Reviewer's report

Title: Risk factors for biochemical recurrence after Robotic Assisted Radical Prostatectomy: a single surgeon experience

Version: 2 Date: 7 January 2015

Reviewer: Kenneth Iczkowski

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This is a study of recurrence after robotic radical prostatectomy by a single surgeon and risk factors such as margin status and other clinicopathologic variables are analyzed by multivariate analysis.

The study largely follows the template of about 2 dozen published reports involving outcome of radical prostatectomy and including margin status. Weaknesses are a smaller size and shorter follow-up than most of the published papers. Strength is that all operations were by a single surgeon, which controls for a variable.

1. On page 7, please give a time frame for PSA level >0.2. Is it on one occasion or on two separate occasions? Some studies require two measurements of >0.2.

1. The median follow-up is stated to be 22 months (1 month to 5 years) on page 8. Presumably with the very short follow-ups such as 1 month, biochemical recurrence intervened. The ranges of follow-up should be given for the failure group and the non-failure group. Then, in Figure 1, BCR-free survival should be given only out to the number of months as the patient with the shortest follow-up. The Kaplan-Meier curve goes out to 90 months, which misrepresents the scale since the longest follow-up is 60 months (5 years). But, even that is problematic because a non-failure patient with 12 months of follow-up should not be included on a curve that extends to 60 months. The Kaplan-Meier curve will under-represent the number of failures unless the maximum follow-up on the horizontal axis equals the shortest follow-up.

K-M curves as constructed may not be feasible, or the K-M curves should be restricted to patients with at least 36 months' follow-up to qualify for inclusion in, for example, a curve extending to 36 months.

2. On page 8, line 125 it is stated that 98 (85%) of positive margins were unifocal. Table 2 should break down the analysis at least according to unifocal and multifocal margins and compare them to each other. Other studies have done more than this, such as looking at margin length or locations.

3. Page 9 line 132. This is a badly worded and uninterpretable sentence: "....first operative period were (Fig. 1F.... What is first operative period--what is the duration? Again, on page 10, line 147 it says "early operative period." What is the time frame of early operative period?
4. Page 24, in the Table, PSA should be clarified as "preoperative PSA."

5. There are grammatical, word usage, and spelling issues to a moderate degree, and these should be fixed by the authors. Page 6 Jefferson should be capitalized.

Page 12 had significantly higher rate of BCR compared to late period---> had a significantly higher rate of BCR compared to the later period.

P. 13 line 207. a single surgeon. Line 208 stage and early postoperative...
Throughout the paper, place a space between a number and a unit such as ml.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests.