OBJECTIVES: Despite limited evidence, US and European guidelines recommend the use of IV vasodilators in addition to diuretics for the treatment of acute heart failure (AHF) patients who are not hypertensive. We investigated whether patients hospitalized for AHF and treated with IV loop diuretics in combination with IV nitrates (NT) or IV nesiritide (NES) achieve better outcomes compared to those receiving diuretics alone.

METHODS: We used the MarketScanU.S. Hospital Inpatient Database to analyze hospitalization records of patients hospitalized for AHF between 2007-2010. NT/neostigmine and NES were identified from pharmacy claims data and the use of IV vasodilators in addition to diuretics were compared with diuretics alone. Outcomes included hospital mortality, hospital length of stay (LoS), and costs during the first hospitalization. RESULTS: Diuretics + NT (N=4,401, mean age 70.1 years, 49.2% male) and diuretics + NES (N=2,254, mean age 70.4 years, 59.4% male) patients had longer LoS (7.3 and 7.9 days, respectively) vs. diuretics patients (5.7 and 5.8 days for corresponding pairs; p<0.01). LoS in ICU was about 0.7 days longer (p<0.01) in both vasodilator cohorts vs. diuretics alone. Mortality was similar to diuretics patients among diuretics + NT patients (1.9% vs. 2.0%; p=0.88) but higher among diuretics + NES patients (2.2% vs. 3.1%; p=0.05). Hospitalization costs were significantly greater in both vasodilator cohorts (diuretics: $8,949 vs. diuretics + NT: $14,016, p<0.001) and in diuretics + NES: $14,210, p=0.01). CONCLUSIONS: This real-world study of patients hospitalized for AHF indicates that neither NT nor NES in addition to diuretics improve survival compared to diuretics alone, with a larger drop in mean absolute SBP than the control, with the gap growing larger over time. The MVP group was more likely to ever reach treatment goal at 18 months (OR 0.03) and 18 months (OR 0.06), and more likely to reach goal more than once at 12 months (OR 0.04). Other factors associated with significantly lower risk of AMI or stroke hospitalization included female gender, younger age, absence of baseline transient ischemic attack or coronary heart disease, absence of concomitant use of aliskiren, insulin or metformin, and absence of AMI or stroke during the follow up period (from the end of ACAP to the end of enrollment period in the database). Association of colesvelam adherence with the outcome was examined by multivariate Cox regression, adjusting for patient demographic and clinical characteristics. RESULTS: A total of 31,017 patients were included in the analysis, of which 5,696 (18.4%), 4,643 (15.0%), 20,678 (66.7%) were high, medium and low adherence, respectively. Compared to patients with low adherence, high adherence patients were 41% less likely to experience AMI or stroke hospitalization during the follow up period (Hazard Ratio: 0.59; 95% CI: 0.56, 0.62; p<0.001). Other factors associated with significantly lower risk of AMI or stroke hospitalization included female gender, younger age, absence of baseline transient ischemic attack or coronary heart disease, absence of concomitant use of aliskiren, insulin or metformin, and absence of AMI or stroke during the follow up period.
PCV19 VENOUS THROMBOEMBOLISM PROPHYLAXIS AND CLINICAL CONSEQUENCES IN HOSPITALIZED MEDICALLY ILL PATIENTS: OBJECTIVES: This 5-year retrospective study used linked outpatient data from MarketScan® Commercial and Medicare Supplemental databases, thereby providing continuity of therapy through hospitalization and post-discharge. Patients were categorized into prophylaxis and non-prophylaxis groups based on use of any guideline-recommended anticoagulants from the index date to 180 days after index hospital discharge, and before the date of the first VTE event. Outcome variables were VTE events and re-hospitalization. Risk adjustment was conducted within the prophylaxis group, and between the prophylaxis and non-prophylaxis groups using propensity score matching. RESULTS: Among 3916 patients identified, 29.37% (n=1179) were admitted with cancer, 18.25% (n=605) with pneumonia, 15.95% (n=478) with heart failure, 11.35% (n=200) with sepsis, 8.19% (n=161) with infectious diseases, 5.67% (n=110) with sepsis and chronic renal disorder, 4.77% (n=83) with infectious diseases and chronic renal disorder (IBD). Among these patients, only 1819 (51.81%) received anticoagulant therapy and 424 (6% 18%) received non-pharmacological prophylaxis only during their hospitalization and until 180 days after discharge. The anticoagulant therapy was started in 88.64% in observation. CONCLUSIONS: The current study showed that the risk of complications increased as levels of MPR decreased. Patients with the lowest MPR level versus optimal level (exponential coefficient 1.23, 95% CI 1.20-1.25). The costs, however, were 23% higher for patients with the lowest MPR level versus optimal adherence had 3 times higher risk of complications (hazard ratio 3.15, 95% CI 2.74-3.67). PCV19. 2011 A115