Stavros G Drakos, J Clin Exp Cardiolog 2016, 7:12(Suppl)
http://dx.doi.org/10.4172/2155-9880.C1.062

Heart failure reversal and cardiac recovery through mechanical assist: What have we learned?

Stavros G Drakos
University of Utah, USA

Myocardial remodeling induced by pressure and volume overload drives the vicious cycle of progressive myocardial dysfunction in chronic Heart Failure (HF). Mechanical volume and pressure unloading induced by implantable cardiac assist devices allows a reversal of stress-related compensatory responses of the overloaded myocardium so that selected patients requiring long-term mechanical circulatory support for advanced HF can achieve clinically meaningful degrees of improvement in the structure and function of their native heart. Insights from clinical and translational studies on myocardial recovery with mechanical circulatory support may enhance the understanding of how the pathophysiologic mechanisms of HF progression might be reversed. The end points of ongoing and future translational and clinical studies are discussed to identify specific investigational strategies that may advance the field of myocardial recovery driven by hemodynamic unloading of the heart.

Biography

Stavros G Drakos is an Associate Professor of Cardiology with Tenure, Co-Chief Heart Failure and Transplant Section, Medical Director of the Mechanical Circulatory Support (MCS) Program and Investigator at the Eccles Institute of Human Genetics, U of Utah. His clinical and translational research interests are focused on cardiac recovery associated with unloading and MCS in both the chronic HF setting and the acute setting (i.e. acute HF/cardiogenic shock). He has published original work generated both in the clinical arena and in the laboratory which led to the establishment of the Utah Cardiac Recovery Program (UCAR). His ongoing clinical and lab-based research is focused on understanding the clinical, metabolic and molecular profile of the recovered human heart and utilize biological information and clinical characteristics derived from these studies to understand, predict and manipulate cardiac recovery applicable to all stages of HF. Dr. Drakos is co-chairing the NIH/NHLBI Working Group 'Advancing the Science of Myocardial Recovery with Mechanical Circulatory Support'.

Stavros.Drakos@hsc.utah.edu

Notes: