Reviewers report

Title: Complementary role of 18F-FDG PET/CT in detection of biliary tract cancer recurrence after curative resection

Version: 1 Date: 1 October 2010

Reviewer: Pierre-Yves SALAUN

Reviewers report:

This study treats about the diagnostic performance of suspicious recurrence by ceCT and 18F-FDG PET-CT in patients treated by curative resection of biliary tract cancer.

In the background (at line 10), authors should cite the tumor markers realized in routine

Moreover, aims have to be explained more clearly and could be divided in two parts.

First: overall (and by specific sites) sensitivity, specificity, PPV, NPV and accuracy of ceCT and FDG-PET/CT

Second: search for correlation between SUVmax in FDG-PET/CT and tumor markers

Concerning materials, authors should explain the ceCT method. Were all exams performed on the same system? Is the number of slice different for each exam? How do you confirm recurrence by imaging?

In the results section(at line 3), authors forget to cite ampulla Vater cancer (28%) for primary site of tumor. No reference about AJCC classification were given

What is median delay between the end of treatment and suspicion of recurrence?

Figure 1 title is badly readable

Have all patients benefit from pathologic confirmation of recurrence? If not, how many was inconclusive.

What is the patients overall survival?

Are RECIST criteria used (progressive disease) to confirm recurrence by ceCT?

Was pathologic confirmation realized by biopsy (guided by imaging?) or by new surgery?

In the discussion it will be interesting to explain the clinical impact of the six false negative cases identified by additional PET/CT.

Are the confirmed recurrent lesion correlated with the absence of adjuvant treatment?

Another limitation is the probable different characteristics of ceCT imaging
between the period of 2003 to 2008 (spatial resolution)
Moreover authors should precise if image analysis was independently reviewed by two experts.

Prognostic value of FDG-PET in initial staging BTC is not related in the start of discussion. A prognostic value of SUVmax in recurrent disease could also be research in you study and discuss with the following reference:


The title could be changed to: “Diagnostic performance of ceCT and 18F-FDG PET-CT in suspicious recurrence of biliary tract cancer after curative resection”

Conclusion : major compulsory revisions

**Level of interest:** An article of limited interest

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

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.