Methodology In a prospective, observational, monocentric study, haemodynamic measurements were obtained by the non-invasive methodology of thoracic electrical cardiometry (EC) in 29 patients with primary ovarian cancer undergoing multivisceral cytoreductive surgery. The change of haemodynamic parameters was analyzed from the day prior to surgery to the first intraoperative measurement by non-parametric longitudinal data analysis in a two-factorial experiment (dependent factor time).

Results Median age of patients was 59 [25-quartile 50; 75-quartile 61] years. 8 (28%) patients had a diagnosis of arterial hypertension, otherwise, no cardiovascular diseases were shown. The FIGO stages were in 22 (75%) patients above stage IIIc and 9 (31%) patients had more than 500 ml of ascites.

The relative change from the baseline to the first intraoperative timepoint showed a reduced heart rate (HR, median -19 [25-quartile -66%; 75-quartile -10%], p<0.0001), stroke volume index (SVI, -9.5 [-15.3;3.2], p=0.0038), cardiac index (CI, -24.5 [-32;-13%], p<0.0001) and the inotropic marker index of contractility (ICON, -17.5 [-35.3;-0.8%], p<0.0001).

Conclusion Substantial changes in HR, SVI, CI, and ICON occurred from the day prior to surgery to the first intraoperative measurement, indicating that patients without relevant cardiovascular morbidity showed reduced cardiocirculatory flow and cardiac function. Furthermore, these data indicate that pharmacological modulation might optimize haemodynamic care during high-risk gynaecological surgery.

Abstract 2022-RA-1347-ESGO Figure 1