Conclusion/Implications Initial FIGO stage and histologic subtypes were significant prognostic factors for survival. For patients with stage IVB disease, chemotherapy only might be preferable rather than combined therapy.

EP358/#615 METHYLATION PROFILING IDENTIFIES TWO DISTINCT CLUSTERS OF SMALL CELL CARCINOMA OF THE OVARY HYPERCALCEMIC TYPE (SCCOHT)

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Introduction Small cell carcinoma of the ovary hypercalcemic type (SCCOHT) is a highly aggressive ovarian malignancy that occurs in young women and is defined by inactivating mutations in SMARCA4. While current treatment modalities only show limited success, emerging evidence suggests that a subset of patients may respond to immunotherapy. Here we set out to assess if methylation profiling can stratify SCCOHT into clinically meaningful subgroups.

Methods We collected a multicenter series of clinically annotated SCCOHT. Tumor samples were analysed using the Illumina EPIC and 450k BeadChip. Focal copy number score (FCS) was computed from segmented array data using CNApp. Statistical analyses included the Chi-Squared tests and one-way ANOVA.

Results Our cohort included 27 SCCOHT. The age at diagnosis ranged from 7 – 47 years (n=25, median of 25 years) and 45% of tumors where this information was available (n=20) presented with low stage disease. Clustering analysis of DNA methylation data identified two distinct tumor clusters (C1, n=15 and C2, n=12). C1 was associated with a trend towards younger patient age when compared to C2 (23.7 years vs. 30.2 years). Tumors assigned to C1 also showed a trend towards a lower mean FCS as compared to tumors from C2 (7.4 vs. 12.75). There was no difference in clinical stage between the two clusters.

Conclusion/Implications Based on a small series our data suggests that there are two distinct DNA methylation clusters of SCCOHT. Analyses of larger cohorts of SCCOHT are warrented to understand, if the clusters identified correlate with patient survival and/or response to (immuno-)therapy.

EP359/#860 A RETROSPECTIVE STUDY OF 11 CASES FROM A SINGLE INSTITUTION: MALIGNANT TRANSFORMATION ARISING FROM MATURE CYSTIC TERATOMA

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Introduction Malignant transformation arising from ovarian mature cystic teratoma(MT-MCT) is very rare and has a poor prognosis. This study investigated clinical characteristics and prognosis of MT-MCT in a single institution.

Methods A retrospective chart review was performed. Patients diagnosed with MT-MCT at Haeundae Paik Hospital between 2010 and 2022 were identified.

Results Among 718 cases of ovarian MCT, malignant transformations were found in 11 patients (1.5%). The median age was 49 (range, 22–86) years. The mean size of MT-MCT was 11 (range, 4–22) cm. The most common symptom was abdominal discomfort, reported in seven(63.6%) cases, followed by urinary dysfunction in two(18.1%) cases. Tumor markers were elevated in preoperative examination and mainly included CA125(63.6%),CA19–9(36.3%),and SCCag(18.1%). Three patients underwent staging surgery, while eight patients underwent cystectomy or salpingo-oophorectomy without staging surgery. Five patients had squamous cell carcinoma, three had carcinoid, and three had other histological subtypes. Seven cases were in FIGO stage I, four cases were in stage II-IV. Patients in stage IC to IV received adjuvant chemotherapy and the overall 1-year survival rate was 33.3%. All the patients in stage IA survived until the period of follow up (mean survival time 51 months) except for one patient who died of old age.

Conclusion/Implications The possibility of MT-MCT was associated with large tumor size or advanced age. In cases of stage 1C or higher, the prognosis was worse compared to other types of ovarian cancer. Therefore, when encountering large tumor size or advanced age, it is important to consider the possibility of malignancy.

EP360/#693 PROGNOSTIC FACTORS FOR SURVIVAL IN PATIENTS WITH RARE PERITONEAL SURFACE MALIGNANCY: DIFFUSE MALIGNANT PERITONEAL MESOTHELIOMA- A SINGLE INSTITUTION EXPERIENCE

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Introduction Diffuse malignant peritoneal mesothelioma (DMPM) is a rare and aggressive cancer that originates in the peritoneum. Due to its poor prognosis, a better understanding of its clinical characteristics and prognostic factors is needed. This study aimed to investigate such factors and their association with survival in patients with DMPM.

Methods We conducted a retrospective analysis of patients diagnosed with DMPM at Ajou University Hospital from February 2000 to June 2022. Various clinical characteristics and potential risk factors that may influence survival were evaluated.

Results We identified a total of 22 patients (6 male, 16 female) with DMPM. The median age of the patients was 57.5 years (range 20–80). The overall median survival was 31.1 months (95% CI 15.8–46.4), with a 5-year survival rate of 25.3%. Of the patients, 2 received cytoreductive surgery and followed by adjuvant chemotherapy, 4 received cytoreductive surgery followed by hyperthermic intraperitoneal chemotherapy (CRS+HIPEC). Survival analysis revealed that cytoreductive surgery (p=0.014) and intraperitoneal