Reviewer’s report

Title: Risk of urinary bladder cancer: a case-control analysis of industry and occupation

Version: 1 Date: 29 September 2009

Reviewer: ALAN NIEDER

Reviewer’s report:

The authors have written a very nice manuscript based on a large case-controlled study. However, it is unclear what the implications of the authors’ findings are. Increased risk of bladder cancer was discovered in widely disparate occupations: waiters, communications, medical specialists and livestock workers. Do the authors believe that their is a causative agent in each of these occupations or are their findings a statistical anomaly? For example, I am not sure that an increased risk in health care workers is related to their awareness of signs and symptoms of bladder cancer and thus an earlier diagnosis, as the authors suggest. While health care workers may indeed be diagnosed at an earlier stage—if they do immediately get evaluated for hematuria and dysuria—but not necessarily in a greater percentage than the non-medical population. The authors should more robustly discuss that varying nature of their findings and the fact that further investigations are clearly warranted in specific occupations. That being said, it would be difficult to label any occupation as increased risk based on this data.

The authors should also address why certain professions has reduced risk of bladder cancer for those employed less than 10 years, however, significantly increased risks for employment greater than 10 years (e.g., farmers). Clearly, risk (if there is a true cause-and-effect correlation) should be based on a continuum, such that as time increases, risk increases. Obviously, with such small numbers of subjects (26 and 17), the statistical and clinical significance becomes questionable.

Furthermore, with such small numbers in each specific occupation as well as a very unbalanced sample of smokers and non-smokers (73% vs. 53%), statistical significance may not infer clinical significance.

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

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests.