Reviewer’s report

**Title:** Renal cancer mortality in Spain: geographic patterns and possible hypotheses

**Version:** 1  **Date:** 15 September 2008

**Reviewer:** Freddie Bray

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The study examines geographical variations in kidney cancer mortality in Spain at the municipality level using GIS techniques and Bayesian smoothing. The aim is clear, the technical aspects and reporting of the results is sound, and the high rates in certain areas of Spain of this disease, and the contrasts between men and women are epidemiologically interesting. It is also well-written and my comments are thus reasonably minor:

- Would prefer use of the term “kidney” rather than “renal” cancer throughout
- Paragraphs 2 and 3 of the Intro should be placed in the Discussion.
- Intro, para 1. Incidence sex-ratio should be “male:female incidence ratio”
- The authors should comment on other explanations for possible differences in kidney cancer mortality across the country, given mortality rates will reflect not just incidence but case fatality. Specifically, the possibility of local variations in:
  - survival rates due to differences in the distribution of tumour stage at diagnosis;
  - incidental detection and possible effect on death certificate reporting.