Methodology 75 women were recruited in this study who had PDS or IDS between January 2008-March 2023. Association between clinical characteristics, pretreatment imaging, serum markers, surgical and pathological factors, and disease recurrence and overall survival was examined in univariable and multivariable analysis (Kaplan-Meier and Cox proportional hazard model).

Results 47 women (PDS) and 28 (IDS) women were included. No residual tumor (R0) was in 72.3% of patients after PDS and in 57.2% of patients after IDS. Postoperative rates of adverse effects and mortality were higher after PDS than after IDS (p=0.793). Median overall survival was not reached for the PDS group and 78 months for the IDS group (p=0.292). Median progression-free survival was 60 months in the PDS group and 52 months in the IDS group (p=0.04). Factors in multivariable analysis associated with increased risk of recurrence included primary peritoneal carcinoma (hazard ratio HR: 6.09, 95% CI 1.55–23.87, p= 0.01), residual tumor >1cm (HR: 2.72, 95% CI 1.06–6.98, p= 0.037) and stable/progression in response to chemotherapy (HR 8.85, 95% CI 1.76–44.45, p= 0.008).

Conclusion PDS before chemotherapy is the standard of care for patients with advanced ovarian cancer. NAC appeared to be a good option when the PDS is not likely as a first choice. The worse survival outcome was associated with primary peritoneal carcinoma, residual tumor in surgical status and a bad response to chemotherapy.

Disclosures Factors independently associated with increased risk of death included residual tumor>1 cm (HR: 4.52, 95% CI 1.86–11.02, p= 0.001) and stable disease/progression at chemotherapy (HR: 13.42, 95% CI 2.7–66.57, p= 0.001)

#293	THE ROLE OF BOWEL RESECTION TO ACHIEVE COMPLETE CYTOREDUCTION FOR RECURRENT EPITHELIAL OVARIAN CANCER: AN OBSERVATIONAL STUDY

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Introduction/Background Complete cytoreduction in recurrent epithelial ovarian cancer has been shown to improve progression-free survival and overall survival in recurrent ovarian cancer patients, with minimal impact on quality of life. Discussions revolving around bowel resection and stoma formation are most distressing for patients during pre-operative counselling. We aimed to quantify these risks in patients undergoing Secondary Cytoreduction Surgery (SCS) at a tertiary cancer centre.

Methodology We included all patients who underwent SCS between 2014–2022. Data were retrospectively collected on demographics, stage and histology at presentation, and resection status at previous cytoreduction. Recurrent disease pattern, bowel resection rates, enterostomy rates and final resection status were evaluated. Descriptive statistics were performed on Microsoft Excel.

Results 64 patients underwent SCS during the study period. High-grade serous ovarian cancer was the most common histological subtype (60.9%) followed by low-grade serous (15.6%). 60.9% had advanced disease (III-IVB) at presentation.

Resection status at primary surgery was R0 in 90.6%. Median disease-free interval was 52.6months (IQR 33.8–70.5). 40.6% of patients underwent surgery for single-site recurrence, while 59.4% had multisite disease. The most common recurrence sites at SCS were pelvic peritoneum (34.4%), rectosigmoid serosa (31.3%), small bowel mesentery (25.0%) and small bowel serosa (20.3%). R0 at SCS was achieved in 89.1% and bowel resection was required in 29.7%. Rectosigmoid resection was the most common type of bowel resection (15.6%). 18.8% of patients underwent enterostomy (25.7% of patients with a transcoelomic recurrence pattern, 21.4% of patients with a mixed pattern, and none of the patients with nodal recurrence). End colostomy was the most common stoma type (12.5%).

Conclusion The proportion of women having bowel resection during SCS for recurrent epithelial ovarian cancer is 29.7% and that requiring stoma is 18.8%. Appropriate preoperative counselling is recommended especially in the context of non-nodal recurrent disease pattern.

Disclosures Nothing to disclose

#297	PROGNOSTIC FACTORS AMONG YOUNG WOMEN WITH EPITHELIAL OVARIAN CANCER: THE YOC-CARE STUDY (YOUNG OVARIAN CANCER – CARE)

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Introduction/Background Ovarian cancer is the most lethal of all gynaecological neoplasms in young women, affecting up to 10–15% of premenopausal women, however, there is very limited data on which are the most important prognostic factors

Methodology A multicentre and retrospective study was performed including women treated for epithelial ovarian cancer who were younger than 45 years old collected between January-2010 and December-2019. Borderline and non-epithelial ovarian cancers were excluded from the study

Results A total of 998 young patients with epithelial ovarian cancer from 55 different institutions in Spain were collected. The mean (standard deviation) age in the study population was 38.9 (5.8) years, and 853 (85.5%) presented an ECOG performance status grade 0 at diagnosis. The grouped FIGO stage distribution was 508 (50.9%) patients in initial stages (stages I and II) and 490 (49.1%) in advanced ones (stages III and IV). Three hundred thirty-four (33.4%) patients presented with recurrent disease after a mean follow up of 43.94 (SD 34.4) months. The type of staging surgery (incomplete vs. complete), the type of initial treatment modality (primary

cytoreduction vs. interval surgery), and the amount of residual disease were all significantly associated with the overall survival. In the multivariate analysis, the response based on radiological findings (HR=3.91 95% CI 2.60–5.90 for partial response, HR=13.13; 95% CI 9.17–18.81 for progression), neoadjuvant chemotherapy (HR=1.81; 95%CI 1.32–2.46), and FIGO Stage (HR=1.68 95%CI 1.40–2.02) were identified as independent prognostic factors associated with the worst oncological outcomes (p<0.001)

Conclusion The radiology-based response, neoadjuvant chemotherapy and FIGO stage were independent prognostic factors associated with the worst oncological outcomes in women younger than 45 years old with epithelial ovarian cancer. It highlights the importance of primary complete cytoreduction, performing maximal-effort surgery in these patients due to the tumor´s characteristics and the better tolerance to maximal-effort cytoreduction in comparison to older women

Disclosures No

| #310 | **TUMOR IMMUNE MICROENVIRONMENT IN ASCITES AND ITS ASSOCIATION WITH THE PROGNOSIS OF HIGH-GRADE SEROUS CANCER PATIENTS** |

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Introduction/Background High-grade serous cancer is often associated with ascites at presentation. Our objective was to quantify immune cells in the ascites before treatment and evaluate their impact on patient survival.

Methodology Forty-seven patients with primary disease and ascites were included in the study. Flow cytometry analysis was performed to detect percentages of CD3+ T cells (CD4+, CD8+, Tregs, and NKT cells), B cells, NK cells (CD56brightCD16- and CD56dimCD16+ subsets), macrophages, and dendritic cells. CD103 epithelial marker was further analyzed on T cells, and PD-1 and PD-L1 immune checkpoint molecules were analyzed on all immune cells. Cut-off of low and high percentages of immune cells was determined by the median of the variables, and the correlation with progression-free survival and overall survival was calculated.

Results CD3+ T cells were the predominant cells in the ascites (median 51%), while the presence of other immune cells was much lower (median ≤10%). PD-1 was mainly expressed on CD3+ T cells (median 20%), lower expression was observed on macrophages (median 10%), dendritic cells (median <10%), NK cells, and B cells (median <5%). PD-L1 expression was not detected. Progression-free survival and overall survival were significantly better in patients with high percentages of CD103+CD3+ T cells, PD-1+Tregs, CD56brightCD16- NK cells, and dendritic cells. High percentages of CD8+ T cells, macrophages, and PD-1 +CD56brightCD16- NK cells, and low percentages of CD4+ also indicated significantly better overall survival.

Conclusion Our results highlight the potential of the ascites tumor immune microenvironment to provide novel prognostic markers for patients diagnosed with primary high-grade serous cancer.
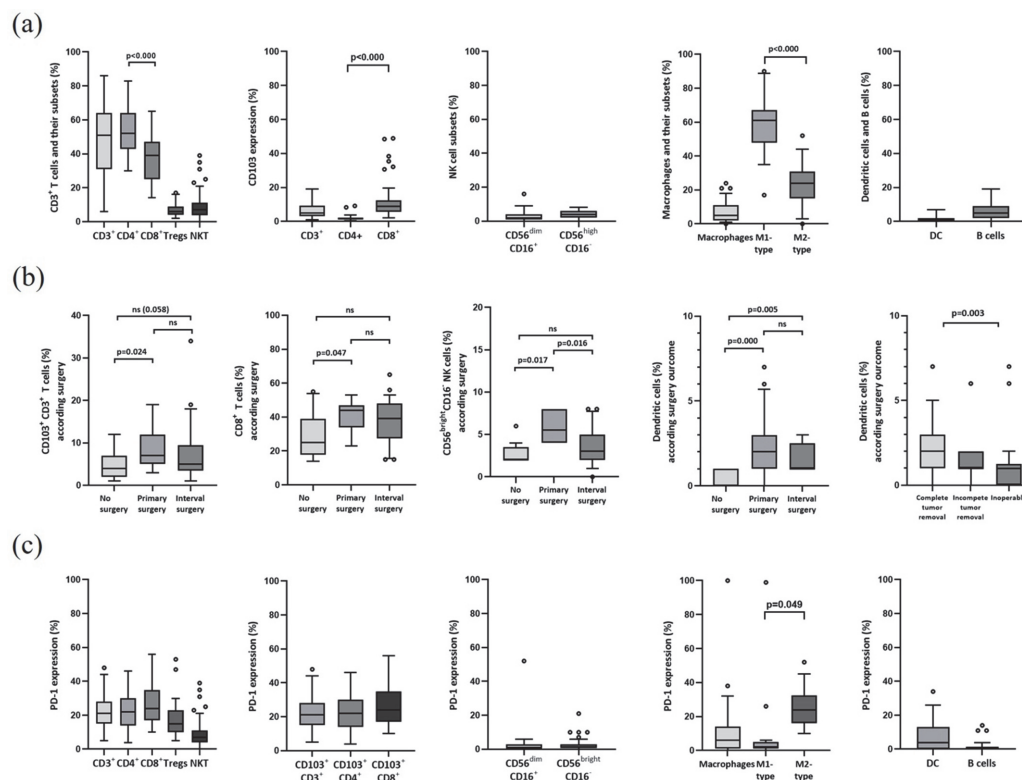
Abstract #310 Figure 1 Box plots showing median (range) and quartiles for (a) T cells, NK cells, macrophages, DCs, B cells, and their subsets in the ascites of HGSC patients, (b) the effect of surgery type and its outcome on ICs percentages (only variables with significant differences are presented) and (c) the expression of PD-1 for each immune population/subset.