

### Editorial Comment on: Risk-Adjusted Hazard Rates of Biochemical Recurrence for Prostate Cancer Patients after Radical Prostatectomy

Patrick J. Bastian

*Urologische Klinik und Poliklinik, Ludwig-Maximilians-Universität München, Klinikum Großhadern, Marchioninistr. 15, 81377 München, Germany*  
[patrick.bastian@med.uni-muenchen.de](mailto:patrick.bastian@med.uni-muenchen.de)

In the work by Walz and co-workers, a tool to examine the annual hazard rate of biochemical failure following radical prostatectomy for presumed localized prostate cancer was developed to risk-stratify each patient [1]. We have seen extensive studies from this group, all of which have been done with sound statistical work-up.

There has been a lot of focus on prostate-specific antigen (PSA) testing during prostate cancer screening [2]. Interestingly, there is only scarce literature on individual follow-up testing. Since Kattan et al introduced prostate cancer nomograms in the late 1990s, we have learned that patients are at different risks for undergoing recurrence, and thus, different follow-up schemes may seem appropriate [3,4].

In this paper, Walz et al define three risk groups and provide evidence that, according to these groups, an individual follow-up protocol can be used [1]. Not surprisingly, the two cohorts of two major referral centers are similar. The interesting finding of the paper is listed in Table 4, which outlines the individual protocol. Looking at the data, patients with low risk require a looser scheme compared with high-risk patients, who may even require a tighter follow-up, as stated in the prostate cancer guidelines [5]. The question, however, is what the consequences of early or late diagnosis of PSA recurrence might be. The majority of patients in this study have only a short follow-up of a couple of years, so it will be interesting to see how they will behave further down the line. Even more interestingly, the role of this adjusted follow-up protocol on prostate cancer-specific mortality has to be evaluated. This may take years and requires a randomized trial. Another point that may affect the usefulness of this data in daily routine is the fact that the data comes from major centers. These centers are known for their great work, but they may differ from the smaller, less specialized centers that treat prostate cancer patients.

The study also addresses the well-known effect of overtreatment of prostate cancer. It is stated in

the discussion that patients in the low risk category may not require any follow-up if the biochemical recurrence-free interval exceeds year 6. The question arises whether the patients require any active treatment at all.

The manuscript touches many interesting topics that need to be studied. To further improve the individual risk of each patient and his likelihood of recurrence, novel biomarkers that independently correlate with the risk of biochemical progression or that improve the accuracy of existing models are sorely needed and will hopefully arise soon [6–9].

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