# **Supplementary data**

## **Detailed description of the results**

Of 59 analyzed patients, a total of 41 patients had a history of hypertension and were identified with LVH (**Table 1**).

In HF patients with severe LVH (n=27; aged 69.3±12.7yrs; EF=27.6±10.6%) with LVMI>149(males)/122(females) g/m2 there was a significant negative correlation between interventricular septum diameter (IVSD) vs. miR-1 (Rs= -0.533, *p=0.004*) (**Suppl**. **Fig. 1A.**) and between posterior wall diastolic thickness (PWDT) vs. miR-1 (Rs= -0.404, *p=0.037*) (**Suppl**. **Fig. 1B.**). We found a positive association between IVSD vs. gal-3 (Rs= 0.383, *p=0.049*) (**Fig. 1C.**), miR-1 vs. miR-21 (Rs= 0.520, *p=0.005*) (**Suppl**. **Fig. 1D.**) as well as NT-proBNP vs. gal-3 concentrations (Rs=0.369, *p=0.019*) (**Suppl**. **Fig. 1E.**) in this group.

No differences were found for age, gender, NYHA class, HF ethology as well as miR-1, miR-21 expressions and gal-3 serum concentrations between patients with severe vs. mild-to-moderate LVH (n=14; aged 70.9±10.5yrs; EF=43.9±17.0%). Noteworthy, among patients with IVSD>12 mm (n=14) serum concentrations of gal-3 were significantly higher than in patients with IVSD≤12 mm (n=27): 18 (15.4-25.6) pg/ml vs. 16.9 (10.8-21.4) pg/ml respectively (*p=0.028*) and its concentration were correlated with LV end-diastolic diameter (LVEDD) and NT-proBNP serum levels (Rs= 0.600, *p=0.023*) (**Suppl**. **Fig. 2A.**); (Rs= 0.660, *p=0.010*) (**Suppl**. **Fig. 2B.**). In this group, a significant downregulation of miR-21 with the increase of LVEDD (Rs=-0.612, *p=0.020*) (**Suppl**. **Fig. 2C.**) and a significant downregulation of miR-1 with the increase of NT-proBNP concentration (Rs=0.746, *p=0.002*) (**Suppl**. **Fig. 2D.**) were observed.

**Supplementary Figure Legends**

**Fig. 1.** Correlations between biochemical parameters and echocardiographic features in HF patients with severe LVH (n=27) with LVMI>149(males/122(females) g/m2:

1. Interventricular septum diameter (IVSD) vs. miR-1
2. Posterior wall diastolic thickness (PWDT) vs. miR-1
3. Interventricular septum diameter (IVSD) vs. galectin-3 (gal-3)
4. N-terminal prohormone of B-type natriuretic peptide (NT-proBNP) vs.

galectin-3 (gal-3)

1. miR-1 vs. miR-21

**Fig. 2.** Correlations between biochemical parameters and echocardiographic features in HF patients with interventricular septum diameter IVSD>12mm (n=14):

1. LV end-diastolic diameter (LVEDD) vs. galectin-3 (gal-3)
2. NT-proBNP vs. galectin-3 (gal-3)
3. LV end-diastolic diameter (LVEDD) vs. miR-21
4. N-terminal prohormone of B-type natriuretic peptide (NT-proBNP) vs. miR-1