Introduction:
In recent years, prostate vaporization has emerged as a new surgical strategy for Benign Prostatic Hyperplasia (BPH) procedures.

Objectives:
To determine the functional results of prostate vaporization comparing the two energies (Green 120 W vs Thulium 150 W).
To validate the performance of the technique in an outpatient settings.

Description:
From November 2008 to January 2012, 113 prostate vaporization procedures were selected. The 60% of cases were performed in an outpatient settings (for the last 58 cases this percentage was even 85%). All the patients underwent diagnostics (ultrasound, flowmetry, PSA and IPSS) before and 6 months after surgery.

Patient statistics:
Age: 69 (45-86)
Prostate Volume: 45 cc (10 cc - 108 cc)
Antiplatelet therapy: 24.8%
Anticoagulation: 3.5%
Presence of Postvoid Residual Urine Volume: 72% / Acute Urinary Retention (AUR): 16.8%
GREEN LASER 120 W (55 cases) / THULIUM LASER 150 W (58 cases)

Results:
Intraoperative conversion rate of 3%.
Catheterization Time: 1.49 days (1-4 days).
Improvement in maximum flow rate, average flow rate and IPSS at 6 months.
Green vs Thulium laser: Flowmetry and IPSS results are comparable.
Thulium laser: Less surgical time and lower energy levels used.

Complications:
AUR: 6.3%
Urinary Tract Infections: 4.5%
Hematuria: 2.7%
Erectile Dysfunction: 7%
Prostatic Lodge Sclerosis: 1.8%
Urinary Urgency: 8.1%

Conclusions:
The prostate vaporization is a safe procedure (also in an outpatient settings). With satisfactory results related to both functional terms and quality of life.
GREEN vs THULIUM: Results are comparable, but regarding the performance, THULIUM laser is faster and applies lower energy levels.