Classification of adenocarcinoma prostatae is very important for the treatment. I have described the disease, its treatment and classification in the introduction. I have analysed a sample of 52 patients from the Urological Clinic of General Faculty Hospital. Simple statistics was used for comparing and analysing of relation of preoperative classification and postoperative development of PSA. I have compared preoperative and operative Gleason's score. Preoperative Gleason score underscores the operative score. PSA decrease is significantly higher in patients with high initial PSA and in patients with classification T2N0M0. PSA one month after surgery does not differ in patients with classification T1C and T2 and it does not correlate with the preoperative characteristics of patients. The decrease of PSA is perhaps dependent only on the surgical treatment. Effect of operation cannot be predicted by Gleason score and by age. These results are valid only for patients undergoing radical prostractomy