Reviewer's report

Title: Lymph nodal Fine Needle Cytology in the Staging and Follow-up of Cutaneous Lymphomas

Version: 2 Date: 3 July 2013

Reviewer: Jan Nicolay

Reviewer's report:

This study delivers as an interesting new aspect a reasonable diagnostic algorithm of FNAC using ROSE and different ancillary techniques depending on the findings. It discusses the chances and challenges of these techniques in detail. Therefore, this study presents interesting data contributing to the controversial field of optimizing diagnostic procedures for optimal staging of CTCL. Yet, there are some points I would like to have addressed:

Major Revisions:

1. FNAC inherently bears the problem of generating false-negative results by poorly representative results (Papa IV et al: JCO 1996), as the sample’s differentiation depends on the localization within the lymph node, that might contain malignant cells, that are just not taken in the biopsy. This problem should be discussed in more detail and possible solutions/perspectives how to minimize that problem should be named.

2. Both classification systems for the determination of the N state in the TNM system (Dutch and NCI-VA classifications) require a statement about the lymph node architecture, so the N state can only be defined by an excisional biopsy. The authors should address this point.

3. Unfortunately, the ancillary methods, that represent one of the major novelties of this paper, cannot be compared by their quality, as they are differentially performed. So for example, no statement can be dared about the quality of flow cytometry, as it is only performed in 13/21 cases. Therefore the authors address to the sensitivity and specificity of performing their ancillary techniques.

4. The authors should express their statement of FNAC as a first line method diagnostically equivalent to excisional biopsy more carefully. To really be able to state that in contradiction to the ISCL/EORTC recommendations, a bigger comparative study between these two methods would be compulsory. The results of FNAC and excisional biopsy would have to show high concordance in order to establish FNAC as first line. This should be named in the discussion.

Minor revisions:

1. page 16, line 6: must be "Papanicolaou" instead of "Papanicoplaou"
**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.