cytoreduction. 43 patients received IDS with HIPEC and 80 patients had IDS without HIPEC. The median follow-up period was 34.4 months.

**Results** No differences in baseline characteristics in patients were found between the 2 groups. The IDS with HIPEC group had fewer median cycles of chemotherapy (P = 0.002) than IDS group. The IDS with HIPEC group had higher rate of high surgical complexity score (P = 0.032) and higher rate of complete resection (P = 0.041) compared to IDS group. The times to start adjuvant chemotherapy were longer in IDS with HIPEC group compared to IDS group (P < 0.001). Post-operative grade 3 or 4 complications were similar in the two groups (P = 0.237). Kaplan-Meier analysis showed that HIPEC with IDS group had better progression-free survival (PFS) (P = 0.010), while there was no difference in overall survival between two groups (P = 0.142). In the multivariate analysis, HIPEC was significantly associated with better PFS (HR, 0.60; 95% CI, 0.39 – 0.93).

**Conclusions** The addition of HIPEC to IDS resulted in longer PFS than IDS without HIPEC not affecting safety profile. Further research is needed to evaluate the true place of HIPEC in the era of targeted treatments.

**EP257/#1025**

**DOES GENETIC STATUS INFLUENCE TIME TO DEATH AFTER DIAGNOSIS WITH BRAIN METASTASIS IN OVARIAN CANCER?**

Monica Levine*, Paulina Haight, Brandon Fox, Brenna Espelien, Vincent Wagner, Leigha Senter, Floor Backes, The Ohio State University Comprehensive Cancer Center, Gynecologic Oncology, Columbus, USA

**Objectives** The purpose of this study was to evaluate the impact of BRCA mutation status on survival among patients with epithelial ovarian, primary peritoneal or fallopian tube cancer (EOC) and brain metastasis (BM).

**Methods** Single institution retrospective study of EOC patients who had access to germline and somatic genetic testing from 2017–2020. Genetic status, oncologic data and demographics were abstracted from medical records. Descriptive statistics were performed.

**Results** From 2017–2020, 449 patients underwent germline genetic testing, and 308 patients underwent somatic testing. BM incidence was 2.04% (1/49) among germline BRCA (gBRCA) mutated cases, 14.58% (7/49) among somatic BRCA (sBRCA) mutated cases, and 3.41% (12/352) among patients without germline or somatic BRCA mutations (non-BRCA) (p = .001). Median time from initial diagnosis to diagnosis with BM was 38 months for gBRCA, 29 months for sBRCA, and 23 months for non-BRCA cases. Two cases were diagnosed with BM at initial diagnosis. Median time to death after BM diagnosis was not reached for gBRCA, 27 months for sBRCA, and 12.5 months for non-BRCA cases. There was no difference in the number of isolated BM between groups; systemic disease was present at the time of BM diagnosis for 16/20 (80%).

**Conclusions** This is the first report describing outcomes of EOC with BM incorporating germline and somatic genetic data. BMs were most frequent in sBRCA patients. Survival after BM diagnosis was longest for the gBRCA, followed by sBRCA, and shortest for non-BRCA cases. The presence of BRCA mutations, germline or somatic, may represent a favorable prognostic factor if BM are diagnosed.

**EP258/#760**

**PEGYLATED LIPOSPOMAL DOXORUBICIN DOES NOT AFFECT CARDIAC FUNCTION IN PATIENTS TREATED FOR GYNECOLOGIC MALIGNANCIES**

Khrystyna Levytka*, Robert Naumann, Miranda Benfield, Erin Crane, Atrium Health, Obstetrics and Gynecology, Charlotte, USA; Atrium Health Carolinas Medical Center, Levine Cancer Institute, Gynecologic Oncology, Charlotte, USA

**Objectives** Pegylated liposomal doxorubicin (PLD) has a more favorable side-effect profile compared to doxorubicin. While the FDA label for PLD includes a black box warning concerning cardiac toxicity, the actual risk of cardiotoxicity is unknown and it may be substantially less than that of doxorubicin.

**Methods** All gynecologic malignancy cases with PLD use were reviewed over a 10-year period. Cardiac studies were aligned already treated with bevacizumab or HIPEC as an additional front-line therapy.
to PLD chemotherapy treatment and ejection fractions were compared pre- and post-treatment.

**Results** A total of 453 patients were identified; 216 (48%) had pre-treatment testing. Predictors of pre-therapy testing were diabetes (p=0.015), higher ECOG score (p=0.004), and cardiac disease (p=0.032). Hypertension, BMI, and prior/concurrent bevacizumab treatment did not influence the likelihood of pre-treatment evaluation. Eighty-three (18.3%) patients had pre- and post-treatment testing. Predictors of pre- and post-testing were number of cycles of PLD (p<0.0001) and total dose of PLD (p<0.0001). Seventy-five (90%) patients had <10% change in EF, 2 (2.4%) had improvement in EF>10%, and 6 (7.2%) had a decrease in EF>10%. Initial EF in patients with >10% decrease was higher than those without change or improvement (p=0.0004). BMI, obesity, hypertension, DM, cardiac disease, total PLD dose, number of cycles, and use of bevacizumab predicted changes in EF. One (1.2%) patient had a clinically significant decrease in EF (32.5%) resulting in interruption of treatment.

**Conclusions** Risk of cardiac toxicity from administration of PLD for patients undergoing treatment for gynecologic cancers appears to be low and routine screening does not appear to be warranted, even in the presence of cardiac risk factors.

**Abstract EP259/#928 Table 1**

<table>
<thead>
<tr>
<th>Adverse reactions</th>
<th>BRCA (+) (N=30)</th>
<th>BRCA (-) (N=20)</th>
<th>BRCA (unknown) (N=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GI adverse reactions</td>
<td>16 (53.3%)</td>
<td>10 (50%)</td>
<td>4 (40%)</td>
</tr>
<tr>
<td>Hematologic adverse reactions</td>
<td>18 (60%)</td>
<td>12 (60%)</td>
<td>6 (60%)</td>
</tr>
</tbody>
</table>

**Abstract EP259/#928 Table 2**

<table>
<thead>
<tr>
<th>Grade of adverse effects— no. (%)</th>
<th>BRCA (+) (N=30)</th>
<th>BRCA (-) (N=20)</th>
<th>BRCA (unknown) (N=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3 (10%)</td>
<td>18 (90%)</td>
<td>4 (40%)</td>
</tr>
<tr>
<td>2</td>
<td>21 (55.3%)</td>
<td>8 (36.7%)</td>
<td>2 (20%)</td>
</tr>
<tr>
<td>3</td>
<td>6 (18.7%)</td>
<td>6 (30%)</td>
<td>1 (10%)</td>
</tr>
</tbody>
</table>

and more severe in the BRCA mutant than in the BRCA wild type (P<0.05) (table 2).

**Conclusions** The occurrence of overall and G3 toxicity of BRCA+ patients was significantly higher than BRCA- patients with epithelial ovarian cancer. Patients with BRCA+ may predict worse toxicity to PARPi maintenance or late-line treatment which could provide early intervention signals to support treatment of patients.

**EP260/#796 ROBOTIC PRIMARY CYTOREDUCTIVE SURGERY FOR ADVANCED STAGE OVARIAN CANCER: A PILOT STUDY, FEASIBILITY AND OUTCOMES**

Peter Lim*, Kathryn Haran. Center of Hope, Gynecologic Oncology, Reno, USA

Objectives To determine the feasibility and outcomes of patients undergoing primary robotic cytoreductive surgery (PRCS) for the treatment of advanced stage ovarian cancer (ASOC).

**Methods** Patients with ASOC who underwent PRCS from April 2020 to April 2022 were prospectively reviewed. Demographic data, preoperative CT scan imaging studies evaluating presence of ascites, omental caking and size of the ovarian mass and CA125 were collected. The type, number, and success of cytoreductive surgical procedure were recorded. The rate of open conversion was determined. The intraoperative and postoperative outcomes and complications were analyzed.

**Results** A total of 30 patients underwent PRCS. The average age was 63.4, average BMI was 24.8. Preoperative evaluation CA 125 was elevated in 90% (3/30). Average preoperative CT imaging pelvic mass was 6.5 cm and 73.4% (22/30) of patients had ascites and/or omental caking present. Optimal cytoreductive surgery was achieved in 73.4% (22/30) of patients. The conversion from robotic surgery to open laparotomy was 20% (6/30). The average intended procedures successfully performed was 3.8. Mean blood loss was 204cc, the average OR time was 215 min [50, 700], and no intraoperative complications. There were no admissions to the Intensive Care Unit. The average length of stay was 5.5 days.

**Conclusions** In our pilot study, Primary Robotic Cytoreductive Surgery for the treatment of ASOC is feasible. Majority of patients underwent successful variety of procedures without the requirement for conversion to open laparotomy and minimal complications.

**EP261/#394 IDENTIFICATION AND CHARACTERIZATION OF CA-125, IL-2, IL-13 AND HE4 IN VAGINAL FLUID IN OVARIAN CANCER**

Revital Linder*, Ido Mick, Geula Klorin, Ari Reiss, Gali Levy, Maria Dolinski, Inbal Zafir-Lavie, Shiri Blumenfeld Kan, Shlomit Reshef, Amnon Amit, Rambam, Gynecological Oncology, Haifa, Israel

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