Reviewer’s report

Title: Socioeconomic environment and cancer incidence: A French population-based study in Normandy

Version: 1 Date: 19 December 2013

Reviewer: Jose Leopoldo Ferreira Antunes

Reviewer’s report:

I commend authors for having addressed my severe criticism to the previous version of this manuscript. Authors did a good job of taking into consideration the editorial process. Having enlarged the study period represents a remarkable upgrade. I contend that the modified manuscript improved considerably, and that this study may amount to a relevant reference for further studies, especially for registering baseline information for future comparisons. In response to your final remark, yes, I really found your study to be of interest.

I am still not fully convinced that the number of cases allows stable estimation of population rates in such small areas. You probably have deleted areas with no cases of specific types of tumour, because you cannot log transform rates when no case has been registered. Even for the most incident type of cancer, the average number of cases per area is reduced. Rates are unstable when they are assessed based on few cases, because each incident case has a higher impact in areas with a lower number of inhabitants. As the number of inhabitants tends to be higher in better off areas, unstable rates may lead to a statistical artifact, and part of the excessive incidence you assessed would have been influenced by the association between the denominator and EDI.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.