Reviewer's report

Title: Neoadjuvant chemotherapy or primary surgery for stage III/IV ovarian cancer: contribution of diagnostic laparoscopy.

Version: 3 Date: 22 June 2008

Reviewer: Peter Schwartz

Reviewer's report:

Major Compulsory Revisions:
None

Minor Essential Revisions:

Abstract-29, not 26 patients received neoadjuvant chemotherapy

Methods- indicate the management of neoadjuvant chemotherapy treated patients following their cytoreductive surgery. Did they stay on the same chemotherapy or did the chemotherapy change? How many cycles of chemotherapy in total were they to receive compared to those treated in a conventional fashion?

Results- The three patients with significant medical comorbidities all died within one month of the first cycle of chemotherapy. What were the causes of their deaths? Were any deaths due to the chemotherapy?

- The authors indicated that in the conventionally treated group, those who underwent surgery by a gynecologic oncologist were 100% cytoreduced to no macroscopic residual disease, while those treated by surgeons not trained in gynecologic oncologic surgery were only able to optimally cytoreduce 33% of their patients. Who operated on the neoadjuvant chemotherapy treated patients? If both groups of surgeons were involved, was there a difference in the success in cytoreduction to no macroscopic disease following neoadjuvant chemotherapy?

Discussion- Page 9. The authors state that half of their patients had Stage III or IV disease and were considered good candidates for primary cytoreductive surgery on the basis of diagnostic laparoscopy, yet according to Table 1 all of the stage IV patients received neoadjuvant chemotherapy. This statement should be clarified.

- The authors refer several times in the Discussion Section to the meta-analysis of Bristow, et al regarding the fact that the patients who underwent optimal primary cytoreductive surgery had a seemingly better survival than those who received neoadjuvant chemotherapy followed by surgery, a finding also observed in this study. The authors should indicate that in the meta-analysis, as in this report, almost all of the studies were retrospective and non-randomized. Those who received the neoadjuvant chemotherapy had clinically worse disease than those chosen to undergo conventional therapy and should have been expected
to have a worse survival.

Discretionary Revisions:

It would be nice to see the differences, if any, in the surgical experience of the two groups of patients, i.e. time of surgery, estimated blood loss, intensive care unit stays and the duration of hospitalizations.

There are two important messages in this paper. The first is that laparoscopy can identify those patients with advanced stage ovarian cancer who may be surgically cytoreduced to no macroscopic residual disease. The second is the importance of the operation being performed by a surgeon trained in radical cancer surgery. The conventionally treated patients had 100% cytoreduction following surgery by a gynecologic oncologist while those not so trained only were able to cytoreduce 33% of the patients to no macroscopic disease.

I believe this paper would be substantially enhanced if the authors refer to the latest Gynecologic Oncology Group reports that show the importance of the primary surgery cytoreducing the patients to no microscopic residual disease, rather than to 1cm or 2cm residual disease (J Clin Oncol 2007; 25:3621-7 and J Clin Oncol 2008; 26: 83-9). There was a dramatic difference in survival between no macroscopic residual disease and any residual disease for both stage III and Stage IV patients. Diagnostic laparoscopy may now allow us to select those patients who may be cytoreduced to no macroscopic residual disease by a gynecologic oncologist and identify those patients who should receive neoadjuvant chemotherapy.

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:

no