5th – 9.1% (1 of 11) and 6th – 16.7% (1 of 6). Repeat biopsies had been undergone by 303 pts. and PCa was found in 118 (38.94%) cases. PCa detection rate at repeat biopsies was 26.63% of all cancer cases of our study. Time of 2nd repeat biopsy (<6 vs. 6–12 vs. >12 months) has no influence on PCa detection rate (27.3 vs. 21.6 vs. 31.8% respectively) – Chi-square test 3.055, p = 0.222. Time of all repeat biopsies (<12 vs. 12–24 vs. >24 months) in cases when PCa was detected has also no influence on cancer detection rate (38.2 vs. 42.5 vs. 33.8% respectively) – Chi square test 1.39, p = 0.509. The patient's age, PSA at the time of biopsy, HG PIN, LG PIN, time between biopsy sets have not been used as predictors of PCa detection at repeat biopsies. Logistic regression analysis shows that only prostate volume is a significant independent predictor for cancer detection at repeat prostate biopsies – Exp(B) 0.987, 95% CI 0.968–0.989, p = 0.0001. Significantly different PCa detection rate (52.1 vs. 42.2 vs. 24.8%) compares to prostate volume <40 vs. 40–60 vs. >60 mL (p = 0.001) was also detected using Chi-square test.
**Conclusions:** Time between repeat prostate biopsy sets has no influence on detection of prostate cancer. Prostate volume is a powerful parameter for prediction of prostate cancer at repeat biopsy and it could be used for choosing the time of repeat biopsy.

**N27**

**Is there a need of routine pathological examination of all tissue specimens taken during benign prostate hyperplasia surgery?**

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**Introduction and Objectives:** In 2.8–9.8% of patients (pts) undergoing TURP or prostatectomy (PR) due to benign prostate hyperplasia (BPH) final pathological evaluation (PE) reveals coexistence of prostate cancer (PCa). WHO 2002 TNM classification defines pT1a and pT1b depending on the amount of cancerous tissue in the specimen <5% and >5%, respectively. However, PCa in 85% occurs in peripheral zone, which is not usually a target of BPH surgery. Moreover, the majority of PCa patients can be excluded from BPH group based on tests performed preoperatively: PSA and TRUS-core Bx. An important question arises, whether tissue specimens taken during surgery should always be examined. The aim was to evaluate the incidence of PCa diagnosed incidentally in prostate specimens taken during BPH surgery, to assess the need of routine PE and to define the group of patients, in whom PE could be abandoned without the risk of omitting coexistence of clinically significant PCa.
**Material and Methods:** 633 consecutive men aged 32–94 (mean age 70) treated due to BPH with TURP (86%) or PR (24%) in 5-year period (2004–2008) were enrolled. Mean values of prostate volume (Pv), serum PSA and PSA density (PSAD) were as follows: 71.44 (10–298) ml, 4.87 ng/ml (0.04–40.84), 0.08 (0.01–1.16). All specimens taken during TURP and PR were evaluated pathologically. Moreover, in 39 pts (6.1%) result of preoperative TRUS-core Bx was negative.
**Results:** PCa was found in 25 (3.9%) pts, less frequently after TURP (3.85%) than after PR (4.5%). PCa was staged as pT1a or pT1b in 9 (36%) and 16 (64%) cases, respectively. PCa grade defined in Gleason score (Gl.) as high risk (≥7) was diagnosed in 5 pts (20%) and all of them underwent TURP. PE in all pts, who underwent biopsy of the prostate before surgery, did not reveal cancer. Mean values of age, prostate volume (Pv), serum PSA level and PSA density (PSAD) in men with PCa and in men, in whom PCa was not found, did not differ significantly and were as follows: age – 74.76 (49–81) versus 70.14 (32–94) years, Pv – 102.44 (17–287) vs. 71.29 (10–298) ml, PSA – 2.92 (1.35–6.23) vs. 4.93 (0.04–40.84) ng/ml, PSAD – 0.04 (0.01–0.06) vs. 0.07 (0.01–1.16) ng/ml/ml, respectively. Additional treatment after BPH surgery was offered to 5 pts (20%), suffering from clinically significant PCa (pT1b, Gl. ≥7, age <70).
**Conclusions:** Incidence of PCa diagnosed incidentally in prostate specimens taken during BPH surgery is low (3.9%). A vast majority (80%) of PCa are low risk tumors (Gl. <7). However, it is difficult to establish any cut-off values of age, prostate volume, PSA or PSAD suggestive for the negligible risk of prostate cancer. Presented data suggest that PE of specimens taken during BPH surgery may be omitted especially in patients, in whom preoperative TRUS-core Bx were negative. Our results bring existing PE standards up for discussion.

**N28**

**Reduction of PSA values after levofloxacin therapy in patients with PSA greater than 4 ng/ml: Implications for prostate cancer detection**

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**Introduction and Objectives:** Asymtomatic prostatitis may induce prostate-specific antigen (PSA) increase. PSA reduction-after antibiotics might identify those patients in whom biopsy can be avoided. The aim of our study was to investigate the possibility of reducing the number of prostate biopsies in patients showing PSA decrease or normalization after antibiotic therapy.
**Material and Methods:** This retrospective study was carried out between 2005 and 2007 in a university hospital. The study population comprised 274 subjects who underwent prostate cancer screening in our institution. Levofloxacin (LVX, 500 mg once a day.) was given orally for 3 weeks. Basal total-PSA (t-PSA) and free-PSA (f-PSA) determinations were repeated in all patients at study entry and after 3 week treatment with LVX, were compared.
**Results:** 235 patients (85.76%) showed PSA reduction after the therapy (Group I). In 39 of them (14.23%) PSA was increased (Group II) 39 of 235 patients had prostate cancer in Group I (16.5%). 8 of 39 patients had prostate cancer in Group II (20.5%). Mean PSA reduction was 18.4% in patients with benign pathology group (n:196) while it was 11.9% in patients with prostat cancer group (n:39)(p = 0.01). Initial PSA were found 9.36 ng/ml in patients with chronic prostatitis while it was 8.42 ng/ml in patients without chronic prostatitis (p = 0.04).
**Conclusions:** The treatment with LVX allowed to significantly decrease PSA values in 85.7% of the patients with asymptomatic prostatitis and PSA greater than 4.0 ng/ml. This approach could be useful in order to increase the specificity of PSA testing, reducing the number of unnecessary prostate biopsies.

**N29**

**Photoselective vaporization of the prostate with Greenlight HPS 120 W laser in patients with benign prostatic hyperplasia – results of treatment of first 100 consecutive patients**

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**Introduction and Objectives:** Photoselective vaporization of the prostate (PVP) with Greenlight laser is a promising minimally invasive procedure providing relief of the bladder outlet obstruction due to benign prostatic hyperplasia (BPH) with excellent safety profile. This technique is especially indicated for patients at high cardiac risk or on oral anticoagulation due to haemostatic properties of Greenlight laser. The aim of the