Reviewer's report

Title: Impact of step therapy with 5-HT3 receptor antagonists on chemotherapy-induced nausea and vomiting: a retrospective cohort study

Version: 1 Date: 23 February 2012

Reviewer: mitsue saito

Reviewer's report:

<Major Comments>
1) Title “Impact of step therapy…” should be changed, because this research is nothing to do with step therapy. Even if there might be some cases related with step therapy, this research is not designed to evaluate the step therapy.

2) The database, insurance type plan, health maintenance organization and American Managed Care Pharmacy commissioned report utilized here in this research should be introduced precisely, as all the reviewers and readers of this manuscript are not US citizens. Especially the system of PharMetrics' claims database is profoundly related to the quality of this research itself.

3) The Impact of NK1ra and dexamethasone should not be ignored, when you compared palonosetron and other 5HT3ra, which was not considered in this investigation.

4) There must be discrepancies between prescription by physicians and actual intake by patients. Does the database utilized here reflect prescription rather than intake? If physicians tend not to prescribe additional antiemetics for palonosetron group, as they believe it's efficacy, the bias is induced easily.

<Minor Comments>
1)"CCI" should be explained in Abstract.

2)Which is more reasonable "More CT days reduced the number of CINV days" described in RESULTS or "long CINV days might be the cause of less CT days"?

3) The reviewer respects the authors about the unique approach using claims database and the results shown in this manuscript must reflect some real outcome of our medical services though, each problem described above needs to be solved or considered.

Level of interest: An article whose findings are important to those with closely related research interests

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'