	Nes Group (n=58)	Non Nes Group (n=72)	P-value
Baseline parameters			
Age (years)	58	66	0.07
Gender-Male	41(72%)	38(55%)	0.04
Systolic pressure (SP)(mm Hg)	115	126	0.011
Sodium (mEq/L)	137	137	0.759
Blood Urea Nitrogen (BUN)	50	40	0.067
Serum Creatinine (mg/dL)	1.97	1.57	0.023
Ejection Fraction	18	24	0.023
QRS duration	152	130	0.005
Using ACEI or ARB (%)	93%	86.5%	0.54
Using Beta Blockers (%)	59%	69%	0.45
Results (admission to discharge)			
Change in BUN	-1.9	-1.4	0.843
Change in Creatinine	-0.11	-0.01	0.636
Change in Weight (pounds)	10.5	11	0.740
LOS (days)	2.87	3.79	0.002

Conclusion: Although the Nes Group was more ill, LOS was significantly shorter for this group. In addition use of Nes resulted in no significant change in renal function, same decrease in weight in a shorter period of time. Thus, use of Nes as initial therapy may allow more rapid discharge of patients without compromising renal function

1085-72 **Discordant Prescription of Guideline-Directed Therapy for Heart Failure Between Subspecialties of Cardiology**

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Background: The updated ACC/AHA guidelines for management of heart failure (HF) clearly describe the mortality and morbidity benefits associated with beta blockers (BB) and ACE inhibitors in HF. In spite of wide dissemination of these data, variability in adherence likely exists. The purpose of this study was to examine practice patterns among cardiologists with regard to prescription of BB and either ACE inhibitors or angiotensin II receptor blockers (ACE) in HF patients (pts).
Methods: The electronic medical record (EMR) at a large, urban cardiology practice was queried to report BB and ACE use in pts with diagnoses of HF or cardiomyopathy. The ability of the EMR to select pts by diagnosis, sort by physician, and identify medications, enabled examination of variability in prescribing practices.
Results: 1956 pts with appropriate diagnoses were examined. 57% were prescribed BB; 75% ACE; and 48% both. The range of BB use among individual physicians was 20-94%; ACE 44-93%; and both 14-87%. Comparison between subspecialists is outlined below.

Subspecialty	BB	ACE	BB+ACE
HF	69%	83%	61%
Non-invasive	43%	71%	32%
Invasive	55%	71%	47%
Interventional	50%	71%	41%
Electrophysiologists	57%	72%	46%

Conclusion: Wide variation was found in the prescription of BB and ACE in HF pts among cardiology subspecialties. HF specialists most closely adhered to guidelines. Most notably, BB plus ACE was prescribed in 61% of pts by HF specialists, compared to only 32-47% by other cardiologists. These data clearly show the need for increased awareness of guideline-directed therapy, even among cardiologists. Such feedback may enhance appropriate use of proven therapies.

1085-73 **Spironolactone Induced Renal Impairment and *Hyperkalemia* in Patients With Heart Failure: Can We Predict These Side Effects?**

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Background: Clinical trials evaluating the effects of spironolactone (SP) in heart failure (HF) reported that 2% of patients required discontinuation of SP due to hyperkalemia (HK) or renal impairment (RI). Medical therapy for HF has evolved since these studies (i.e. beta blockers), and SP has been prescribed to a broad population of HF patients. We sought to define the incidence of HK and RI with SP therapy in HF patients in our clinical practice.
Methods: We studied clinical data from 926 consecutive patients with HF started on SP from 1998 to 2002. We compared baseline characteristics, medications & laboratory data at selected time points on 126 randomly selected controls and 67 (7.2%) cases (SP was stopped due to HK - >5.0mEq/L or RI - creatinine >= 2.5 mg/dL). Between group comparison was done using non-parametric Mann-Whitney tests. Multivariate logistic regression was performed to identify independent predictors of HK and RI. Data are expressed as mean ± s.d., p value.
Results: Analysis of the study subjects (age 59 ± 13, female 37%, ejection fraction 0.25 ± 0.13, angiotensin converting enzyme inhibitors 94%, beta blockers 84%) revealed that, compared to controls, cases were older (63 ± 10 vs 57 ± 14, 0.002), had lower New York Heart Association class (2.4 ± 0.5 vs 2.6 ± 0.7, 0.04), had higher baseline serum glucose (144 ± 72 vs 124 ± 63 mg/dL, 0.01), potassium (4.4 ±0.4 vs 4.3 ± 0.5 mEq/L, 0.02), and creatinine (1.3 ± 0.3 vs 1.2 ± 0.3 mg/dL, 0.02), and were more likely to be treated with beta blockers (96% vs 79%, 0.002) and thiazide diuretics (43% vs 29%, 0.04). Independent predictors of HK included age, beta blocker use, diabetes and baseline potassium dosage, while independent predictors of RI included thiazide diuretic use and baseline creatinine.
Conclusions: SP induced HK and RI are more common in our clinical experience than reported previously. This difference may be partially explained by the frequent use of beta blockers to treat HF and concomitant medications and comorbidities. Redoubled efforts are necessary to protect patients against these infrequent yet serious side effects of SP.

1085-74 **Do Patients Necessarily Have to Start With an Angiotension Converting Enzyme Inhibitor in the Treatment of Heart Failure? Results of the CARMEN (Carvedilol ACE Inhibitor Remodeling Mild CHF EvaluatioN) Study**

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Background: Treatment guidelines for chronic heart failure (CHF) recommend ACE-inhibitor (ACE-I) as first-line treatment and β-blockers are to be added in case patients remain symptomatic. This paradigm, based on historical grounds, enforces polypharmacy and prevents an individualized approach to the treatment of CHF. The aims of the CARMEN trial were to challenge this paradigm by comparing the effect on cardiac remodeling of the ACE-I Enalapril (E) against Carvedilol (C) a combined β_1/β_2- blocker with additional α_1-receptor blockade and antioxidant properties.
Methods: CARMEN is a parallel-group, 3-arm, double-dummy, multi-center study conducted in 13 European countries. Patients were randomized to C&E, C or E treatment, uptitrated on C to 25mg (50mg in patients ≥ 85kg) bid target dose and/or E to 10mg bid target dose, and continued for 18 months. In the C&E treated arm, C was uptitrated first. *Effects on left ventricular (LV) remodeling were assessed by serial transthoracic* echocardiography (biplane, Simpson) at baseline, months 6, 12 and 18 at a central core laboratory.
Results: The ITT population included 479 mild (NYHA II = 65%, LV ejection fraction (EF) <40%) CHF patients (C&E = 158; C = 161; E = 160), 81% male, mean age 62 years. LV end systolic volume index (LVESVI) was reduced by 5.4 ml/m^2 (p=0.0015), LV end diastolic volume index by 5.0 ml/m^2 (p=0.0046) and LVEF increased by 2.3% (p=0.0022) at month 18 for the primary comparison favoring C&E versus E. The second primary comparison favored C versus E, although differences were not significant. However, in the within-group comparison C significantly reduced LVESVI by 2.8 ml/m^2 (p=0.018) compared to baseline, whereas no changes were observed in E, and LVESVI decreased by 6.3 ml/ m^2 (p=0.0001) in C&E.
All three arm showed very similar safety profiles and withdrawal rates.
Conclusion: *The CARMEN results confirm the current treatment guidelines and provide* an immediate mandate for prescribing the combination of ACE-I and C in mild CHF patients. However, as C was safely initiated before ACE-I and resulted in reversed LV remodeling, one might challenge the historical sequence of ACE-I as first-line therapy and start treatment with Carvedilol before ACE-I.

1085-75 **Double Blind, Placebo-Controlled Study of Long-Term Intermittent Dobutamine Infusion With Concomitant Oral Amiodarone for End Stage Heart Failure**

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Background: Agents with positive inotropic effect have consistently been shown to increase mortality when administered chronically to patients with congestive heart failure (CHF). A non randomized study has showed that long-term intermittent dobutamine infusion (IDI) combined with oral amiodarone, improves the survival of patients with end stage CHF .The purpose of this randomized double blind study was to evaluate prospectively the effects of long-term IDI combined with oral amiodarone in patients with CHF, refractory to standard medical treatment. **Methods:** Thirty patients with decompensated CHF refractory to standard treatment were randomized in a double blind manner to receive for 8 hours every 14 days intravenous infusion of placebo (Group 1, n=14), or dobutamine 10μg/kg/min, (Group 2, n=16). All patients were treated with oral amiodarone, 400mg/d, started at least 2 weeks before randomization. **Results:** There were no differences in baseline clinical, hemodynamic and biochemical characteristics between the two groups. The left ventricular ejection fraction was 24 ±5 % and 23±6% in Group 1 and 2 respectively (p=0.563); mean pulmonary capillary wedge pressure 30±8