Effects Of The Long-Term Administration Of Nebivolol on the Clinical Symptoms, Exercise Capacity And Left Ventricular Function Of Patients With Diastolic Dysfunction (ELANDD)

Patients and methods: 116 patients suffering from Heart Failure NYHA functional class II or III Ejection fraction > 45% , Nebivolol was started at 2.5 mg/day and gradually uptitrated to 10 mg/day over a period of 5 weeks.

Objective: This study is designed to assess the long-term effects of the administration of nebivolol, compared with placebo, on the function of the left ventricle in patients with diastolic heart failure. The efficacy of nebivolol will be primarily evaluated through its impact on the patients’ functional performance (modification of the distance walked at a 6 minutes walking test). In addition, modification of symptoms and NYHA functional class will also be assessed.

Results: Nebivolol visibly decreased resting Heart Rate, as observed in both the 6-minutes walking test and the cardiopulmonary exercise test, while placebo led to an increase in mean HR.. The 6MWT distance increased with nebivolol and this change was similar to those observed in the placebo group.NYHA functional class significantly improved from baseline in both groups.

Conclusions: Beyond blood pressure lowering, Nebivolol was confirmed safe and well tolerated at a dose of 2.5 to 10mg in patients with heart failure with preserved ejection fraction. The beneficial effect of nebivolol in these heart failure patients with preserved ejection fraction, as seen in other studies (Seniors, Nodari), could not be confirmed in this series of patients. In this regard we have to consider that the patient group was too small, since the study was stopped prematurely at 116 of 150 patients. In 19 of these patients there were no echocardiographical signs of heart failure. This, together with the changes in inclusion criteria to enter the study are most probably at the basis of the inconclusive results we can see in this study.