**Introduction**

Authors performed a systematic review of randomized controlled parallel-design human trials with statins published since January 1980 to June 2007.

Eligible trials had to have: 1) direct comparison between a statin and control treatment or placebo, 2) incidence or recurrence of AF as a specified event, 3) follow up of at least 3 weeks. Search identified the following 6 trials with a total of 3,557 patients: Tveit et al, Am J Cardiol 2004; MIRACL, Circulation 2004; Chello et al, Crit Care Med 2006; Ozaydin et al, Am J Cardiol 2006; ARMYDA-3, Circulation 2006; Der nellis and Panaretou, Am Heart J 2006.

Three of these 6 studies, investigated the use of statins in primary prevention of new-onset of AF (two in patients undergoing cardiac surgery and one in patients after acute coronary syndrome). The other three studies investigated the use of statins in secondary prevention of recurrences of AF (two in patients with persistent AF undergoing electrical cardioversion and one in patients with history of paroxysmal AF). The following statins (with a variable daily doses between 10 and 80 mg) were studied: atorvastatin in five studies and pravastatin in one. Incidence or recurrence of AF occurred in 165 of 1,775 (9.3%) in patients treated with a statin versus 221 of 1,782 (12.4%) in control subjects. Therefore, use of statins resulted associated with a significantly decreased risk of new onset or recurrence of AF compared with control group (OR 0.60, 95% CI 0.18 to 0.85, p=0.02). The benefit of statin therapy seemed more marked in secondary prevention of AF (OR 0.33, 95% CI 0.10 to 1.03, p=0.06) then in new onset AF (OR 0.60, 95% CI, 0.27 to 1.37, p=0.23). When atorvastatin was considered alone, benefit was higher (OR 0.30, 95% CI 0.12 to 0.78, p=0.01).

**Conclusions and Comments**

This meta-analysis provide some evidence that use of statins is associated with a significant decreased risk new onset or recurrence of AF. However, clinical implications are limited by the fact that a coronary artery disease was present in most of the study population (93%). In this group...
of patients statin therapy is actually already indicated for the treatment of underlying disease. In addition, mechanisms of AF certainly varied in the different subgroups of patients (recurrences in paroxysmal or persistent AF, new onset after acute coronary syndrome or surgery), so the mechanism of protective effect of statins therapy remains to be elucidated. Therefore, out of ischemic heart disease, data resulting from published studies, are not yet conclusive to establish whether, why and in which group of patients statins should be take in consideration as appropriate therapeutic indication for the management of AF.