



האיגוד הישראלי לכירורגית לב וחזה
THE ISRAEL SOCIETY OF CARDIOTHORACIC SURGERY

האיגוד הקרדיולוגי בישראל
ISRAEL HEART SOCIETY



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Ejection Fraction and Long-Term Mortality in Heart Failure Patients

Real World Outcome Data from the Heart

Failure Survey in ISrael (HFSIS)

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Disclosures – None.



Sheba Medical Center
Tel Hashomer

The Leviev Heart Center



Background

- Contemporary heart failure (HF) therapies have not resulted in improved outcome among HF patients with preserved left ventricular ejection function (LVEF).
- We sought to evaluate the differential effect of LVEF on long term mortality following hospitalization for acute HF patients in a real world setting.

Methods

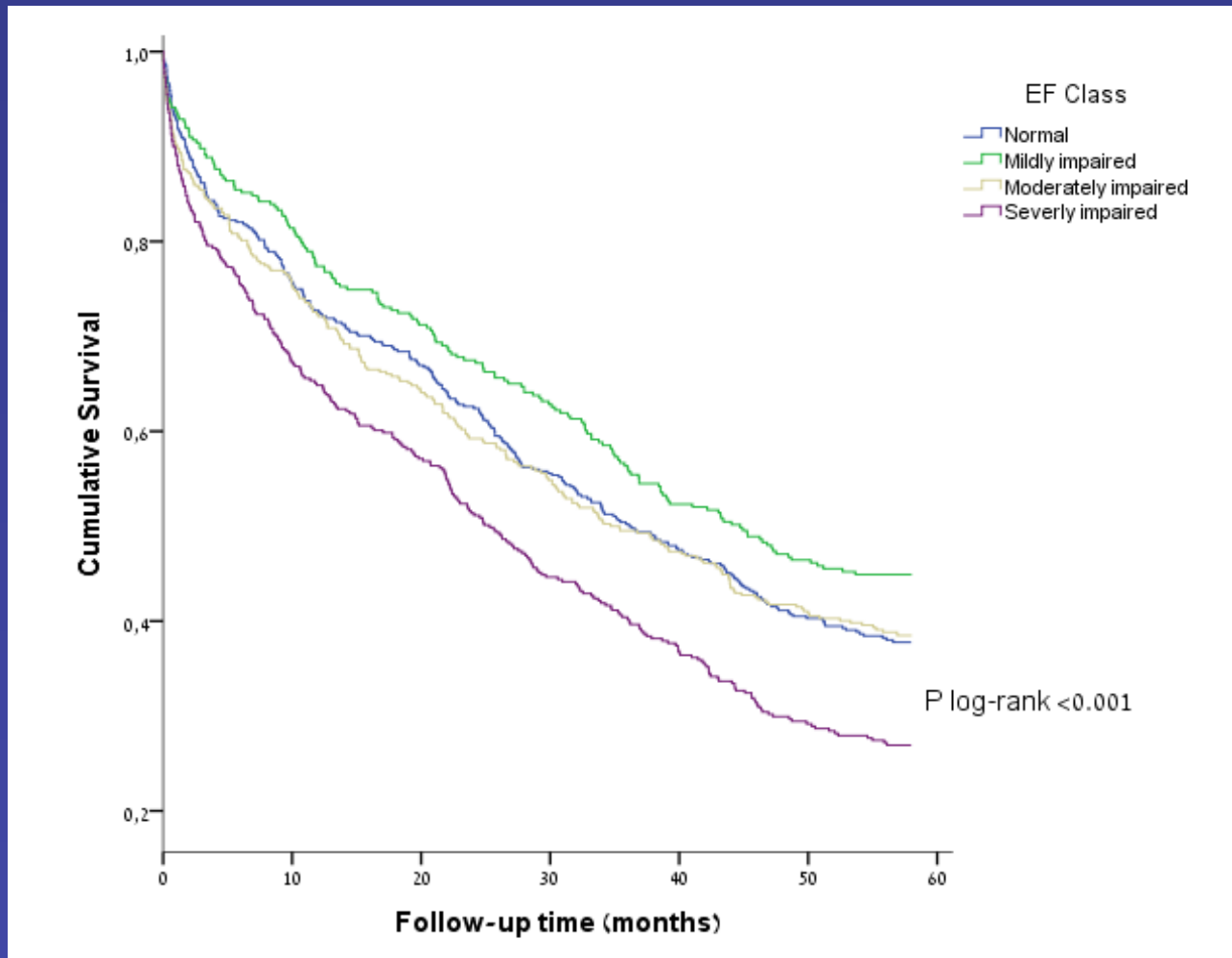
- 1620 patients (63%) with available LVEF data enrolled in the Heart Failure Survey in Israel
- LVEF was categorized as:
 1. preserved [$\geq 50\%$] - 484 (30%)
 2. Mildly reduced [40%-49%] – 323 (20%)
 3. Moderately reduced [30%-39%] – 412 (25%)
 4. Severely reduced [$< 30\%$] – 401 (25%)
- All-cause mortality at 4 years following hospitalization was assessed by LVEF



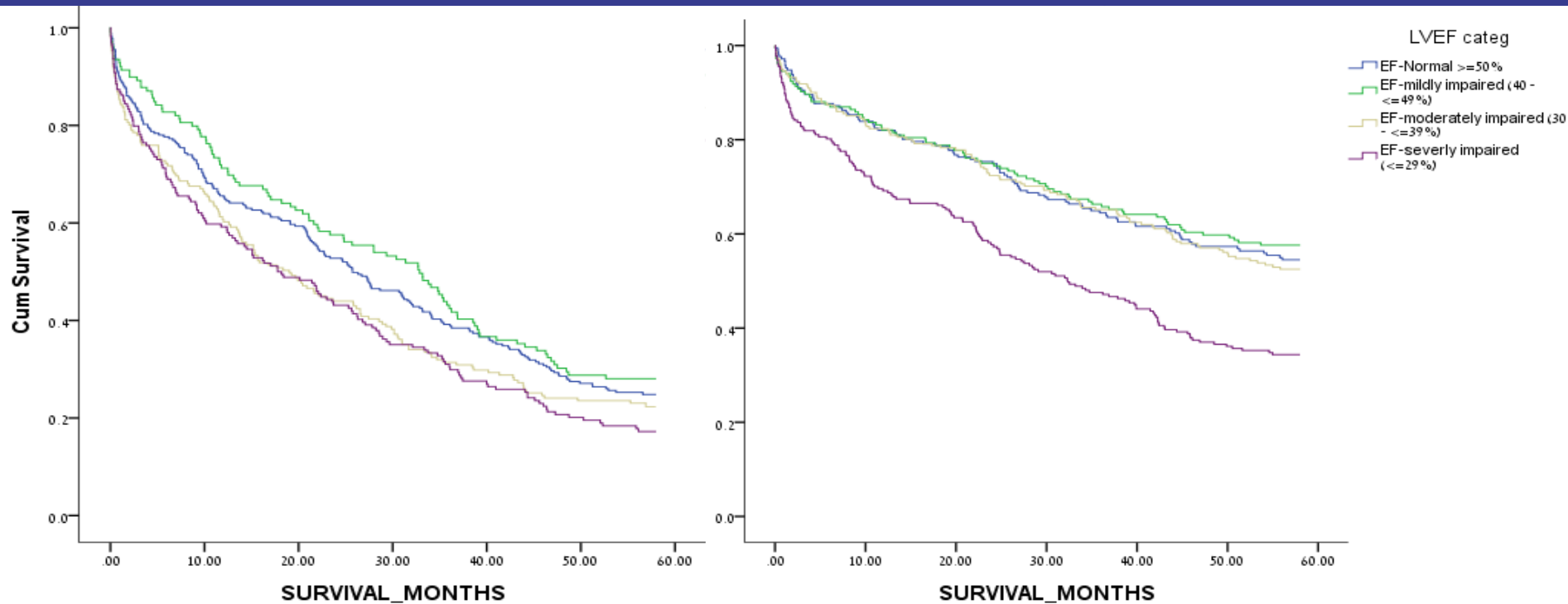
Results

- Patients with preserved LVEF had a similar risk of long-term mortality as patients with mild or moderate reduction in LVEF (HR=0.92 [p=0.40] and 1.01 [p=0.90], respectively)
- Compared with preserved LVEF patients with severely reduced LVEF had increased long term mortality risk (HR=1.20; p=0.04).
- Sub-group analysis revealed that increased mortality risk among severely reduced LVEF was evident only among patients ≤ 75 years (HR=1.49 95%CI[1.14-1.95])
- Among older patients there was no difference in the risk of long-term mortality between those with preserved vs. severely reduced LVEF (HR=1.02 95%CI[0.92-1.28]; p-value for age-by-LVEF interaction = 0.03).

Cumulative Survival Analysis by LVEF



Cumulative Survival Analysis by LVEF in Elderly and Young Patients



> 75

≤ 75

Conclusions

- Patients hospitalized for HF who have preserved LVEF experience similar long-term mortality as patients with mild or moderate reductions in LVEF
- Severely reduced LVEF remains an independent predictor of long-term mortality in this population.
- The differential effect of LVEF on long-term mortality is significantly attenuated in the older age-group.