Reviewer’s report

Title: Treatment Approaches and Costs of Surgical Site Infections post Hip Arthroplasty in Australia: a retrospective Analysis.

Version: 1 Date: 20 August 2012

Reviewer: Ralf Skripitz

Reviewer’s report:

In their interesting and well written article “treatment approaches and costs of surgical site infections post hip arthroplasty in Australia: a retrospective analysis” the authors estimated the treatment “costs” for different approaches after surgical site infections (SSI).

However, in order to make the article publishable some changes should be made:

1. The authors do not analyse the costs but the reemburrisment according to the AR-DRG. Therefore the article, including the title, has to be changed or e a real cost analysis has to be performed.
2. In order to make the results more comparable the authors should clearly state how much a successful performed primary total hip arthroplasty costs and how much money is earned with it, since international data is available on that.
3. The authors should also clearly define success rate after revision e.g. one year infect free
4. For the debridement group the actual number of deep SSIs has to be established. In 39 cases it is not clear whether it is not only a superficial infect, therefore the “success rate” is to high and the costs to low in this group.
5. The tables are labelled wrongly and therefore the numbers in the text are not to compare with the numbers in the tables. Some of the numbers mentioned in the text cannot be found in the table at all (e.g. page 9 $24,357 table5)
6. Range or SD should be given for all treatments in the text or in the tables
7. Type of infection (name and number of bacteria) should be listed for all treatment groups
8. Both figures do not add information to the article and could be omitted. In figure 2 the tables should be corrected as well as the numbers.
9. References should be cut in half. More than 20 is certainly not necessary otherwise the authors should provide the references to the reviewer because some of them could certainly not be found
10. For each treatment the quantity of codes need to be added in order to become an overview what has been done
11. Table one could be omitted
12. The discussion has to be corrected in the way that DAIR only showed good
results if the 39 unclear cases were added (page 12 bottom). This also makes the assumption that DAIR could lower costs (page 13) irrelevant.

All comments need major essential revisions.

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

**Quality of written English:** Acceptable

**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