

**Results** The kappa inter-rater agreement was  $-0.017$  (95% CI 0.023 to  $-0.005$ ), indicating low inter-rater agreement between radiology and actual laparoscopic score. The ICC was 0.06 (0.02–0.21), indicating that surgeons do not score the same across all images. When using a PIV cutoff of 8, the probability of agreement between radiology and actual laparoscopic score was 0.56 (95% CI 0.49–0.73). When looking at disease site subscales, the probability of agreement was (95% CI): peritoneum 0.57 (0.51–0.62), diaphragm 0.54 (0.48–0.60), mesentery 0.51 (0.45–0.57), omentum 0.61 (0.55–0.67), bowel 0.54 (0.44–0.64), stomach 0.71 (CI 0.65–0.76), and liver 0.36 (CI 0.31–0.42).

**Conclusions** Surgeon radiology review did not highly correlate with actual laparoscopy findings. By subscale, the best agreement is seen when evaluating for stomach involvement, and the worst with liver involvement. Our study highlights the benefits of laparoscopic assessment to determine resectability over radiology alone.

## IGCS19-0367

### 301 A NOVEL BIOMARKER FOR EARLY STAGE OVARIAN CANCER, AND A NEW TARGET FOR IMMUNOTHERAPY?

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**Objectives** Ovarian cancer (OC) is the eighth most commonly occurring cancer worldwide. One of the most effective ways to improve patient survival would be an earlier diagnosis when survival rates are highest. However, diagnosis tends to be in the later stages of disease when patients present with pelvic or abdominal pain, urinary frequency or urgency, increased abdominal size or bloating. A diagnosis of OC is usually confirmed by a pelvic examination, transvaginal ultrasonography and detection of carbohydrate antigen 125 (CA125). However, the value of CA125 in early stage disease is limited due to a lack of sensitivity.

**Methods** Using immunohistochemistry we examined the expression of a panel of tumour antigens including ovarian cancer protein (OCP), as well as the standard biomarkers for OC, CA125, HE4 and WT1, in paraffin-embedded OC microarrays containing 208 samples. Scoring was performed in a single blinded fashion.

**Results** We found OC to be expressed at an intensity and frequency that exceeded that of CA125, HE4, WT1 or PASD1 in stage I and II OC. To confirm this expression we used two additional commercially-available antibodies that recognised OCP and demonstrated that this expression was reproducible and restricted to OC with little or no expression in adjacent, healthy ovarian or endometrial tissues, or indeed disease or inflamed endometrial tissue.

**Conclusions** We have identified a cancer-testis antigen that is more frequently expressed in presentation OC Stage I and II OC than CA125, HE4 and WT1. We are now examining the impact of siRNA treatment targeting OCP on OC cell survival in vitro.

## IGCS19-0649

### 302 A PHASE IB STUDY OF INDIRECT IMMUNIZATION WITH OREGOVOMAB AND TLR3 STIMULATION WITH HILTONOL® (H) IN PATIENTS WITH RECURRENT PLATINUM RESISTANT OVARIAN CANCER (PROC)

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**Objectives** This phase IB study assessed safety of Oregovomab (O) indirect immunization (monoclonal antibody for CA125) and TLR3 stimulation with H (polyI:CLC) in PROC. Secondary endpoints were RECIST response, immune response, response to subsequent therapies, and overall survival.

**Methods** Patients with PROC (median 5 prior Rx) received 4 IV infusions with 2 mg O followed by 2 mg H IM 30 min & 48 hours post-O at weeks 0, 3, 6 and 9. Week 12, imaging was performed, and elective chemotherapy was allowed post-progression. A final O infusion was given at week-16 and patients were followed.

**Results** 17 patients were enrolled at 2 centers; 15 were dosed and 13 completed the minimum 3 infusions. Treatment phase safety analysis is complete & post IT follow-up is ongoing. Local site reactions to H and mild fatigue/flu-like symptoms were reported in 13(87%) patients. Serious adverse events were reported in 5 (33%) patients, attributed to underlying disease. No new safety signals were observed. Six (40%) had stable disease through the 12-week immunization period. Four patients with persistent/progressive disease stopped IT prior to infusion 4. Early humoral response by week-6 was observed in 7 of 9 (77%) patients with the available time points. 14 patients took additional cancer Rx, 5 died of disease and 5 with persistent/progressive disease are stable on Rx.

**Conclusions** Safety, compatibility of combining O with H, and early humoral responsiveness to indirect immunization by week-6 have been established. The potential to enhance activity of chemotherapy using O indirect immunization is proposed.

## IGCS19-0464

### 303 RECENT ADVANCES ABOUT LIQUID BIOPSY IN EARLY DIAGNOSIS OF OVARIAN CANCER PROGNOSTIC ESTIMATION OF OVARIAN CANCER

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**Objectives** Among gynecological tumors, ovarian cancer ranks the first lethality rate during the last decades. Clinical data had suggested that effective therapy can achieve 90% in ovarian cancer patients when the tumor is still confined to the ovary. However, Almost 75% of patients are diagnosed at

advanced stage(III/IV) and exhibit chemotherapy resistance. To find new biomarkers for early diagnosis, therapeutic monitoring and prognostic estimation of ovarian cancer is of great importance. The occurring of liquid biopsy provides a new direction for clinical research of this neoplasm.

**Methods** Literatures had been searched through databases using the certain theme of ““ovarian cancer ““ and ““liquid biopsy”””.

**Results** Liquid biopsy offers a minimally invasive repeatable sample collection of blood. Recent studies attempted to shed light upon their values on early diagnosis, prognosis and prediction of ovarian cancer. Up to now, circulating tumor cells (CTCs), circulating tumor DNA (ctDNA) and tumor cell-derived exosomes (TEXs) represent the main liquid biopsy approaches.

**Conclusions** The occurring of liquid biopsy provides a new direction for clinical research of ovarian cancer. Liquid biopsy acts as an effective early detection approach to find new biomarkers for early diagnosis, therapeutic monitoring and prognostic estimation of ovarian cancer.

## IGCS19-0357

### 304 DOES NACT REDUCE THE EXTENT OF SURGERY AND PERIOPERATIVE MORBIDITY IN SURGICAL CYTOREDUCTION OF ADVANCED EPITHELIAL OVARIAN CANCER? A SINGLE INSTITUTE EXPERIENCE AT FMRI, GURUGRAM

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**Objectives** To study the extent of surgery to achieve completeness of cytoreduction (CC) score 0 and perioperative morbidity in interval surgical cytoreduction in comparison to primary surgical cytoreduction of advanced epithelial ovarian cancer.

**Methods** It is an interim analysis of ongoing prospective comparative study of patients with stage III/IV ovarian, tubal and peritoneal cancers undergoing interval or primary surgical cytoreduction during the period 2015 to 2018. The extent of surgery to achieve CC score-0 was the primary endpoint and perioperative morbidity was the secondary endpoint. Indication for NACT was bulky upper abdomen disease based on clinical evaluation and imaging or PS >2.

**Results** Among 124 cases, 73 were in stage III/IV epithelial cancer; 46 of them had NACT and underwent interval surgical cytoreduction and 27 had primary surgical cytoreduction. The two groups did not differ significantly in median surgical peritoneal carcinomatosis index (PCI) (p 0.5755) or surgery duration (p 0.2301). In the interval group 78.3% and in the primary group, 81.5% were cytoreduced to CC score of 0. The types of procedures to achieve CC 0 were not statistically different between the two groups. A higher incidence of paraaortic lymph node dissection was observed in the primary group (p 0.0137). The perioperative morbidity in the interval group was not significantly different from the primary group.

**Conclusions** In our experience, NACT could not significantly reduce the surgical extent to achieve CC 0 or the perioperative morbidity in comparison to patients undergoing primary surgical cytoreduction.

## IGCS19-0623

### 305 A RARE CASE OF BORDERLINE BRENNER TUMOR

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**Objectives** To report a case of borderline Brenner tumor

**Methods** Case report and literature review

**Results** A 70-year old woman had lower abdominal pain and was found to have a large tumor in the pelvic cavity which had both cystic and solid lesions by ultrasonography and MRI. We underwent a surgery of total hysterectomy, bilateral salpingo-oophorectomy, omentum resection, pelvic and para-aortic lymph node dissection according to a frozen section diagnosis of borderline or malignant tumor of the ovary. The final pathological diagnosis was borderline Brenner tumor, StgaelC3, which shows an exuberant papillary transitional cellular component with mild nuclear atypia lined by mucinous columnar epithelium without invasion to the stroma. There is no recurrent and metastasis at postoperative 3 months.

**Conclusions** Borderline Brenner tumor of the ovary is a rare tumor, which has only about 30 case reports of published English literatures. At present, we don't have enough knowledge about the characteristics of the tumor to decide appropriate treatment. Additional collection of data of this tumor is necessary to establish diagnosis and treatment.

## IGCS19-0548

### 306 TREG CELLS AND TH17 CELLS PRODUCING IL-21 AND IL-22 IN A ROMA RELATIONSHIP OF PATIENTS AFFECTED BY OVARIAN TUMOURS

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**Objectives** The relationship of Treg and CD4+IL-21+ or CD4+IL-22+ in the peripheral blood and the tissue of the epithelial ovarian tumor, to blood serum levels of markers HE4 and CA125 and to assess the application of the risk of ovarian malignancy algorithm (ROMA).