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## CARDIAC FUNCTION AND HEART FAILURE

### ATRIAL FIBRILLATION IN HEART FAILURE IS ASSOCIATED WITH AN INCREASED RISK OF DEATH ONLY IN PATIENTS WITH ISCHEMIC HEART DISEASE

ACC Poster Contributions

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**Background:** The prognostic importance of atrial fibrillation (AF) in heart failure (HF) populations is controversial and may depend on patient selection and the etiology of HF. In the present study we investigated the prognostic impact of AF in a large population with HF of various etiologies.

**Methods:** From the Echocardiography and Heart Outcome Study (ECHOS), 2881 patients admitted to hospital during a 4-year period (2001-2004) with symptoms of worsening of HF were included in the present study. Patients were followed for up to 7 years for all-cause mortality stratified according to heart rhythm (sinus rhythm, paroxysmal or chronic AF) and according to presence of ischemic heart disease (IHD).

**Results:** During follow-up, 1934 patients (67 %) died. The unadjusted mortality hazard ratio for patients with chronic AF was 1.17 (1.06 - 1.30;  $p < 0.001$ ). There was significant interaction between the aetiology of HF and the prognostic importance of chronic AF ( $p = 0.003$  for interaction with IHD). In HF patients with history of IHD, chronic AF was associated with a hazard ratio of 1.44 (1.18 - 1.77;  $p < 0.001$ ). In contrast, in patients without IHD, chronic AF was not associated with increased risk; hazard ratio 0.88 (0.71 - 1.09;  $p = 0.25$ ). No increased risk was found in the patients with paroxysmal AF.

**Conclusions:** In patients with heart failure, atrial fibrillation is associated with an increased risk of death only in patients with underlying ischemic heart disease.

