American Heart Association/American Stroke Association
Latest Get With The Guidelines® Quality Research

Associations Between Aldosterone Antagonist Therapy and Risks of Mortality and Readmission Among Patients With Heart Failure and Reduced Ejection Fraction. Adrian F. Hernandez, MD, MHS; Xiaojuan Mi, PhD; Bradley G. Hammill, MS; Stephen C. Hammill, MD; Paul A. Heidenreich, MD; Frederick A. Masoudi, MD, MSPH; Laura G. Qualls, MS; Eric D. Peterson, MD, MPH; Gregg C. Fonarow, MD; Lesley H. Curtis, PhD. JAMA. 2012;308(20):2097-2107. doi:10.1001/jama.2012.14795. Epub 11/28/12

Key Findings:

- Initiation of aldosterone antagonist therapy at hospital discharge was not independently associated with improved mortality or cardiovascular readmission but was associated with improved heart failure readmission among eligible older patients with heart failure and reduced ejection fraction.
- This study adds to the body of knowledge concerning real world experience with aldosterone antagonists in heart failure patients - which may lead to increased use.
- Processes of care varied significantly by hospital likely reflecting uncertainty about what works best to reduce readmission rates.
- Using quality improvement programs such as Get With The Guidelines®-Heart Failure will help hospitals to follow guideline-based discharge recommendations.
- The very large study sample adds to the impact of this study in the clinical management of heart failure patients.

- There was a significant increase in the risk of readmission with hyperkalemia, predominantly within 30 days after discharge. This study highlights a very real opportunity to improve patient outcomes (readmission rates) by incorporating appropriate follow up in regards to testing for increased potassium levels.
- Overall, more research is needed to determine processes that are clearly associated with short-term outcomes among patients hospitalized with heart failure.

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Dr. Hernandez is an Associate Professor of Medicine at Duke University and a member of Duke Clinical Research Institute, where he serves as the Director of Outcomes and Associate Director of Health Services Research. He has led studies ranging from clinical trials to outcomes and quality of care that have informed practice and health policy with a clinical focus in heart failure. He is the Coordinating Center Principal Investigator for NHLBI's Heart Failure Network, which will conduct several 200-300 patient trials over the next 7 years; and EXSCEL (exenatide qw vs. placebo; 9500 patients with diabetes), He recently served as the Coordinating Center Principal Investigator for the landmark trial, ASCEND-HF (nesiritide; >7000 patients with acute heart failure), which was the largest acute heart failure trial ever done. He serves as the Principal Investigator of AHRQ funded DEcIDE Cardiovascular Consortium and the Co-Principal Investigator for COMPARE-HF, a large heart failure comparative effectiveness study. He is the Co-Principal Investigator for American Heart Association's (AHA) Get-With-The Guidelines (GWTG) Analytical Center. He was elected to the American Society of Clinical Investigation in 2012 and has over 150 publications including articles in the New England Journal of Medicine, JAMA and the Lancet.
Right now, 5.7 million Americans are living with heart failure. An additional 670,000 new cases are diagnosed annually, up from 500,000 a few years ago. With the aging of the population, the problem is poised to reach epidemic proportions in coming years, taking a tremendous toll in quality of life as well as longevity. Moreover, the cost of providing heart failure care ranks among the leading U.S. healthcare expenditures. The American Heart Association has mounted a nationwide campaign to attack the problem from all sides. Target: Heart Failure provides healthcare professionals with comprehensive, content-rich resources and tools - free of charge - to address this urgent challenge.