

## Prognosis and risk stratification in patients with heart failure and preserved ejection fraction (hfpef) and in patients with heart failure and moderately preserved ejection fraction (hfmpef), on the basis of adjustment of blood pressure

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**Introduction:** Heart failure with moderately retained ejection fraction is a new category in heart failure (guide lines 2016). Due to insufficient reference of HFmrEF in the literature, there is a need to “decrypt” this new category and the best way to deal with it.

**Purpose:** The present study was designed to draw useful conclusions for the evaluation of the long-term clinical outcomes of hypertensive patients with HFmrEF and the effect of blood pressure on mortality and cardiovascular outcome.

**Material - Method:** 120 patients with hypertension were studied, of which 85 with heart failure and moderately retained ejection fraction (HFmrEF) and 35 patients with preserved ejection fraction (HFpEF). Patients had signs and symptoms of heart failure (NYHA II), left ventricular ejection fraction > 40%, had at least one heart failure-related hospitalization, and the first follow-up visit took place between October 2015 and March 2019.

**Results:** The average follow-up time was 48 months (2015-2019). Our analysis did not reveal a statistically significant difference between the two groups in total mortality ( $p = 0.39$ ) or in cardiovascular mortality ( $p = 0.45$ ). ( $p = 0.04$  and  $p = 0.011$ , respectively) and cardiovascular mortality ( $p = 0.01$  for both). In patients with HFpEF no significant association was found between outcome and outpatient blood pressure.

**Conclusions:** Heart failure with sustained and moderately sustained ejection fraction has a similar long-term outcome. Poor regulation of blood pressure was a significant risk factor for an adverse outcome in HFmrEF. The results emphasize the importance of good regulation of blood pressure so as to achieve better results in hypertensive patients with moderately affected ejection fraction and symptoms of heart failure.