**SERIAL SAMPLING OF MIDREGION PROADRENOMEDULLIN IS PREDICTIVE OF SHORT TERM MORTALITY IN PATIENTS ADMITTED FOR SHORTNESS OF BREATH**

**Poster Contributions**  
**Poster Hall B1**  
Sunday, March 15, 2015, 3:45 p.m.-4:30 p.m.

**Session Title:** Imaging and Biomarkers in Heart Failure  
**Abstract Category:** 14. Heart Failure and Cardiomyopathies: Clinical  
**Presentation Number:** 1217-209

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**Background:** Midregion proadrenomedullin (MR-proADM) was shown to predict 90-day mortality in shortness of breath in the BACH (Biomarkers in Acute Heart Failure) study. Recent studies have demonstrated that serial measurement of MR-proADM, B-type natriuretic peptide (BNP) and N-terminal proBNP (NT-proBNP) may aid prognostic utility. However, serial MR-proADM for short-term, 30-day prognosis has not been established.

**Methods:** The BACH trial was a prospective, 15-center, multinational study of 1,641 patients presenting to the emergency department with dyspnea. Using this dataset, 949 patients admitted for shortness of breath and with serial biomarkers were analyzed. Previously published cutoffs for MR-proADM (1.985 nmol/l), BNP (1021 pg/ml), and NT-proBNP (6310 pg/ml) were used for analysis.

**Results:** Of the 979 patients included in the analysis, 383 (39.1%) were diagnosed with heart failure. There were 53 deaths at 30 days. Patients with persistently elevated MR-proADM, compared to patients with serial levels below the cutoff, had increased 30-day mortality (HR 7.3 [95% CI: 4.1 to 13.1], p<0.001). Serial BNP and NT-proBNP were also predictive of 30-day mortality (HR 3.1 [95% CI: 1.6 to 5.9], p<0.001 and HR 4.5 [95% CI 2.5 to 8.1], p<0.001, respectively).

**Conclusion:** Persistently elevated MR-proADM is strongly associated with 30-day mortality. In addition, serial MR-proADM may have increased prognostic utility compared to serial BNP or NT-proBNP measurements, though further studies are needed.