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Editorial

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Gleason's scoring of prostatic adenocarcinoma, updates of the updates

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Editorial

The proposals to update the Gleason's grading system of prostatic adenocarcinoma by the International Society of Urological Pathology in 2005 were a reflection of the fact recognized by pathologists and urologists that the Gleason grading system, established in 1960, had to be updated. The system, based mainly on recognition of architectural pattern withstood the test of time as a guide to the diagnosis, management and outcome of prostatic epithelial neoplasia. However, the modern progress in the prostatic carcinoma pathology, molecular biology, biochemical markers and the widespread use of needle prostatic biopsy it was becoming clearer that the Gleason system has to be modified. Gleason grades 1 & 2 based originally on patterns in prostatectomy specimens were "laid to rest", so to speak, as non-neoplastic adenomatous proliferative lesions. So, for years, prostatic carcinoma was graded differently from all other cancers by a system that starts with "grade 3", rather than "grade I". The serious inter-observer variability among pathologist in applying the 2005 system prompted a "contemporary update on pathology reporting for prostate cancer" in 2012.[1]

These revisions, "Updates" and "clarifications" were very useful for pathologists and urologists but may have added to the confusion of the general medical community and the patients as for the understanding of Gleason scoring complexities. One of the complexities of the system is adding various grades together to come out with "score". There is strong evidence that Gleason's grades 3 and 4 may represent two separate diseases reviewed by.[2] Gleason score 6 (3+3) cancers do not metastasize to lymph nodes[3,4] and are associated with a cancer specific survival of close to 100% regardless how they are treated or as a matter of fact, whether they are treated closely observed.[5] A retrospective study in our own institution concluded that "the proportion of prostate biopsy with Gleason pattern 4 or 5 predict for biochemical and clinical outcome after radiation therapy for prostate cancer.[6] The more recent evidence indicated that Gleason 3 may not affect the oncological outcome negatively when left at the surgical margin at prostatectomy.[7] Urologists started to wonder whether low-grade, low-volume prostatic cancers are really malignant neoplasm.[8] Gleason grade 4 and 5 are the real aggressive cancers and how much of those the patient has is a reflection of the tumor burden and ultimately decides the outcome.

The question about the "updated" Gleason is mainly about Gleason 7 and whether or not we are adding to different neoplasm's (grade 3 and 4) rather than reporting them separately as co-existing low-grade and high-grade neoplasms? More studies may be needed to define grade 4 even better, especially the "poorly formed glands" and to decide whether reporting the ratios of each grade separately will reflect the oncological outcome even better, rather than lumping them together.

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Conflicts of interest

Author declares that there is no conflict of interest.

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