anaemic CHF with ID of combination therapy by Mircea and Maltofer there was a significant increase Hb (to 9.8±0.7 g/dl to 12.8±0.6 g/dl) (p<0.01), a significant NYHA class from 3,4±0.3 (p<0.05), a longer endurance on exercise testing from 243±84 to 384±75 meters (p<0.01). There was also a significant fall in serum NT pro BNP levels from 684±108 pg/ml to 239±181pg/ml (p<0.05). Combination therapy significantly reduced in plasma creatinine (p<0.01) and an increase in estimated creatinine clearance (p<0.05).

**Conclusion:** Iv-iron administration improves iron status (increased TSAT and ferritin). Percutaneous Mircea in dose 50 IU in day in one month in follow-up 6 months has improved EPO disfunction. Combination therapy has emerged as a well tolerated and effective therapy to improve symptoms and quality of life in anaemic CHF patients with ID. Therefore, combination therapy of EPO and iv-iron may best.

### P3316 | BEDSIDE

**Acute heart failure volume control trial: the comparison of tolvaptan and carperitide**

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**Background:** Acute decompensated heart failure (ADHF) is a common and highly morbid cardiovascular disorder. Diuresis is a major therapy for the reduction of congestive symptoms. However, most diuretics cause hypernatremia, which is a worsening factor of prognosis of ADHF patients. The purpose of this study was to examine the efficacy and safety of tolvaptan, which is a selective vaso-pressin V2 receptor antagonist and produces water excretion without changes in sodium excretion, compared with carperitide.

**Methods and results:** One hundred and nine hospitalized ADHF patients were enrolled and randomly assigned tolvaptan or carperitide treatment groups. We compared the efficacy and safety of these two drugs. Subjective symptoms and plasma BNP level were similarly improved by treatment in both groups. Blood pressure was significantly lower in the carperitide group than in the tolvaptan group (P=0.027). The average drug cost of tolvaptan was significantly lower (CTR:A 55±3.9% vs. 50±6.5% p<0.01, B 59±6.0% vs. 51±8.6%, p<0.001; mean BNP:A 251±350pg/ml vs. 26±54pg/ml p<0.01, B 286±781pg/ml vs. 26±153pg/ml p<0.01, Tei-A 0.65±0.13 vs. 0.44±0.11 p<0.01, B 0.59±0.15 vs. 0.31±0.10 p<0.001). FAC is also improved significantly in both groups (A 0.27±0.07 vs. 0.34±0.05, p<0.01, B 0.21±0.08 vs. 0.36±0.07, p<0.001). But e‘ is not changed significantly during this period (A 6.0±4.2cm/s vs. 7.2±2.3cm/s, B 5.9±2.9cm/s vs. 11.0±3.8cm/s). Then, there was no significant change in the difference of each parameters between two groups.

**Conclusions:** Carvedilol therapy for chronic heart failure in children is effective in the patients with CHD. The efficacy does not depend on the morphological difference of the systemic ventricle, “right or left”

### P3320 | BEDSIDE

**Association of chronic kidney disease with abnormal cardiac structure and function in a HFpEF population: the PARAMOUNT study**

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**Aims:** Abnormal renal function is associated with increased risk for cardiovascular morbidity and mortality. We studied the relationship between renal impairment and cardiac structure and function in patients with heart failure with preserved ejection fraction (HFpEF).

**Methods:** The Prospective comparison of ARNI with ARB On Management Of heart failure with preserved ejection fraction (PARAMOUNT) study enrolled 301 patients with HF, LVEF ≥45%, and elevated NT-proBNP > 400 pg/ml (mean age 71 years, 56% female, 94% with hypertension, 38% diabetics). Urinary albumin to creatinine ratio (UACR) was > 10mg/g yet less than microalbuminuria level (intermediate range) in 19%, and in microalbuminuria range or greater (> 17 mg/g for men, > 25 mg/g for women) in 40%. Mean eGFR was 65.4±20.4 ml/min/1.73m².

**Results:** In multivariate analysis patients with albuminuria had higher E/E’ (p =0.030), greater LAVi (p=0.013), and higher values of NT-proBNP (p<0.0001), even in patients with intermediate UACR (p=0.014). Lower eGFR was associated with lower E’ (p=0.035), higher relative wall thickness (RWT) (p<0.02), and elevated NT-proBNP (p=0.041).

**Conclusion:** In this HFpEF population renal impairment (higher UACR, lower eGFR) was associated with worse diastolic function, higher RWT and left ventricular wall stress.