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## **Prognostic Value of High-Mobility-Group Box 1 in Heart Failure**

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HMGB1 has been established as an important mediator of myocardial inflammation and associated with progression of heart failure. The aim of this study was to analyze the prognostic value of systemic HMGB1 levels in HF patients with ischemic and dilated cardiomyopathy. An analysis was conducted (follow-up time of six years) of HMGB1 plasma concentration in 154 patients with systolic HF and correlated the results with severity of disease and prognosis. HMGB1 in HF patients was significantly elevated compared to controls regardless of diagnosis. HMGB1 levels correlated with other markers of heart failure indicating an association of HMGB1 levels with disease severity in HF. In survival models for the combined endpoint of death and heart transplantation, HMGB1 proved to be an independent predictor of the combined endpoint when split into terciles. In a multivariate Cox regression model, which included NTproBNP, serum creatinine, beta-blocker intake, NHYA classification and age, HMGB1 remained an independent predictor of the combined endpoint. Similar results have been obtained with HMGB1 analyzed at the ROC derived cut-off as well as applying as a continuous variable. These results demonstrate that HMGB1 plasma concentration is elevated in HF, correlates with disease severity, and that is an independent predictor of the combined endpoint death and heart transplantation in HF patients.