Reviewer's report

Title: Increased expression of MMP-9 and IL-8 are correlated poor prognosis of Bladder Cancer

Version: 1 Date: 20 March 2012

Reviewer: Adrie van Bokhoven

Reviewer’s report:

The authors describe the interesting finding that MMP-9 and IL-8 expression might be correlated with biological and recurrence of bladder cancer. While this report shows some interesting findings there are some issues that should be address or clarified.

Major Compulsory Revisions

1) If control/normalizer normal bladder was used from 5 RRP patients, why was not chosen to use normal control tissue from each individual patient? Also in the # #CT formula CT normal bladder tissue is used, is that from one of the five control tissues or a mean of all five? Was there any expression variation in the five controls in the genes studied?

2) There is no description of the demographics of the five controls, age/race etc. Also all 5 controls were male while tumor cohort was male/female. Also no race/ethnicity data for the BC patient group.

3) Results and discussion: IL-8 seems to be unexpressed in tumor tissues but go up in high grade vs low grade. Would like to have seen a clearer description and more discussion on this. Overall the discussion is better and more detailed on the MMP-9 than on the IL-8 results.

4) Statistical methods are not describe fully, and there no results described for test for comparison of clinical characteristics with the use of Mann-Whitney, Chi-squared, and Fisher exact test.

Minor Essential Revisions

5) Abstract: a few errors/spelling mistakes
   - Frozen malignant tissue collected -- Frozen malignant tissue collected
   - patients that recurrence – patients with recurrence

6) Background
   - MMP-9 e MMP-2 ---- MMP-9 and MMP-2

7) Results
   - We don’t found differences ----- We did not find differences
   - the expression of this genes ----- the expression of these genes
   - tumors and IL8 RNAm ---- tumors and IL8 mRNA
8) background:
The rational for including IL-8 and RECK in this study is not explained, RECK is explained with a sentence in discussion section but probably should be explained upfront in background section

9) Results section, last paragraph is a repeat of all data in table, better to just refer to table, listing of all the p values is confusing and redundant.

**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:** No, the manuscript does not need to be seen by a statistician.