Introduction/Background A According to Globocan 2020, ovarian cancer (OC) is the 11th most common cancer among women worldwide. It is more than 320,000 new cases of OC were registered each year and more than 200,000 deaths worldwide in 2020. To date, there are no recommended methods for screening of OC. More than 70 per cent of OC is detected in the late stages. In Kazakhstan (KZ), OC is the 3rd most common gynaecological cancer with the one of highest mortality rate in women. The proportion of OC among all cancers was 2.9% in 2020. The purpose of this study was to analyse OC incidence, mortality and survival for 15 years (2005-2020) in KZ.

Methodology Incidence data, mortality statistics were sourced from the cancer registry database. All incidence and mortality rates were directly age-standardised to the World Standard Population. Data on survival were obtained from specific reports. We used Kaplan-Meier method to estimate cumulative observed survival. The statistical processing was carried out with SPSS 23.0 for Windows.

Result(s) In KZ 14.125 new cases of OC have been diagnosed from 2005 to 2020. In the analysis of Standardized Incidence of OC, there is a stable rate for 10 years: 9.8 per 100,000 female population in 2005 and 10.0 per 100,000 female population in 2020. OC is found in all age groups and a noticeable increase in a group of 65-69 years. In the analysis of OC by stages is marked a decrease in the detection rate of the disease at the 4th stage for the period from 2005 to 2020, from 20 to 8.8%. Despite this, mortality from OC for ten years remains stable high and it is 4.6 per 100,000 female population in 2020. It is 7.458 women with OC who died from 2005 to 2020. Five-year relative survival for all stages of OC estimates of 20.3% (95%CI: 18.7-21.1).

Conclusion Analysis of OC Incidence in KZ showed a stable rate. Despite the reduction in the detection of ovarian cancer at stage 4, mortality from this disease remains high. According to these results, Kazakhstan is among the counties with low five-year OC survival.

Introduction/Background The management of recurrent adult granulosa cell tumour (AGCT) of the ovary is a challenging therapeutic scenario. When surgery and hormonal therapies are no longer feasible, further treatment options are limited since there are low response rates to chemotherapy. Traditionally radiotherapy has not been widely used, but with recent advances in radiotherapy techniques this may provide a further option for either localised disease or palliative treatment.

Aim To evaluate the response to radiotherapy in recurrent AGCT.

Methodology A retrospective analysis was undertaken of patients who received radiotherapy for recurrent AGCT. Descriptive statistics were used to describe baseline characteristics, treatment and outcomes.

Result(s) A total of 11 patients with AGCT were treated between 2012-2020. The mean age at diagnosis was 49 (28-57). 7(64%) patients had multi-site disease, 8 (50%) had pelvic disease, 6 (33) upper abdominal and 4 (17%) nodal disease. Most patient had large volume tumours with range 37.8-5942.7cm³. In total, 21 sites were treated with radiotherapy with 5(45%) patients receiving multiple courses of radiotherapy, including one who had re-irradiation of 3 sites. One patient had post-operative RT and one died soon after pelvic radiotherapy due to progressive upper abdominal disease. Nine patients with 16 sites were evaluable for response assessment at first irradiation. Technique: Stereotactic radiotherapy for 2 sites, IMRT/conformal 10 sites, large volume palliative fields to 4 sites. Radiation dose ranged from 20 to 45Gy in 5-20 fractions. There was a response in 100% sites with median reduction in tumour volume by 80% (range 18-100%) after 3 months and by 88% (range 24-100%) at 12 months demonstrating continued regression. Two patients had a complete radiological response, and two had <1% residual disease. One patient had progression within the irradiated field after 47 months and overall local control was 89% with median follow up 32.4 months. One patient had grade 2 acute bowel toxicity and two patients had grade 1 bowel toxicity.

Conclusion Radiotherapy is a very effective treatment for recurrent AGCT, achieving maintained local control. This demonstrates that chemo-refractory tumours can still be very sensitive to radiation treatment, which should be considered for selected patients.