Reviewer's report

Title: Changes in period and cohort effects on haematological cancer mortality in Spain, 1952-2006

Version: 1 Date: 16 January 2014

Reviewer: Marlous van Laar

Reviewer's report:

The authors address an interesting and important topic of increasing mortality trends for NHL and multiple myeloma, highlighting important differences between genders.

I suggest the following minor essential revisions:

1. Background, Paragraph 1:
   1a) The word 'morbimortality' does not appear in the English dictionary, and should be changed to 'morbidity and mortality'.
   1b) The sentence beginning 'In Europe, Spain occupies...' would read better as follows: "Morbidity and mortality from haematological cancers in Spain are comparable to the European average" (see also discretionary revisions).

2. Background, Paragraph 2:
   2a) Change 'in contract' to 'in contrast'

3. Background, Paragraph 3:
   3a) Change 'potential distorting effects' to 'potential confounding effects'

4. Methods, Data Source
   4a) Last sentence should be rewritten as: “Mid-year population estimates for Spain were obtained from the Spanish National Institute of Statistics from 1952 to 2006 (insert reference here)"
   4b) The authors mention ‘problems of case ascertainment and death certification for lymphoid tumours from the beginning of cancer registry activities’ in the Background, paragraph 2 – it would be useful to further explore whether ascertainment of death certification is thought to be a problem for the Spanish data within the data source section and if so, this should also be added to the study limitations.

I suggest the following discretionary revisions:

5. Background, Paragraph 1
   5a) It would be useful if the authors listed European averages alongside the Spanish morbidity and mortality figures.

6. Figure 1
6a) There is a lot of important information in Figure 1 and it may be more appropriate to produce separate plots for each diagnostic group showing both males and females.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**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