**Aim:** Assessment of the correlation between biopsy (bGS) and pathological (pGS) Gleason score in years 2000-2012 and difference in the evaluation of bGS at central or referring department.

**Material and methods:** Between 2000 and 2012 we have performed a total of 1028 radical prostatectomies at our department. Patients with neodjuvant hormonal therapy (n=63), unreported bGS or pGS (n=23), pT0 classification (n=14) and time to surgery longer than one year (n=23) were excluded. In all patients, the bGS and pGS was known, as well as evaluating department and in the case of the General Teaching Hospital the name of the reporting pathologist. Parameters were analysed using contingency tables and Chi-square test, differences by the year of the examination were assessed by nonparametric ANOVA.

**Results:** We evaluated a total of 912 patients, median bGS and pGS was 6 (2-9), pGS reached significantly higher values \((p <0.0001)\). Gradual increase in the value of bGS has been shown in 2000-2012, the most significant difference was observed between periods 2000-2007 and 2008-2012 \((p <0.0001)\). Altogether no difference was shown between the evaluation of bGS at our department and at referring hospitals. Only in period 2000-2005 bGS was significantly higher \((p = 0.0366)\) at our department. In 384 patients (42.4%) bGS and pGS were identical and in 374 cases (41.3%) bGS was underestimated. Greater differences in the evaluation of bGS and pGS were seen in biopsies performed at other departments \((p <0.0001)\). Evaluation of both specimens with the same pathologist did not affect the difference between the bGS and pGS \((p = 0.6735)\).

**Conclusion:** Modification ISUP 2005 applies equally in the assessment of bGS at different departments, beginning from 2008. The absolute difference between the bGS and pGS does not correlate with changes in the risk of disease.

The work was supported by grant MPO TIP FR-T13/666.