Reviewer’s report

Title: Phase II Study of the Combination Carboplatin plus Celecoxib in Heavily Pre-treated Recurrent Ovarian Cancer Patients

Version: 3 Date: 29 December 2010

Reviewer: David Tan

Reviewer’s report:

This is a study with an interesting premise. However, further details are required before a fuller appreciation of its impact, particularly in the context of platinum resistant disease, can be obtained.

Major revisions

1) Please clarify why carboplatin was administered 4 weekly as opposed to the usual 3 weekly regimen. Was this related to concerns of renal toxicity?

2) Please define clinical benefit in the context of stable disease – I presume the authors mean GCIG and RECIST SD for at least 3months? This should be stated in the methods.

3) Given the premise that celecoxib may have a potential role in reversing platinum resistance, it would be important to know what percentage of 1) platinum-resistant patients and 2) platinum-refractory patients actually responded to the combination. Please include this information in the manuscript and in Table 2.

4) Of the 45 patients recruited the authors state in the abstract that 51.1% had platinum resistant disease, although I note that in the patient selection criteria all patients enrolled had to have a treatment free interval (TFI) from platinum-based chemotherapy of >6mths. It is well-known that the length of platinum TFI can subsequently affect the response to platinum rechallenge and therefore it is important that the response rates be compared in patients with platinum TFIs of 6-12mths and those with TFIs of >12mths.

5) Were any of the patients BRCA mutation carriers? This again may have an impact on response rates in patients rechallenged with platinum-based chemotherapy.

6) This group has previously published results showing that increased COX-2 expression by immunohistochemistry is associated with chemotherapy resistance and outcome in ovarian cancer patients (Ferrandina et al Ann Oncol (2002) 13 (8): 1205-1211). It would therefore be very interesting to evaluate the role of COX-2 expression as a biomarker in this context. Is there any specific reason why this was not performed?

Minor Revisions
1) There are a number of grammatical errors in the manuscript that should be corrected, e.g. In the abstract, 1st line of methods: “Patients were administered oral celecoxib associated to intravenous carboplatin….”, please change "associated to" to "in combination with". Similar mistakes are also present throughout the text and should be corrected.

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

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

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests