Introduction/Background Ovarian cancer (OC) one of the main cause of deaths from gynecological cancer. More than 1,000 new cases and 500 deaths from ovarian cancer are detected annually in Kazakhstan (KZ). More than 80% of OCs are found in a advanced stages. The standard treatment of advanced OC includes debulking surgery followed by chemotherapy to minimize the residual tumor size. Results of Hyperthermic Intraperitoneal Chemotherapy are controversial (HIPEC). The aim of this study was to assess the clinical benefit of HIPEC after primary and interval debulking surgery in Kazakhstani women with III and IV stages of OC.

Methodology 14 patients with stage III or IV of OC was included in this prospective study. Surgical treatment and HIPEC were presented in Kazakh Institute of Oncology and Radiology. The primary end point was progression-free survival. Second points was to assess adverse events. Data was analyzed using SPSS 23.0 and medians were reported.

Results The mean age of the patients was 58.6 years. In 78% cases patients were represented with serum ovarian adenocarcinoma. 92% of cases presented HIPEC+ interval debulking. Complete surgery was performed in 35% and suboptimal surgery in 50%. Bowel resection with anastomosis was performed in 1 case. HIPEC+ surgery time ranged from 120 to 240 min. The median duration of hospitalization was 11 days with including +1 day stay in the intensive care unit. After treatment 92% of patients received adjuvant chemotherapy (Paclitaxel+Carboplatinum) Recurrence in 3 years were registered in 64% cases. Disease-free survival at 3 years was 16.4%.

Conclusion HIPEC plus debulking surgery in OC can increase median disease-free survival. The research is currently ongoing. We think that in a few years we will be able to present data on the overall survival of patients with ovarian cancer treated with HIPEC.