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## HEART FAILURE MEDICATION IN THE EXTENDED RANDOMIZED INH STUDY: CLINICAL OUTCOMES ACCORDING TO PRESCRIPTION FREQUENCY AND DOSING OF GUIDELINE-RECOMMENDED DRUGS

Poster Contributions
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**Background:** Heart failure (HF) medication is often not administered as recommended in guidelines. The aim of the present analysis was to investigate the change of prescription frequency and dosage of betablockers (BB), ACE-Inhibitors (ACEi) or angiotensin receptor blockers (ARB) and resulting prognostic effects after a follow up time of 18 months in both study arms (telephone- und nurse-led intervention HeartNetCare-HFTM [HNC] and Usual Care [UC]) of the extended randomized INH-Study.

**Methods:** 1019 patients with systolic heart failure (ejection fraction≤ 40%) were randomized (UC: n=512, HNC: n=507, 70+12 years, 29% women, ejection fraction 31%). Patients in the HNC-arm received education concerning HF medication. Up-titration of BB and ACEi/ARB was an explicit target of the HNC-arm. Patients in the UC-arm received standard care, up-titration of medication was recommended to the patients' general practitioner. Type and dosage of HF medications, and survival status were assessed at baseline and at follow-up after 6 and 18 months.

**Results:** At baseline 83% (HNC/UC: 83/83%, NS) of patients received a BB and 88% (HNC/UC: 89/87%, P=NS) an ACEI/ARB. After 18 months prescription frequency for BB and ACE/ARB had increased by 5% and 8% in HNC (both P<0,05) but not in UC (+0,2% and + 2.3% both P=NS) when compared to baseline. The mean % dose of the recommended target dose (TD) had increased after 18 months for BB in UC and HNC by +16 and +28% (P<0.001) and for ACEi/ARB by +9 and +19% (P<0.001), respectively. Higher doses of both BB and ACE/ARB after 6 months were associated with improved survival in both study arms in multivariate Cox regression adjusted for age, sex, NYHA class, LVEF, renal function, systolic blood pressure and body mass index.

**Conclusions:** Even in the controlled setting of a randomized controlled trial evaluating a disease management program (HNC) not all HF patients could be treated according to guidelines and tolerated to be up-titrated with BB and ACE/ARB. Optimization of HF medication proved more effective in HNC, and higher doses of BB and ACE/ARB at 6 months follow-up were associated with significant prognostic benefit .