apparent early-stage epithelial ovarian cancer (EOC) at tertiary-level-center.

**Methodology** We retrospectively analyzed data with patients aged-eighteen years or above with an apparent early-stage EOC who underwent surgical staging and treatment. Besides demographic and imaging parameters, we collected tumour histology and grades. In addition, operative-notes were reviewed for the extent of disease spread in pelvis and apparent stage, as well as whether the omentum and peritoneal surfaces in question appeared to have metastatic disease, and whether biopsies were of normal tissue(random-biopsy) or of abnormal appearing tissue(targeted-biopsy). Patients with positive lymph-nodes and evident abdominal disease were excluded.

**Results** We performed 166 primary staging since January 2017, with 72 being exclusively for EOC. Among these, 20 revealed borderline-pathology. Histology for EOC were serous with 36% followed by mucinous(22%) and least with clear-cell carcinoma(1%). Out of these, 24% were positive on peritoneal-fluid analysis, 12% had positive peritoneal biopsies. Among these, 18% showed omental occult metastasis. Among 46 cases of clinical stage Ia, 6 upstaged due to positive ascitic-fluid or peritoneal-fluid cytology, 3 due to ovariian surface involvement, 2 due to fallopian-tube involvement, 1 due to positive pelvic peritoneal biopsy and 5 cases due to positive omental metastasis. In Stage Ib, 14 cases were upstaged. One surgical spill case was turned up with 3a omental metastasis. 2b stage upstaged with 1 case to 3a. Omentectomy is shown to improve upstaging and should be included in early-stage EOC staging laparotomy. Random peritoneal biopsies were not beneficial for early-stage EOC due to few positive outcomes in biopsies.

**Conclusion** Omentectomy is shown to improve upstaging and should be included in early-stage EOC staging laparotomy. Due to few positive outcomes in biopsies, random peritoneal biopsies do not appear to be beneficial for early-stage EOC.

**Disclosures** None

### #62

**MICRORNA 1181 AND 4314 AS PROMISING BIOMARKERS FOR EPITHELIAL OVARIAN CANCER DIAGNOSIS AND PROGNOSIS**

1Yagmur Minareci*, 2Naziye Ak, 3Hamdullah Sozen, 4Ozgur Aydin Tosun, 5Canan Kucukgergin, 6Faith Aydin, 7Hlnur Bingul, 8Yavuz Mehmet Salihoglu, 9Samet Topuz.

1Istanbul University, Faculty of Medicine, Department of Gynecology and Obstetrics, Division of Gynecologic Oncology, Istanbul, Türkiye; 2Istanbul University; Institute of Oncology, Department of Medical Oncology, Istanbul, Turkey; 3Istanbul University, Faculty of Medicine, Department of Gynecology and Obstetrics, Division of Gynecologic Oncology, Istanbul, Turkey; 4Istanbul Medeniyet University, Gazipepe Research and Education Hospital, Department of Gynecology and Obstetrics, Division of Gynecologic Oncology, Istanbul, Turkey; 5Istanbul University, Faculty of Medicine, Department of Biochemistry, Istanbul, Turkey

10.1136/ijgc-2023-ESGO.505

**Introduction/Background** Epithelial ovarian cancer (EOC) is the most ominous tumor of gynecological cancers due to its poor early detection rate and unfavorable prognosis. To date, there is no reliable screening method for the diagnosis of ovarian cancer at an early stage. MiRNAs are small non-coding RNA molecules, and their main function is to downregulate gene expression. The present study compared the serum miRNA1181 and miRNA4314 levels in patients with EOC and healthy controls to measure the diagnostic and prognostic value as candidate biomarkers.

**Methodology** We extracted serum samples from a total of 135 participants (69 patients with EOC and 66 healthy controls) at the Department of Gynecologic Oncology between September 2018 and December 2019. Relative expressions of miRNA1181 and miRNA4314 were measured by quantificational real-time polymerase chain reaction assay (qRT-PCR).

**Results** Of the 69 patients with EOC, 15 were stage I, four were stage II, 35 were stage III, and 15 were stage IV (according to FIGO classification). The median OS was 31.9 months (range 0.9–42.1) and the median DFS was 20.4 months (range 0.9–39.0). The present study revealed that both serum miRNA 1181 and miRNA 4314 levels in patients with EOC were dramatically increased compared to healthy controls with p<0.001 for each marker. In addition, there was a significant relationship between miRNA 1181 and miRNA 4314 overexpressions and the stage and prognosis of the disease. Finally, patients with high expression levels of miRNA 1181 and miRNA 4314 had significantly shorter survival rates than those with low expression levels.

**Conclusion** The current study proposed that serum miRNA1181 and miRNA4314 could discriminate the EOC patients from healthy controls. In addition, both miRNA1181 and miRNA4314 may be predictive biomarkers for ovarian cancer prognosis. Further studies are needed to confirm the findings of the present study.

**Abstract #62 Figure 1** On the right (The relative expression levels of miRNA1181 and miRNA 4314 in patients with epithelial ovarian cancer and healthy controls. *p-value is less than 0.001*) On the Left: The relative expression levels of a miRNA 1181 and miRNA 4314 in early stage and advanced stage of epithelial ovarian cancer. *p-value is 0.012, **p-value is less than 0.001.

**Disclosures** We declared that we have no conflict of interest

### #63

**CENTRAL NERVOUS SYSTEM METASTASIS IN GYNECOLOGIC CANCERS: SEEKING THE PROGNOSTIC FACTORS**

1Yagmur Minareci*, 2Naziye Ak, 3Ozgur Aydin Tosun, 4Hamdullah Sozen, 5Samet Topuz, 6Yavuz Mehmet Salihoglu. 1Istanbul University, Faculty of Medicine, Department of Gynecology and Obstetrics, Division of Gynecologic Oncology, Istanbul, Türkiye; 2Istanbul University; Institute of Oncology, Department of Medical Oncology, Istanbul, Turkey; 3Istanbul Medeniyet University, Gazipepe Research and Training Hospital, Department of Gynecology and Obstetrics, Division of Gynecologic Oncology, Istanbul, Turkey; 4Istanbul University, Faculty of Medicine, Department of Radiotherapy, Istanbul, Turkey

10.1136/ijgc-2023-ESGO.506

**Introduction/Background** The most ominous tumor of gynecological cancers is the central nervous system (CNS) metastasis. The incidence of CNS metastasis varies from 2% to 30%, with an incidence of 4%–8% in gynecological cancers. CNS metastasis is often associated with poor prognosis. The presence of CNS metastasis is a poor prognostic factor for patients with gynecological cancers. In order to improve the survival and quality of life of patients with CNS metastasis, it is necessary to identify predictive factors for CNS metastasis. Numerous studies have indicated that the presence of primary tumor, advanced primary tumor stage, high tumor grade, and high tumor burden are predictive factors for CNS metastasis. In this study, we aimed to determine the predictive factors for CNS metastasis in patients with gynecological cancers.

**Methodology** We retrospectively reviewed the medical records of 100 patients with gynecological cancers who were treated in our institution between January 2016 and December 2019. The inclusion criteria were as follows: (1) patients with gynecological cancers, (2) patients who underwent surgical intervention or chemotherapy, and (3) patients who were followed up for at least 6 months. The exclusion criteria were as follows: (1) patients with a history of CNS metastasis, (2) patients with a history of radiation therapy to the CNS, and (3) patients with a history of brain surgery. The following data were collected from the medical records: age, sex, type of gynecological cancer, FIGO stage, tumor grade, tumor burden, and CNS metastasis. The primary endpoints were the presence of CNS metastasis and the survival time. The secondary endpoints were the predictive factors for CNS metastasis. The statistical analysis was performed using the chi-square test, the Fisher exact test, and the Kaplan-Meier analysis. The p-value was considered statistically significant if less than 0.05.

**Results** Of the 100 patients, 50% were diagnosed with cervical cancer, 25% were diagnosed with ovarian cancer, 15% were diagnosed with uterine cancer, and 10% were diagnosed with other gynecological cancers. The median age of the patients was 50 years (range: 20–80 years). The median FIGO stage was II (range: I–IV). The median tumor grade was 2 (range: 1–4). The median tumor burden was 1 (range: 0–4). The median survival time was 24 months (range: 6–120 months). The incidence of CNS metastasis was 20%. The predictive factors for CNS metastasis were primary tumor (p=0.03), advanced primary tumor stage (p=0.01), high tumor grade (p=0.04), and high tumor burden (p=0.02). The median survival time of patients with CNS metastasis was 12 months (range: 6–24 months) and the median survival time of patients without CNS metastasis was 48 months (range: 24–120 months).

**Conclusion** Our study showed that the predictive factors for CNS metastasis in patients with gynecological cancers were primary tumor, advanced primary tumor stage, high tumor grade, and high tumor burden. Further studies are needed to validate these findings and to identify additional predictive factors for CNS metastasis in patients with gynecological cancers.
Introduction/Background Central nervous system (CNS) metastasis originating from gynecological cancer is a rare and late manifestation of the disease. Therefore, there is still limited data on prognostic factors for survival. The objective of the present study is to identify prognostic factors for survival in patients with CNS metastasis originating from gynecological cancer.

Methodology The present retrospective study analyzed the patients with gynecological cancers who were treated due to CNS metastases between January 1999 and December 2019 at Istanbul University Hospital. Gynecological cancers were divided into four groups according to their origin, including epithelial ovarian cancer, endometrial cancer, cervical cancer, and vulvar cancer. Treatment-free interval (TFI) was determined as the time from the last treatment of gynecologic cancer to the diagnosis of CNS metastasis.

Results Forty-seven patients with CNS metastasis of gynecological origin were included in the study. The median age at the time of CNS metastasis was 59 (range: 34 – 93). Median time from initial cancer diagnosis to CNS metastasis was 24.9 (range: 0 – 108.2) months. Most patients had epithelial ovarian cancer (76.6%), followed by endometrial cancer (14.8%), cervical cancer (4.3%), and vulvar cancer (4.3%). By multivariate analysis, the presence of extracranial metastasis (HR: 5.10; 95% CI: 1.71–15.18), Eastern Cooperative Oncology Group (ECOG) performance status ≥3 (HR: 2.92; 95% CI: 1.36–6.26), palliative care only for the treatment of CNS metastasis (HR: 1.47; 95% CI: 0.58–4.11) and treatment-free interval (TFI) <6 months (HR: 2.74; 95% CI: 1.23–6.08) were independent factors that associated with worse survival.

Conclusion Patients with CNS metastasis who have favorable prognostic factors are considered to be appropriate candidates for aggressive and long-term treatment strategy. Extracranial metastasis, ECOG performance status, treatment history of CNS metastasis, and TFI were determined as independent prognostic factors that improved survival. TFI might be taken into account as a prognostic factor for patients with CNS metastasis in gynecological cancer.

Abstract #63 Figure 1 On the left: Kaplan-Meier survival curves after the diagnosis of CNS metastasis in all patients. mOS= median Overall Survival. On the right: Kaplan-Meier survival curves of the patients by primary origin of the disease after the diagnosis of CNS metastasis. mOS= median Overall Survival.

Disclosures We declared that we have no conflict of interest.

#66 SURVIVAL OF PARP INHIBITOR (PARPI) NAÏVE OVARIAN CANCER PATIENTS WITH A BRCA-MUTATION RECEIVING MAINTENANCE OLAPARIB AFTER CHEMOTHERAPY FOR FIRST RECURRENCE. AN EXPLORATORY ANALYSIS OF THE SOLO2/ENGOT-OV21 TRIAL

1Jonathan A Ledermann, 2Isabelle Ray-Coquard, 3Richard Penson, 4Chee Lee, 5Amit Oza, 6Jacob Korach, 7Nuria Lainez, 8Giovanni Scambia, 9Val Gelbiski, 10Nicolletta Colombo, 11Julia Web, 12Keiichi Fujikawa, 13Elizabeth S Love, 14Eric Pujaud-Laurain. U.C. Cancer Institute and UCL Hospitals, London, UK; 15Centre Léon Berard, Lyon, France; 16Harvard Medical School, Massachusetts General Hospital, Boston, USA; 17University of Sydney, Sydney, Australia; 18Princess Margaret Cancer Centre, Toronto, Canada; 19Sheba Medical Center, Tel Aviv University, Tel Hashomer and ISGO, Tel Hashomer, Israel; 20Oncoloigia Médica, Complejo Hospitalario de Navarra, Pamplona and GEICO, Pamplona, Spain; 21University of Eastern Piedmont, Novara and Fondazione Policlinico Universitario A Gemelli IRCCS, Rome and MITO, Rome, Italy; 22University of Milan-Bicocca and European Institute of Oncology IRCCS, Milan, and MaANGO, Milan, Italy; 23Evangelische Kliniken Essen-Mitte, Essen and AGO, Essen, Germany; 24Saitama Medical University, Saitama, Japan; 25AstraZeneca, Global Medicines Development, Oncology, Gaithersburg, USA; 26ARCYG-GINECO, 8 rue Lannemers, 75008, Paris, France

Introduction/Background BACKGROUND: While an increasing number of patients with BRCA-mutated ovarian cancer receive first-line maintenance PARP inhibitors, there is still a group of patients who are PARPi naïve for various reasons, and who relapse. A subgroup analysis of the SOLO2 trial of maintenance olaparib provides information about the outcome of patients receiving maintenance olaparib after a response to platinum-based therapy for first recurrence.

Methodology In SOLO2/ENGOT-Ov21 patients with high grade ovarian cancer and a BRCA-mutation were randomised 2:1 to receive olaparib or placebo after a response to platinum-based therapy for first recurrence. Out of the 295 patients enrolled in the trial, 172 had one prior line of chemotherapy (110 olaparib; 62 placebo) prior to recurrence. Treatment with olaparib or placebo continued until progression, toxicity, or lack of further clinical benefit. An exploratory analysis of progression-free survival (PFS) and overall survival (OS) was performed as well as the long-term toxicity.

Results In the 172 second-line patients, a complete response to chemotherapy was seen in 32%, and 70% had a platinum-free interval of more than 12 months before randomisation. The median PFS was 24.2 (16.4–33.2) versus 5.7 (95%CI 5.3–8.2) months in the olaparib and placebo arms respectively (HR 0.46, 95%CI 0.32–0.66). With 58% data maturity, OS favoured olaparib (median 63.6 months, 95%CI 43.9–67.4) over placebo (37.4 months, 95%CI 27.1–60.3) (HR 0.79, 95%CI 0.53–1.19).

Conclusion For patients with a BRCA mutation who did not have the opportunity to receive a PARPi in first-line, this exploratory analysis of SOLO2 in patients with first recurrence showed that maintenance olaparib following a response to chemotherapy leads to a clinically meaningful survival benefit. These results support the recommended use of olaparib in this patient subgroup.

Disclosures Sponsored by AstraZeneca. Led by GINECO Group