Top Ten Things To Know
Acute Heart Failure Syndromes in the ED

1. Heart Failure affected 5.8 million people in the US in 2009 (about 2% of the US population). For most, acute symptoms will trigger an ED visit. These acute phases of decompensation are referred to as episodes of acute heart failure syndrome (AHFS).

2. There are nearly 658,000 ED AHFS encounters annually, almost 20% of total HF ambulatory care encounters delivered yearly.

3. Nearly 80% of those treated for AHFS in the ED are ultimately admitted to the hospital. Thus, the ED serves as the principal portal of entry for hospitalized AHFS patients and makes the ED team the gatekeepers.

4. Significant advancements have been seen in outpatient management of chronic HF, but, with the exception of natriuretic peptide testing, breakthroughs in AHFS care have not been significant in the last several decades. Even though AHFS presentations are very heterogeneous, therapeutic options have remained largely unchanged.

5. In AHFS the pathophysiology is likely multifaceted. However, presenting features such as hemodynamic status, presence (or absence) of myocardial ischemia, and renal dysfunction currently influence management decisions.

6. Appreciation of the variability of AFHS is lacking. Not all patients have the same etiology or precipitating factor. Heterogeneous presentations are met with homogeneous therapy.

7. Understanding how acute therapy impacts underlying cardio-renal function and hemodynamic endpoints is critical to the development of more progressive, outcome-oriented AHFS care.

8. Objective measures are currently lacking to select subsets of patients for targeted therapies based on their risk-profile, HF etiology, and cause of decompensation.

9. A common link in clinical trials addressing AHFS care is the lack of ED enrollment. Acute therapy and symptomatic improvement occurs in less than 6 hours in the vast majority of patients, patients are typically randomized into therapeutic trials long after this time.

10. Ongoing clinical trials and management strategies must address current knowledge gaps to ensure delivery of evidence-based care and improve clinical outcomes.