Reviewer’s report

Title: Perineural invasion as an independent predictor of biochemical recurrence in prostate cancer following radical prostatectomy or radiotherapy: a systematic review and meta-analysis

Version: 0 Date: 25 Nov 2017

Reviewer: Rodrick Ven Den Bergh

Reviewer's report:

A review of the literature on the impact of perineural invasion on outcomes after prostate cancer treatment is presented.

Please find my comments below:

- This is a thoroughly performed review according to the accepted standards for systematic review.

- A 2013 review by Cozzi et al may be referred to.

- Perineural invasion is based on biopsy results in the radiotherapy group, while on prostatectomy specimen in the RP group? How difficult is it to report PNI in biopsy cores only? ('Third, the pathological diagnosis of PCa and the detection method of PNI varied throughout the eligible studies.')

- Readers may not be familiar with the Begg test.

- '… others argue that PNI is not an independent predictor of BCR.' Are only studies presenting multivariable analysis included in the meta-analysis, or are univariate analyses also included?

- NOS please write in full.

- 'Therefore, we suggested that some patients with PCa and PNI may benefit from systemic therapy.' Since PNI seems to be mainly related to local (ECE) tumor extension, and not to metastasis, it would sound more logical to advise adjuvant local therapy instead of systemic treatment when PNI is present? Please provide further explanation in the discussion.

- One of the main clinical implications of this may be that pathologists are encouraged to report this factor.

- Is there any rationale for advising to perform surgery verus radiotherapy in patients with PNI?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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