Author's response to reviews

Title: Second primary cancer risk - the impact of applying different definitions of multiple primaries: results from a retrospective population-based cancer registry study.

Authors:

Aishah Coyte (0805014C@student.gla.ac.uk)
David S Morrison (david.morrison@glasgow.ac.uk)
Philip McLoone (philip.mcloone@glasgow.ac.uk)

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Author's response to reviews:

Dear Editor

Thank you for the referee’s comments. I have set out the changes we have made in light of these comments.

Reviewer - Lifang Liu

1. We did not present absolute excess risks because a) we carried out the analysis over a time period when absolute risks are changing, and b) the numbers of events are too small to provide reliable estimates of excess risk in each age-group/time-period. For this reason we chose indirect standardisation. The problem with small number of events is even more acute when specific cancers are examined. In this instance, we do not agree with the reviewer’s suggestion and have opted not to add AERs.

2. We cannot explain why there is a difference between the percentage of patients with second primary cancers in the Dutch cancer registry and the percentage we found in the Scottish cancer registry. We have added a description detailing what is recorded in the Scottish cancer registry, and have made reference to the reviewers own paper on the subject. We do suggest that the differences may occur due to differences in registration practice.

3. We feel that the reviewer has perhaps over interpreted our text. We postulated that smaller SIRs may be due to greater screening, we did not state that this was definitely the case. Our rationale for this suggestion is that greater screening increases the overall incidence of cancer which in turn would generate a greater expected number of cases. The SIR which is basically the ratio of observed to expected cases would fall because the expected number of cases has increased. This assumes that incidence of second primary cancers in the cancer group has not increased by the same degree. This may be the case if we assume cancer patients are under greater surveillance.

Reviewer – Amy Downing
Major Revisions

Results
1. We have clarified that the risk is lower between 60 days-1 year.

Discussion
2. 6th paragraph - we are not in a position to discuss variation in the different ways in which cancer registries operate. However we have added an explanation of what is recorded in the Scottish cancer registry and the registration of second primary cancers in the registry. We have also made a statement that in general cancer registries record malignant and insitu tumours. We also draw attention to difference with the Dutch cancer registry.

3. 7th paragraph - we have clarified this discrepancy by stating that that Scottish cancer registry guidelines for registering multiple primary cancers are not as restrictive as the IARC/IACR rules.

4. 8th paragraph – we have removed the last two sentences which had caused confusion.

Minor

5. 1st paragraph - we have mentioned melanoma

6. Paragraph 9 – We have changed this sentenced so that the meaning is now clearer.

We have altered the title of the paper. We have corrected references and rectified typographical errors.

Yours sincerely

Philip McLoone