Reviewer's report

Title: Preoperative serum CA125: A useful marker for surgical management in endometrial cancer

Version: 4  Date: 25 January 2015

Reviewer: Christa Nagel

Reviewer's report:

Major Compulsory Revisions

1. I do not understand the sentence from line 101-104 starting with “Omiting”. As it is written, this does not seem to be a true statement.

2. It seems that all patients did not undergo lymphadenectomy in this study. I think that you are unable to draw the conclusions that you have based on this. How do you know that those patients did not have microscopic metastases.

3. In the inclusion criteria you mention that no patient had received chemotherapy or radiation. Did you exclude patients with another cancer diagnosed within 5 years of their endometrial diagnosis if they were treated with surgery alone or another therapy? If not, I feel that this compromises the study because a recurrence, unless biopsied, is not definitively endometrial.

4. Was the cutoff for Ca-125 levels the same for premenopausal and menopausal patients. If so, I do not think this is accurate. Premenopausal patients may have an elevated Ca-125 level depending on the timing with their cycle.

5. It would be important to know how many patients had preoperative imaging and suspicion of metastatic disease prior to surgery.

6. In your conclusion you state that this is a retrospective study, but in the purpose statement of the introduction you state it is prospective.

7. I think that this study has a good concept, but needs to be more focused. The patient population studied needs to be more homogenous. I think that it should be focused on clinical Stage I patients where the decision for systemic lymphadenectomy and adnexectomy in premenopausal patients is not definitive. If there is evidence of extrauterine disease prior to surgery, then an elevated Ca-125 will not change surgical management.

8. The conclusions made in this study are too definitive. Such definitive conclusions can not be made from a retrospective study.

9. The conclusion section needs to be more focused. Again, I would suggest focusing on clinical stage I disease and the incidence of lymph node and adnexal involvement based on preoperative Ca-125.
Minor Essential Revisions

1. In line 94-95 you state that peritoneal cytology is part of the standard treatment for endometrial cancer. This is no longer included in the staging system.

2. In line 99-101 you state, The disadvantage of systematic lymphadenectomy is a 7–10% risk of lymph cyst formation after surgery [2,3], along with increased anesthesia and operating time, and the need for a specialized surgical oncologist.” I would suggest including the risk of lymphedema, which is a much more symptomatic and long standing issue than lymph cyst formation.

3. The second paragraph of the introduction needs to be shortened. There does not need to be as much information on the background of Ca-125 in ovarian cancer. This weakens the purpose of the study.

4. Need to include BMI information for the patient population.

5. Line 182-184 needs to be in the methods section.

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

**Quality of written English:** Acceptable

**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.