Saxon, L., Stevenosn, W., Middlekauff, H. Fonarow, G., Woo, M., Moser, D., and Stevenson, L. Predicting death from progressive heart failure secondary to ischemic or idiopathic dilated cardiomyopathy.  

Data were retrospectively reviewed on 528 consecutive patients hospitalized for treatment of advanced heart failure (left ventricular ejection fraction 0.2 +/- 0.07) and cardiac transplant evaluation, who were stabilized with medical therapy and discharged home. Predictors of heart failure death or rehospitalization for urgent transplantation were identified using the Cox proportional-hazards model. Within 1 year, 59 patients (11%) died suddenly and 70 (13%) died of heart failure or required urgent transplantation. A serum sodium < or = 134 mEq/liter, pulmonary arterial diastolic pressure > 19 mm Hg, left ventricular diastolic dimension index > 44 mm/m2, peak oxygen consumption during exercise testing < 11 ml/kg/min and the presence of a permanent pacemaker were independent predictors of hemodynamic deterioration. In the absence of these risk factors the risk of hemodynamic deterioration within 1 year from this study was only 2%. This risk increased to > 50% in the presence of hyponatremia and any 2 additional risk factors. Thus, patients with advanced heart failure at highest risk for progressive hemodynamic deterioration can be identified from clinical variables that could aid in triaging such patients to earlier cardiac transplantation.