Reviewer's report

Title: Spatial distribution of Parkinson's disease mortality in Spain, 1989-1998, as a guide for focused aetiological research or health-care intervention.

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Reviewer: Felix Bermejo

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The meticulous and interesting study of de Pedro-Cuesta et al., is more detailed after the review. But there is not a clear response to my critics about the PD low mortality data in South Spain (and South-West Spain). As the majority of ecological surveys, this may have unknown under-ascertainments (clearly stated in the abstract), that could explain the findings.

In my opinion the uneven distribution of Parkinson disease mortality in Spain, remember me, quite exactly, the uneven distribution of the 1,600-2,000 neurologists all over Spain in the studied period. This distribution had also a north-south gradient and with some areas of very few neurologists in the south (mainly in the Gibraltar area and Malaga South-East-, and Extremadura –South-West-) that are in agreement with the PD low mortality data (and obviously with the levodopa administration).

Why this elemental study has not been performed?

In the Gibraltar area (South Spain) there is a very contaminant industry with low mortality EP

I think that this ecological study has a lot of inconsistencies.