



Interobserver reproducibility of percent Gleason grade 4/5 in prostate biopsies.

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PURPOSE: Percent Gleason grade 4/5 (GG4/5) has been proposed as a predictor of prognosis in prostate cancer and it has been shown to add prognostic information to that given by Gleason score (GS). We recently noted that the interobserver reproducibility of percent GG4/5 in total prostatectomy specimens is at least as good as that of the GS. However, to our knowledge the reproducibility of percent GG4/5 in needle biopsies has not yet been investigated. **MATERIALS AND METHODS:** A consecutive series of needle biopsies from 69 men with prostate cancer was reviewed. Biopsies were taken according to a standardized octant protocol. All 279 slides containing cancer were circulated among 4 genitourinary pathologists, who assessed GS and percent GG4/5. Results were compared pairwise and weighted kappa was calculated. **RESULTS:** The 4 observers had a mean weighted kappa for GS and percent GG4/5 of 0.48 to 0.55 (overall mean 0.51) and 0.52 to 0.68 (overall mean 0.60), respectively. There was less disagreement in percent GG4/5 when a single biopsy was positive for cancer than when 6 or more biopsies were positive. The number of positive biopsies showed a stronger correlation with a discrepancy in percent GG4/5 than cancer length. Disagreement was worse when cribriform or fusion patterns were present. **CONCLUSIONS:** Interobserver reproducibility of percent GG4/5 on prostate biopsies is at least as good as that of GS. Hence, concern about interobserver variability should not deter pathologists from using percent GG4/5. Grading appears to be most difficult when cancer is present in multiple biopsies or it contains cribriform or fusion patterns.

• Reproduzierbarkeit der Gleason-Gradierung unter 7
Pathologen: kappa 0.48