More patients with SM had a smoking history that those without SM (28.3% vs 11.5%, p=0.004). Other demographic characteristics were similar between groups (age (56 vs 54, p=0.23), body mass index (25.7 vs 25.5, p=0.70), diabetes (5.7% vs 5.8%, p=0.76), proportion of patients of Asian ethnicity (18.9% vs 23.1%, p=0.66)). The proportion presenting with stage I OCCC was comparable (66% vs 59%, p=0.46).

Only one patient had documented Lynch syndrome. Survival analysis is pending.

Conclusions Patients with OCCC are at increased risk of SM, most frequently non-Lynch syndrome related. This could suggest that a subset of patients with OCCC harbor mutations rendering them susceptible to SM. SM that could be associated with Lynch syndrome warrants genetic testing.

IGCS19-0306

Is it safe to immediately initiate adjuvant intraperitoneal chemotherapy following bowel resection in patients with newly diagnosed advanced ovarian cancer?

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Objectives To determine if early administration of intraperitoneal chemotherapy (IPC) and intra-operative insertion of an intraperitoneal (IP) port are associated with increased complications in patients who undergo a bowel resection surgery as part of primary cytoreductive surgery.

Methods Retrospective cohort of patients with ovarian cancer at 2 institutions between 2008–2018. Patients included in this study had primary cytoreductive surgery which included one or more small or large bowel resections and either received or were scheduled to receive adjuvant intraperitoneal chemotherapy.

Results The majority of patients had stage III or IV disease (86.2%) and high grade serous histology (91.6%). 120 out of 138 patients (87%) received at least 4 cycles of IPC. A small proportion of patients (5.4%) received all chemotherapy intravenously, despite having had an IP port inserted. Compared to patients who received their first cycle of chemotherapy intravenously (IV), patients who started with IPC were not at increased risk of delayed infection (1.8% vs 1.3% (p=0.8)), IP port related complications which included port obstruction, leakage, infection, pain and erosion (19.6% vs 20% (p=0.96)), or anastomotic leak (3.6% vs 2.7% (p=0.8)). The rates of anastomotic leak (5.6% vs 3.3% (p=0.62)), intra-abdominal infection (16.7% vs 8.7% (p=0.17)) and IP port related complications (24.1% vs 13.3% (p=0.21)) were not statistically different in patients who had intra-operative IP port insertion compared to delayed post-operative insertion.

Conclusions IPC during the first cycle of adjuvant treatment and intra-operative IP port insertion are not associated with increased complications after primary cytoreductive surgery for ovarian cancer which includes a bowel resection.

IGCS19-0502

Ovarian tumor in patients with previous gastrointestinal carcinoma

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Objectives To evaluate demographic and clinical-pathological characteristics of ovarian tumors diagnosed in women with previous gastrointestinal cancers.

Methods A tranversal study of 59 patients with diagnosis of ovarian tumors who had previously been treated for gastrointestinal adenocarcinoma at a hospital in Sao Paulo, Brazil, from 2009 to 2018. Demographic data were collected: age, follow-up of primary gastrointestinal tumor, tumor markers CA-125, CA-19.9 and CEA, radiological characteristics, type and extent of surgery performed, amount of residual disease, primary tumor site, anatomopathological diagnosis and survival.

Results The primary gastrointestinal carcinoma sites were: stomach (15.3%), colorectal (64.4%), appendix (3.4%), pancreas (3.4%), gallbladder (3.4%) and undetermined gastrointestinal cancer (10.2%). The median follow-up was 16 (1–87) months. The overall survival from the diagnosis of gastrointestinal carcinoma was 33 (2–187) months and the overall survival from ovarian tumor diagnosis was 16 (1–87) months. The mortality rate varied according to the site of origin of gastrointestinal carcinoma: stomach (77.8%), colorectal (53.1%), appendix (50%), gallbladder (50%), pancreas (50%) and undetermined gastrointestinal carcinoma (16.7%).

Conclusions Metastatic gastrointestinal tumors to the ovaries present variable overall survival according to the primary site of origin. Tumors of the stomach, gallbladder and pancreas present worse prognosis. Colorectal metastatic tumors are the most frequent and the ones with the highest overall survival. These differences should be considered when deciding whether to perform surgical treatment in these patients with metastatic tumors.

IGCS19-0379

Feasibility of an outpatient 12-step desensitization for patients with history of carboplatin hypersensitivity reactions (HSR) undergoing retreatment with carboplatin for recurrent ovarian or endometrial cancer

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Objectives To retrospectively evaluate the safety and efficacy of an outpatient 12-step carboplatin desensitization regimen in patients with prior carboplatin HSR.

Methods Patients with a history of carboplatin HSR undergoing carboplatin desensitization for Mullerian cancer were
included. Following consultation with a desensitization specialist, patients were premedicated for 3 days (prednisone 40 mg, montelukast 10 mg) and immediately prior to carboplatin (dexamethasone, antihistamine-1 and antihistamine-2 antagonists). Carboplatin was administered in 12 steps under dedicated nursing supervision: Bag1 (1% dose), Bag2 (2.5% of dose), Bag3 (96.5% of dose) were each given in 4 incremental steps. Planned infusion time for steps 1–11 was 15 minutes/step and step 12 was administered at 75ml/hour.

**Results** 30 patients received carboplatin desensitization between 12/2016–01/2019. During their prior HSR 5/30 (16%) had required epinephrine. 19/30 (63%) were seen by an allergist prior to desensitization. 24/30 (80%) received ≥ 2 desensitization cycles with median of 3 (range 1–8). During desensitization 11/30 (37%) had breakthrough HSR; 9 of these 11 (81%) were able to receive additional cycles. 2/30 (7%) required epinephrine with 1 patient (3%) transferred to urgent care. No patient required admission for HSR. Reasons for treatment discontinuation were: completed planned treatment (12/30, 40%), disease progression (11/30, 37%), and HSR (5/30, 17%). Median time in chemo unit was 504 minutes (range 335–630).

**Conclusions** 37% had breakthrough HSR despite the 12-step desensitization; however, the majority was able to receive additional platinum desensitization. Our data suggest that outpatient carboplatin desensitization is feasible but repeated HSR can occur. Dedicated nursing care and access to desensitization specialists are required.

### IGCS19-0341

**CORRELATION OF LYMPHOVASCULAR SPACE INVASION AND INVASIVE CIRCULATING TUMOR CELLS IN PATIENTS WITH EPITHELIAL OVARIAN CANCER**

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**Objectives** The detection of circulating (CTCs) and invasive circulating tumor cells (iCTCs) in the peripheral blood of women with epithelial ovarian cancer (EOC) has been proven to be feasible and prognostic. The deleterious impact of lymphovascular space invasion (LVI) has been well-established in various gynecologic malignancies (e.g., vulvar, cervical, endometrial) but has not been extensively evaluated in EOC. The goal of this study is to evaluate the correlation between CTCs, iCTCs and LVI in patients with EOC.

**Methods** Peripheral blood samples from 85 patients with EOC were assessed for the presence of CTCs and iCTCs using our functional cell adhesion matrix (CAM) enrichment method. The histopathology slides from each patient were reviewed by two gynecologic oncology pathologists for histologic type, grade, presence or absence of LVI, extent of the LVI (focal or multifocal) and location (organ site).

**Results** High levels of CTCs and iCTCs were significantly associated with advanced stage but not with grade, debulking status, platinum sensitivity, lymphovascular space invasion, age, or overall survival. High levels of CTCs and iCTCs were positively correlated. Lymphovascular space invasion was significantly associated with decreased overall survival (median: 1194 vs. 2034 days, p=0.02) but not with stage, grade, debulking status, platinum sensitivity, median or high levels of CTCs or iCTCs, or age.

**Conclusions** Lymphovascular space invasion is an independent risk factor for women with EOC, but was not associated with levels of circulating tumor cells. These findings suggest that these two circulations have distinct mechanisms by which they contribute to spread of ovarian cancer.

### IGCS19-0100

**RARE OVARIAN CANCER PRESENTATION**

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**Objectives** To report an intestinal lymphangitis carcinomatosa related to ovary cancer.

**Methods** The information has been obtained through review of medical records and review of the literature.

**Results** A 57-year-old virgin, deaf-mute patient with cognitive deficit was referred to our hospital with left ovary neoplasia. Abdominal CT showed a 3.5 cm diameter mixed lesion in the left ovary. CA-125 was 74.55. Videolaparoscopy showed lymphatic fluid in the abdominal cavity, lesions in epiploon compatible with metastatic implants. Left oophorectomy was performed. Frozen section revealed undifferentiated malignant neoplasia, not being able to rule out lymphoma. Pathology confirmed the hypothesis of high grade serous ovarian carcinoma. She was readmitted in 2 weeks later with clinical signs of high bowel obstruction. Abdominal CT demonstrated proximal jejunal obstruction. Exploratory laparotomy showed a thickened area of 10 cm in the proximal jejunum, with stenotic enteric lumen, with lesion apparently originating from its submucosal and muscular layers without implants in serosa. Proximal enterectomy, panhysterectomy, omentectomy, and resection of peritoneal implants in hepatic round ligament and bladder were performed. Pathology revealed jejunal stenosis due to an infiltrating tumor, lengthening 7.2 cm. Microscopy showed lymphatic tumoral emboli in mucosa, submucosa and muscularis propria. No serosal involvement was identified. Immunohistochemistry was compatible with metastatic high grade serous ovarian carcinoma.

**Conclusions** Our report demonstrates an unusual pattern of metastasis: embolization of intestinal lymphatic vessels, with subsequent stromal invasion. To the best of our knowledge, this is the first report in the literature of intestinal carcinomatous lymphangitis related to ovary cancer.