Reviewer's report

Title: Risk of stroke in patients with ovarian cancer: a nationwide population-based study

Version: 1 Date: 17 January 2014

Reviewer: Lisa M. DeAngelis

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This is a nicely done study addressing an increasingly important topic in cancer survivors.

Major:

1. The duration of follow-up in the ovarian cancer and control cohorts was very different, median 2.68 yr for the cancer group and 3.85 yr for the control. This makes for a very unequal comparison. The limitation is the follow-up of the ovarian cancer patients - which is understandable. However, shouldn't the authors have matched the follow-up of the control group to the cancer group as they matched everything else given that longer follow-up of these patients will increase the number of strokes in the control population and reduce the potential effect of the cancer? I think this is the most serious issue and needs to be addressed. They may have grossly underestimated the HR of stroke in the ovarian cancer population.

2. Several standard vascular risk factors were prominent in the ovarian cancer population such as hypertension, increasing age, etc. However, there is no comment on the effect of these risk factors in the control group. Did they have a similar HR in the control group or was there an interaction between these standard risk factors and the presence of ovarian cancer, or the use of platin-based chemotherapy? This is important in trying to understand the mechanisms and tease out whether platin-based therapies accounted for the majority of the increased risk seen in the ovarian cancer population

Minor:

1. Was thromboembolic disease recorded in the database and could the authors find any association with stroke in the cancer population?

2. The other tantalizing piece of information on page 14, line 264 is the suggestion that the increased risk of stroke is present immediately at diagnosis - which can't be explained by platin therapy. Do the authors have data on the time when strokes occurred?

Discretionary:

1. The whole paragraph on RT on page 14 doesn't add anything, and I would delete.
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 I have no competing interests.