The aim of this study is to analyse laboratory markers of cardiac dysfunction and placental dysfunction in pregnant women with fetal smallness in the third trimester. Prospective cohort control study in 32 patients with singleton pregnancies with EFW < 10. pct compared to physiologic singleton pregnancies. Markers of cardiac dysfunction: copeptin, NT-proBNP, troponin T and s-Flt, PlGF were measured. Using a hierarchical and standardized system, placental lesions were classified histologically.

Women in the observed group showed statistically higher blood pressure values (syst. BP: 120 vs. 107 (p.007); diast. BP: 77 vs. 64 (p.005)). We found statistically significant positive correlation between systolic blood pressure and NT-proBNP, s-Flt, PlGF and s-Flt/PlGF ratio. Women with SGA/FGR fetuses had lower PlGF (168, 9 vs. 274, 3 (p.011)) and higher s-Flt/PlGF ratio (100, 6 vs. 12, 1 (p.028)).

Markers of cardiac dysfunction and also s-Flt values showed no statistically significant difference between the compared groups.

**Conclusion:**
Our study demonstrated a significant difference in markers of placental dysfunction in pregnancies with fetal smallness when compared with controls. There was no statistically significant difference in biochemical markers of myocardial ischaemia. However, before a definitive causation is established, more data needs to be collected.

**Laboratory markers of cardiac dysfunction and placental dysfunction in late-onset FGR/ SGA compared to physiologic pregnancies**

Supported by PRVOUK P32