Reviewer's report

**Title:** Atrial fibrillation after pulmonary lobectomy for lung cancer affects long-term survival in a prospective single-center study

**Version:** 1  **Date:** 21 October 2011

**Reviewer:** Ken Kodama

**Reviewer's report:**

The authors investigate the impact of postoperative AF on early and late outcomes after pulmonary lobectomy for lung cancer. Their results indicate that hospital mortality is higher in patients with postoperative AF than those without AF. Among the 5-year survivors, postoperative AF independently predicts poorer long-term survival. As independent AF predictors, they picked up preoperative paroxysmal AF, blood infusion, and FBS. This report is convincing, and seems to be including new evidence.

I think that the mechanisms involving postoperative AF will be separated into two categories; one of them is the volume or pressure overloading on the atrium due to the decrease of lung volume, blood infusion, etc. Another one is conduction defect affected by CAD, DM, advanced age, etc. High catecholamine states secondary to pain may also become a trigger of AF.

When the authors focused on the postoperative AF for the patients with lobectomy for lung cancer, the influence of systematic mediastinal lymph node dissection on the postoperative arrhythmia should be added in the analysis or discussion.

They should also discuss about the reason that postoperative AF more frequently involved in the patients with left lobectomy than right lobectomy.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.