ADAM19, Ki-67, and Caspase-3) and chemoresistance test (to carboplatin chemotherapy).
Results It was found that the number of spheroids obtained, all gene expression, and number of chemoresistance to carboplatin regimen in CD133+ CSC cultures were higher than the main population and CD133-. CSCs with CD133+ had a higher ability to proliferate with increased Ki-67 gene expression, stronger stemness with higher NANOG gene expression, and greater chemoresistance ability with increased ATM and ATR gene.
Conclusion/Implications It can be concluded that ATM and ATR gene expression are positively correlated with the resistance of CSC in ovarian cancer patients.

EP222/#246 QUANTIFYING PLATINUM SENSITIVITY AS A MARKER FOR RESPONSE TO PARP INHIBITION IN PATIENTS WITH ADVANCED OVARIAN CANCER

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Introduction All patients with high grade epithelial ovarian cancer(HGEOC) do not benefit equally from PARP inhibitors, but all are exposed to PARP-associated toxicities. This study aims to assess the correlation between the pathology-based Chemotherapy Response Score(CRS) at the time of interval debulking surgery(IDS) and progression free survival (PFS) in patients who received PARP maintenance, to determine this score's potential as a marker of expected benefit from PARP.
Methods This is a retrospective cohort study of patients with HGEOC who underwent IDS between January 2016 and September 2022. Demographic and clinical parameters were collected. $\chi 2$ test and Student t-test were used to compare descriptive variables and Kaplan-Meier survival analysis with log rank test comparison for PFS.
Results On 169 patients, 47 received PARP maintenance and the majority needed dose reduction due to toxicity(53.2%). Patients with CRS 1(No/Minimal response) or CRS 2–3(Moderate/Complete response) were comparable in terms of baseline characteristics. Patients CRS 1 compared to CRS 2–3 had lower PFS regardless of maintenance($p=0.017$). Patients with CRS 2–3 who received PARP showed significantly improved PFS(20 vs 15 months, $p=0.029$) compared to those who did not, while in those with CRS 1 maintenance was not associated with improved PFS($p=0.27$). Results were similar on multivariate analysis, adjusting for BRCA status and surgical outcomes.
Conclusion/Implications In HGEOC patients demonstrating response(CRS 2–3) to NACT, PARP maintenance was associated with a significant improvement in PFS. CRS can be a helpful tool in counseling prior to PARP inhibitor initiation, in patients BRCA-intact, and in settings where homologous recombination deficiency testing is not easily available.

EP223/#840 KAZAKHSTAN NATIONAL EXPERIENCE: GRANULOSA CELL TUMORS OF THE OVARY

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Introduction Objectives: Ovarian granulosa cell tumors (OGCT) are rare, and Eurasian data have not been published. This study objective was to describe OGCT among the 19 million residents of Kazakhstan.
Methods The Kazakhstan Cancer Registry Database was queried for descriptive and outcomes data of all consecutive patients with histologically verified OGCT from 2014–2020. Descriptive statistics and log likelihood ratios were performed using JMP Version 14.0.
Results 240 patients with OGCT were included, representing 3.9% of ovarian cancer in Kazakhstan. The median age was 52 years (range, 15–87 years). Nationality of origin was 55% Kazakh, 30.8% Russian, 3.8% Ukrainian, and 11% other. Stage distribution was 53.7% Stage I, 20.4% Stage II, 22% Stage III, 2.5% Stage IV, and 1% unknown. In total, 89 patients (37.6%) received chemotherapy; this did not correlate with stage. Common regimens included paclitaxel/carboplatin; bleomycin, etoposide, and cisplatin (BEP); and EP. Of the 240 patients, 67 patients (28%) recurred; recurrence correlated with stage ($p<0.001$). Treatment for recurrent disease included surgery, chemotherapy, and radiation therapy. After 16-month median follow up (range, 0–90 months), 186 patients (77.5%) were without evidence of disease, 12 patients (5%) were alive with disease, and 42 patients (17.5%) had died. Risk of death increased with advancing stage ($p<0.001$). Stage I OGCT patients who received adjuvant chemotherapy were significantly less likely to die than those who had not ($p=0.003$).
Conclusion/Implications This is the first description of OGCT in Kazakhstan. There is a survival advantage to chemotherapy administration in early-stage patients, supporting the importance of access to chemotherapy.

EP224/#880 BRCA MUTATIONS IN HIGH GRADE SEROUS OVARIAN CANCER IN KAZAKHSTAN

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Introduction Objectives: More than 1,000 new cases and 500 deaths from ovarian cancer are detected annually in Kazakhstan. The aim of this study was to examine the BRCA1/2