Lymphocytic focus score as a prognostic tool

We would like to thank Dr Arnaud et al for their comment on our article discussing the prognostic value of salivary gland assessments in primary Sjögren’s syndrome (pSS).

One of our findings was that having a lymphocytic focus score (LFS) ≥3 (number of foci/4 mm²) at the time of diagnosis contributes significantly to the risk of lymphoma development during pSS disease course. We agree that the follow-up time after biopsy is important to take into account because differences observed could merely be a result of the time that patients have been followed. As displayed in our article, we therefore analysed the incidence rate of non-Hodgkin’s lymphoma (NHL) per 1000 person-years and showed that the incidence rate was higher for patients with an LFS ≥3 than those with an LFS of either 1 or 2 (NHL incidence rate of 3.7 for LFS=1, 2.4 for LFS=2 and 12.8 for LFS ≥3, respectively, with a total of 1169 person-years at risk).

As suggested, we have additionally performed Kaplan–Meier survival analysis and Cox’s proportional hazard regression analysis. The Kaplan–Meier curve showed reduced survival for the patient group with an LFS ≥3 (Log-rank test: p=0.009). Using Cox’s proportional hazard regression analysis, we observed that an LFS ≥3 was significantly associated with the development of NHL both in a univariate analysis (HR 6.2; 95% CI 1.3 to 29.3; p=0.021) and when adjusting for anti-SSA, anti-SSB, ≤40% immunoglobulin (IgA plasma cells and ≥25% IgM plasma cells in salivary gland specimens (HR 9.9; 95% CI 1.2 to 82.4; p=0.034).

In addition, in the original manuscript, we had performed multivariable linear regression analysis to assess the association between LFS ≥3 and development of NHL. The results of multivariable logistic regression analysis, which is indeed more appropriate (variables in the equation: anti-SSA, anti-SSB, LFS ≥3, ≤40% IgA plasma cells and ≥25% IgM plasma cells in salivary gland specimens), are comparative to our previously reported findings and show independent and significant prediction for lymphoma development of LFS ≥3 (OR 14.72; 95% CI 1.6 to 136.4; p=0.018).

Together, these results confirm our previous analyses that an LFS ≥3 might help to identify pSS patients with an increased risk for development of NHL.

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