effect of fertility-preserving surgery on recurrence remains inconclusive, in the present study we examined the clinicopathological factors in residual/recurrent BOT.

Methods BOT diagnosed between 2010 and 2020 were retrieved using electronic records for women <40 years. Clinicopathological features of residual/recurrent BOT during this period were analysed.

Results In total, 74 BOT cases were reviewed which consisted of 42 (56.8%) serous BOT, 29 (39.2%) mucinous BOT and 3 (4.1%) seromucinous BOT.

Amongst the 13 residual/recurrent BOT, all but one were serous BOT. More than half of residual/recurrent BOT had normal CA125 at presentation. The mean age was similar to the non-recurrent BOTs. Laparoscopic cystectomy was the most common initial treatment. Bilateral tumours were seen at initial surgery in 3/13 (23.1%). The time to residual/recurrent tumour ranged from 1 to 96 months. The residual/recurrent tumours were seen in the same ovary in 3/13 (23.1%), in opposite ovary in 5/13 (38.5%) and at extraovarian sites in 5/13 (38.5%). Only 2 of the 13 cases showed focal micropapillary pattern. Cytology samples were examined in 7 cases and 5 of these reported presence of epithelial cells. Majority of residual/recurrent BOT were stage 1 at initial diagnosis. All but 2 patients are currently disease free.

Conclusions Our study highlights clinicopathological factors associated with residual/recurrent BOT in young females undergoing fertility-preserving surgery.

IGCS20_1100

128 IN SILICO ANALYSIS OF THE IMMUNE CHECKPOINT TIGIT AS A NOVEL IMMUNOTHERAPY TARGET FOR HIGH GRADE SEROUS OVARIAN CANCER

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The T-cell immunoglobulin and ITIM domain (TIGIT) is a new inhibitory receptor that represents a novel target for the development of immunotherapy strategies. Using an in-silico approach, we identified differentially expressed genes (DEGs) and enriched pathways associated with TIGIT mRNA expression, in high grade serous ovarian cancer (HGSOC) using the Cancer Genome Atlas (TCGA) and the Australian Ovarian Cancer Study (AOCS).

Methods DEGs between patients with high and low TIGIT expression, stratified based on an unsupervised tree analysis were calculated using EdgeR. Enriched pathways with the DEG list were identified using Gene Set Enrichment Analysis (GSEA) using a False Discovery Rate (FDR) <0.25 as significant.

Results Increased TIGIT mRNA expression was associated with improved survival in HGSOC (p=0.034). 975 DEGs were identified in the TIGIT high group, and GSEA identified enriched pathways involved in complement activation humoral immune response, suggesting that TIGIT expression may be associated with an immunologically 'hot' tumour. This was confirmed by the finding that increased TIGIT expression was associated with an increased lymphocytic infiltration score, CD8+ T cells and Interferon Gamma Response score. Finally TIGIT expression was reduced in AOCS samples from women with acquired platinum resistance compared to matched primary tumour samples (p=0.014)

Conclusion TIGIT represents an important prognostic marker in HGSOC. Similar to PD-1/PD-L1, TIGIT is associated with increased tumour infiltrating lymphocytes and an improved prognosis. Platinum resistance is associated with a reduction in TIGIT expression and warrants further study in HGSOC.

IGCS20_1104

129 UTERINE LIPOLEIMYOMA MIMING OVARIAN TERATOMA: A DIAGNOSIS CHALLENGE

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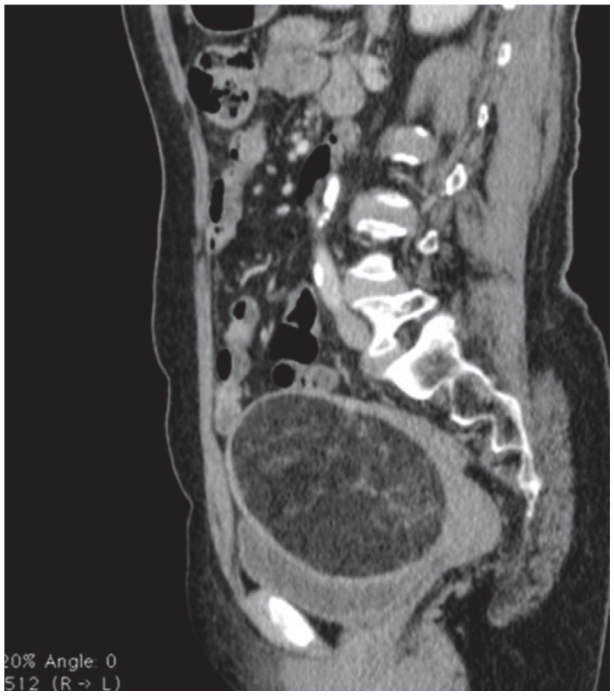
Introduction Uterine lipoleimyoma (UL) is a rare benign tumor affecting especially perimenopausal and menopausal women and it is often diagnosed as a malignant tumor in radiology findings.

Methods We report a case of a female patient aged 66 years treated for left parauterine mass in Salah Azaiz Institute of Oncology, Tunis, Tunisia in March 2020.

Case Report A 66-year-old woman with medical history of diabetes, high blood pressure and coronary artery disease consulted for a pelvic mass fortuitously discovered on a CT scan. The physical exam was normal. The thoracic-abdominal pelvic scan showed a multi-partitioned well-defined left ovarian mass of fat density, measured 113 mm in its great diameter. Tumor markers CA 125, CA 19–9 and ACE were negative. The



Abstract 129 Figure 1

diagnosis of ovarian teratoma was suspected on radiological findings. We decided to perform an exploratory laparotomy, instead of laparoscopy due to COVID 19 outbreak. Intraoperatively, we found a uterine mass with fibroid appearance. The patient underwent total non-conservative hysterectomy. The frozen section concluded to the diagnosis of UL.

The postoperative course was straightforward. The diagnosis of UL was confirmed by the final histologic examination.

Conclusion The resemblance between UL and ovarian teratoma on the CT scan leads to confusion. Only surgical exploration and histologic examination allow to make the right diagnosis and then adjust a best management of this disease.

IGCS20_1105

130 PROGNOSTIC SIGNIFICANCE OF LYMPHOVASCULAR SPACE INVASION IN EPITHELIAL OVARIAN CANCER

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Objectives To identify the clinical, therapeutic and survival impact of lymphovascular space invasion (LVSI) in epithelial ovarian cancer.

Methods Retrospective study of 151 patients staged surgically in Salah Azaiez Tunisian cancer center, between 2000 and 2010.

Results We performed primary debulking surgery in 128 patients (84.8%) and 23 patients (15.2%) underwent and interval debulking surgery. Maximal cytoreduction (R0) was achieved in 67 of patients (44.4%),39 patients had a residual disease ≤1 cm (25.8%) and 45 patients had a residual disease >1 cm (28.8%). LVSI were recorded in 51 patients (33.8%). LVSI was were associated to higher serum level of CA 125 >1000UI/ml (52.9% vs 33%,p=0.01),higher quantity of ascites >1litre (49% vs 28%,p=0.01) with more frequent cacinomatosis in the upper abdomen (60.8% vs 31%, p<0.0001) and more residual disease R1/R2 (72.5% vs 47%,p<0.0001),bilateral tumors (82.4% vs 58%,p=0.003),advanced FIGO stage III-IV (96.1% vs 68%, p<0.0001) and high tumor grade (88.3% vs 59%, p<0.0001). Among the 84 patients who underwent lymphadenectomy, LVSI positive tumors were correlated to higher risk of lymph node metastasis (LNM) (57.1% vs 30.4%, p=0.018) with higher LN ratio (13.95 ±21.69 vs 7.25±17.90, p=0.17) and more frequent associated pelvic and para aortic LNM (33.3% vs 10.2%, p=0.015). LVSI positive tumors were correlated to a decreased 5-years overall survival (25.2%vs 44%, p=0.004) and recurrence free survival (26.8% vs 47%,p=0.019).

Conclusion LVSI is an independent predictor of extended lymph node metastasis, progression and survival in patients with primary epithelial ovarian cancer.

IGCS20_1106

131 THE INCREASING RACIAL DISPARITY OF UTERINE CARCINOSARCOMA OVER 16 YEARS: A STUDY OF 35,000 PATIENTS

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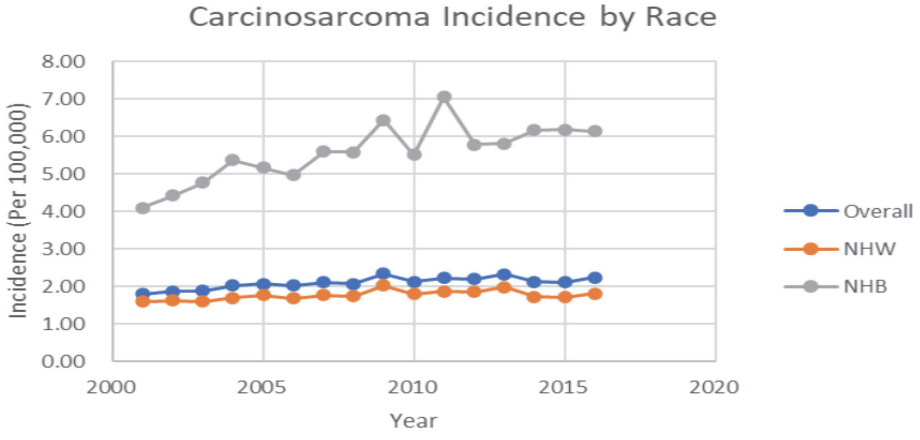
Objective To evaluate the racial disparities of uterine carcinosarcoma based on incidence and trends in the United States.

Methods From 2001 to 2016, incidence rates were estimated from the United States Cancer Statistics after correcting for hysterectomy and pregnancy prevalence from the Behavioral Risk Factor Surveillance System (BRFSS). SEER*Stat and Joinpoint regression were used to calculate the incidence rate (per 100,000) and average annual percent change (AAPC).

Results Of 35,524 patients with carcinosarcoma, 66% were White, 24% Black, 7% Hispanic, and 3% Asian. Between 2001 and 2016, the overall incidence increased from 2.7 to 3.5, with an average annual percent change (AAPC) of 1.5% (p<0.001). Black women had a 3 fold higher incidence at 9.9 per 100,000 compared to 2.8 in Whites. Additionally, Black women had a higher annual increase at 2.4% vs. 1.1% in Whites. With respect to age, patients aged 75–79 had the highest incidence at 15.5. To identify a group of patients at highest risk using demographic factors, we found the intersectionality of Blacks aged 70–74 years had an incidence of 43.2/100,000 with an increase of 2.2% annually (p<0.001).



Abstract 131 Figure 1