BJU Int.* 2021 Apr;127(4):389-399

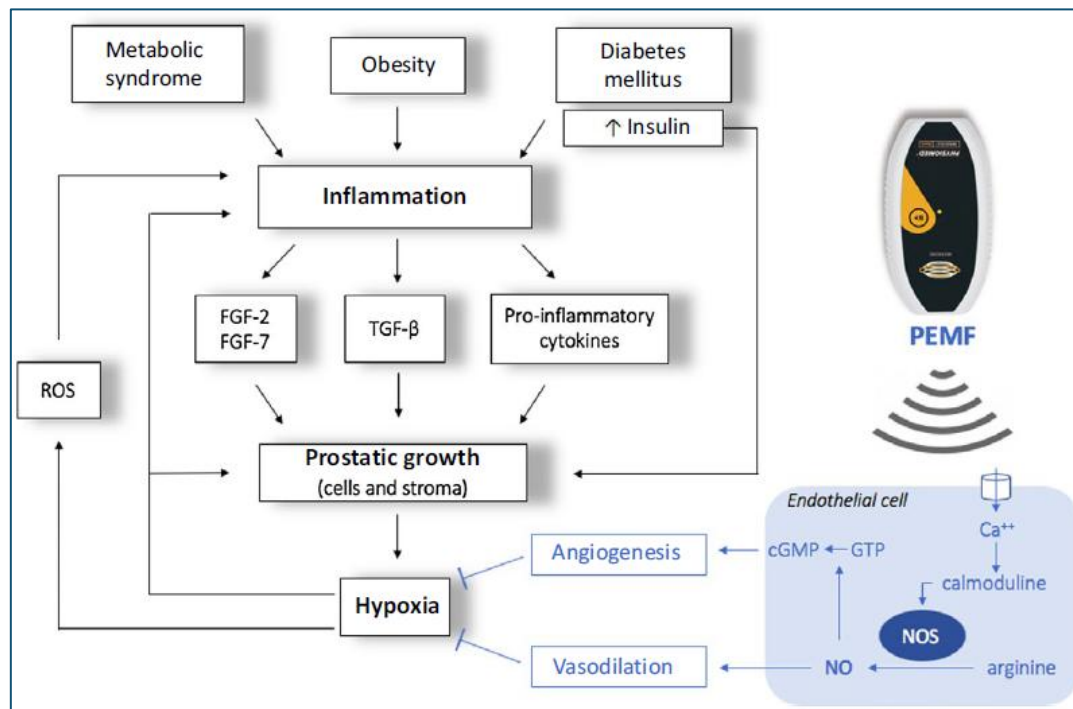


De Nunzio, C., Presicce, F. & Tubaro, A. Inflammatory mediators in the development and progression of benign prostatic hyperplasia. *Nat Rev Urol* **13**, 613–626 (2016).





Showalter, V.C., Raynor, M.C. (2020). *Medical Management of Benign Prostatic Hyperplasia*. In: Isaacson, A., Bagla, S., Raynor, M., Yu, H. (eds) *Prostatic Artery Embolization*. Springer,



Tenuta M et al., Therapeutic use of pulsed electromagnetic field therapy reduces prostate volume and lower urinary tract symptoms in benign prostatic hyperplasia. Andrology. 2020 Sep;8(5):1076-1085.

Caso clinico

- 62 anni
- BMI 27.28
- Occasionale assunzione di alcol
- Ex operaio

Anamnesi patologica remota

- Emorroidectomia
- Ascesso perianale
- Artrite psoriasica
- Microcitemia



IPSS pre-trattamento

Over the past month....	Not at all	Less than 1 time in 5	Less than half the time	About half the time	More than half the time	Almost always	Your score
Incomplete Emptying How often have you had a sensation of not emptying your bladder completely after you finish urinating?	0	1	2	3	4	5	
Frequency How often have you had to urinate again less than two hours after you finished urinating?	0	1	2	3	4	5	
Intermittency How often have you found you stopped and started again several times when you urinated?	0	1	2	3	4	5	
Urgency How difficult you found it to postpone urination?	0	1	2	3	4	5	
Weak stream How often have you had a weak urinary stream?	0	1	2	3	4	5	
Straining How often have you had to push or strain to begin urination?	0	1	2	3	4	5	
Over the past month....	No	1 time	2 times	3 times	4 times	5 times	Your score
Nocturia How many times did you most typically get up to urinate from the time you went to bed until the time you got up in the morning?	0	1	2	3	4	5	
Total Score							

- Tot: 21
- Quality of life: 6



Esami biochimici e strumentali

- **Ecografia: prostata a pattern disomogeneo, 33 ml. Residuo vescicale: 50 ml**
- **PSA: 1.020 ng/ml (<4)**

Protocol

Step 1 (2-3 sedute)

- Spostamento liquidi
Intra 40%
Extra 60%
10 minuti
- Biostimolazione
Power 3
Membrana cellulare
10 minuti



Step 2 (5-6 sedute)

- Spostamento liquidi
Intra 80%
Extra 20%
10 minuti
- Biostimolazione
Power 3
Membrana cellulare
10 minuti

IPSS post-trattamento

Over the past month....	Not at all	Less than 1 time in 5	Less than half the time	About half the time	More than half the time	Almost always	Your score
Incomplete Emptying How often have you had a sensation of not emptying your bladder completely after you finish urinating?	0	1	2	3	4	5	
Frequency How often have you had to urinate again less than two hours after you finished urinating?	0	1	2	3	4	5	
Intermittency How often have you found you stopped and started again several times when you urinated?	0	1	2	3	4	5	
Urgency How difficult you found it to postpone urination?	0	1	2	3	4	5	
Weak stream How often have you had a weak urinary stream?	0	1	2	3	4	5	
Straining How often have you had to push or strain to begin urination?	0	1	2	3	4	5	
Over the past month....	No	1 time	2 times	3 times	4 times	5 times	Your score
Nocturia How many times did you most typically get up to urinate from the time you went to bed until the time you got up in the morning?	0	1	2	3	4	5	
Total Score							

- Tot: 6
- Quality of life: 2



Preclinical studies

Leoci R et al., Effect of pulsed electromagnetic field therapy on prostate volume and vascularity in the treatment of benign prostatic hyperplasia: a pilot study in a canine model. Prostate. 2014 Aug;74(11):1132-41.

Clinical studies

Giannakopoulos XK et al., Effects of pulsed electromagnetic fields on benign prostate hyperplasia. Int Urol Nephrol. 2011 Dec;43(4):955-60.

Elgohary HM, Tantawy SA. Pulsed electromagnetic field with or without exercise therapy in the treatment of benign prostatic hyperplasia. J Phys Ther Sci. 2017 Aug;29(8):1305-1310.

Tenuta M et al., Therapeutic use of pulsed electromagnetic field therapy reduces prostate volume and lower urinary tract symptoms in benign prostatic hyperplasia. Andrology. 2020 Sep;8(5):1076-1085.



- La diamagnetoterapia ha ridotto i sintomi clinici della IPB
- Trattamento *add on* alla terapia farmacologica particolarmente in pazienti refrattari
- Sono necessari nuovi studi in un gruppo più ampio di pazienti

Conclusioni