Letter to the Editor

Discrepancy between theory and practice of the clinical tumor-nodes-metastasis (TNM) classification for localized prostate cancer

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We thank Dr. Bandini and Dr. Preissler for the interest they have taken in our paper "Predictive value of the UICC and AJCC 8th edition tumor-nodes-metastasis (TNM) classification for patients treated with radical prostatectomy", and appreciate their comments (1,2).

In our study, clinical T categories cT1 and cT2 were associated with different predictions for an organ confined tumor and favorable WHO grade ≤2 (Gleason score ≤7a). However, biochemical recurrence-free survival (BFS) did not differ.

The definition of cT1 and cT2 rests on the anatomical extent of the tumor, cT1 referring to a non-palpable, and cT2 to a palpable tumor. Both categories are further subdivided. cT2a-cT2c are defined according to tumor volume, i.e., cT2a = involvement of less, cT2b of more than 50% of one lateral lobe, cT2c indicates involvement of both lobes.

The clinical classification depends mostly on the result of digital rectal examination (DRE), while imaging is a more recently introduced additional tool. The physician doing a DRE will have difficulties to distinguish between the various cT2 subgroups. Radical prostatectomy (RP) by definition changes cT1 to pT ≥2, whereas clinical and pathological T2a-T2c may correspond. The inconsistencies of cT2 and pT2 have been discussed in a previous paper (3). They may be caused by the low sensitivity and specificity of DRE (4), or by the multifocal occurrence of tumor affecting both lobes (5). DRE may thus fail to detect the tumor in its entirety, often leading to a histological upstaging after RP. Thus the most frequent post-RP diagnosis in our cohort was pT2c (56.6%).

For these reasons, a clinical distinction between 'non-palpable' and 'palpable' should suffice to describe the suspected presence and extent of the tumor. In this regard, a redefinition of the clinical TNM classification may be appropriate. It was the purpose of our paper to raise awareness of the discrepancy between theory and practice of clinically diagnosing prostate cancer.

Not only clinicians, pathologists alike have reservations against the T2 subcategories. pT2a-pT2c subclassifications do not appear to have any prognostic relevance regarding BFS (6) and accordingly, have since been abandoned in the recent TNM-classification (7).

One other point of concern in the comment of Drs. Bandini and Preissler is the—not mentioned yet well known—fact that men of Afro-American descent do experience worse outcomes after treatment. Consequently, risk nomograms that are mostly validated in Caucasian patients could not be easily transferred to African-American patients (8). In our study we dealt with a cohort of mostly German men all of whom happened to be of Caucasian origin, not of choice but simply due to the very low proportion of Afro-American residents in the German population of less than 1% (2011: 0.6%, 2018: 0.7%) (9). The interpretation of our data refers to our population only. We gladly shall add a clarification to that extent, if so desired.

Acknowledgments

None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

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