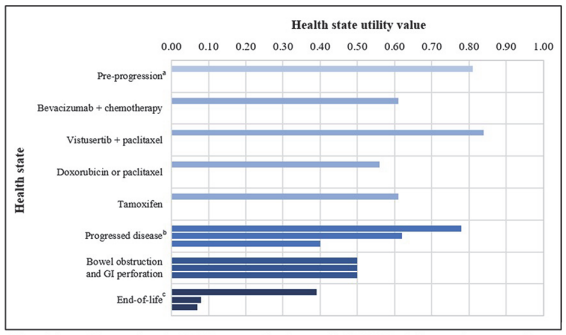
Gastrointestinal perforation and bowel obstruction were associated with HSUVs of 0.50.



Abbreviations: GI, gastrointestinal; PFS, progression-free survival; PROC, platinum-resistant or -refractory ovarian cancer
[a]The utility for PROC that had not progressed further on treatment (ie, was in PFS) was assumed equal to the Stage 2 disease utility in the economic model
[b]Only the lowest value, highest value, and mean are shown for progressed disease
[c]Includes utility values for patients in end-of-life hospice care with gastrointestinal complications

Abstract #805 Figure 1 Reported utility values in patients with PROC

Conclusion Reported HSUVs within health states were heterogeneous; however, they declined following disease progression. Gastrointestinal complications and end-stage disease were associated with the lowest HSUVs. Well-tolerated treatments that extend progression-free survival are crucial in PROC.
Disclosures MI and MP are employees and shareholders of Novocure. ZC is employed under contract by Novocure.

#815 VALIDATION OF LAPAROSCOPIC PREDICTIVE INDEX VALUE AS A PREDICTOR OF COMPLETE RESECTABILITY IN DANISH OVARIAN CANCER PATIENTS

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Introduction/Background Ovarian cancer is the most lethal gynecologic malignancy, often diagnosed in advanced stages with a 5-year survival rate of 40%. Accurate preoperative evaluation of complete tumor resection is critical for improving patient allocation to optimal treatment. The Predictive Index Value (PIV) is a scoring system of seven pre-defined areas in the abdomen, used to evaluate resectability in ovarian cancer patients. A PIV-score ≥8 identifies non-resectable patients better served with chemotherapy. The aim of this study was to validate the PIV as a predictor of complete resectability in a Danish cohort.
Methodology Study data was obtained from the Danish Gynecological Cancer Database of all patients who underwent laparoscopic evaluation of resectability in ovarian cancer at Rigshospitalet from 2015–2022.
Results A total of 217 patients were included, with 147 having PIV <8 (68%) and 70 having PIV ≥8 (32%). Ninety-two patients had subsequent primary debulking surgery (62.5%), 39 had interval surgery (26.5%) and 16 patients had no surgery due to other causes (11%). Complete cytoreduction was obtained in 81 of 92 patients (88%) with PIV <8, indicating a negative predictive value of 88%. When also considering patients with PIV ≥8 who were not unnecessarily explored, a total of 92% of patients were initially triaged correctly.
Conclusion In Danish ovarian cancer patients with PIV <8, complete resection was achieved in a high proportion of patients. This study suggests that the PIV can be used to better triage patients who may benefit from surgery. Further analysis of the data may provide additional insights into patient selection and improve outcomes for ovarian cancer patients
Disclosures The PIV is a reliable tool for evaluating resectability in patients with advanced ovarian cancer, particularly when preoperative imaging is inconclusive.

#816 METABOLOME ANALYSIS DETECTED THE LIPID MOLECULES WHICH CONTRIBUTE TO CELL PROLIFERATION VIA LIPID METABOLISM OF EPITHELIAL OVARIAN CANCER

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Introduction/Background Previously we reported that lipolysis-stimulated lipoprotein receptor (LSR) mediates the cell proliferation via lipid metabolism in epithelial ovarian cancer. Our newly anti-LSR antibody demonstrated stronger anti-tumor effect against LSR positive epithelial ovarian cancer cells in High-Fat Diet (HFD) fed mouse compared to Normal-Diet (ND) fed mouse. That suggests lipid molecules in HFD might contribute to cell proliferation via LSR. In this research, we performed metabolome analysis using HFD and ND fed mouse serum. We analyzed the metabolomic profile of lipid molecules.
Methodology We established HFD and ND fed mouse and obtained each serum to perform metabolome analysis. We compared the metabolomic profile of HFD and ND fed mouse serum and identified the lipid metabolites which might associate with the cell proliferation. We evaluated the effect of lipid molecules on promoting cell proliferation and signaling pathway mediated via LSR.
Results Metabolome analysis detected 210 metabolites, and PCA showed obviously different metabolic profiles of HFD mouse serum compared to ND mouse serum. PLS-DA also revealed cholesterol, oleic acid and arachidonic acid as lipid molecules with high VIP score. We revealed that these molecules significantly promoted the cell proliferation by cell proliferation assay ($p<0.05$) and these molecules activated the MAPK signaling pathway.
Conclusion Metabolome analysis identified the lipid molecules which are associated to the cell proliferation of LSR positive epithelial ovarian cancer.
Disclosures I have no potential conflict of interest to report.

#817 OVEREXPRESSION OF LYSIL OXIDASE PROPEPTIDE (LOX-PP) RESULTS IN DECREASED PROLIFERATION AND IMPROVED CHEMOSENSITIVITY OF OVARIAN CANCER CELLS

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Introduction/Background Lysyl oxidase (LOX) is an enzyme engaged in the cross-linking of the extracellular matrix proteins. LOX proenzyme is secreted to extracellular space, then proteolitically cleaved resulting in the LOX enzyme and LOX propeptide (LOX-PP). Various studies showed contradictory results, indicating that LOX may act either as an oncogene or a tumor suppressor. More detailed analyses suggest that LOX enzyme may be responsible for oncogenic effects, while LOX-PP may act as tumor suppressor. Our aim was to investigate LOX-PP role in ovarian cancer cells.
Methodology Ovarian cancer cell lines (SKOV3, A2780, ES2) with stable LOX-PP overexpression were established using lentiviral transfer system. Cell lines were validated by semi-quantitive RT-PCR and immunoblotting. Cells proliferation were assessed by MTS assay. In vitro cytotoxicity assay was performed with two major drugs used in ovarian cancer treatment: cisplatin (0,1–20μM range) and paclitaxel (1,56 nM - 30μM range).
Results RT-PCR showed that the LOX-PP-containing cells had higher LOX-PP expression compared to control cells with an empty vector. Immunodetection was successful both in cells lysates and in culture medium suggesting that the protein is efficiently secreted. Cell proliferation assay showed lower proliferation rate of A2780_LOX-PP as compared to controls. No differences in proliferation rate was observed among cell lines SKOV3 and ES2. In vitro cytotoxicity assay demonstrated that LOX-PP overexpressing SKOV3 and A2780 cells were more sensitive to both cisplatin and paclitaxel. The A2780_ LOX-PP cells showed a 8,5% and 16% higher sensitivity to paclitaxel and cisplatin, respectively, while SKOV3¬_ LOX-PP cells showed 15% and 24% higher sensitivity to those drugs.
Conclusion LOX-PP seems to exert an anti-cancer function in ovarian cancer, either by decreasing cells proliferation rate and/or by sensitizing of cells to chemotherapeutic agents.
Disclosures The authors have no conflicts of interest to declare.

#822 EXPANDING USE OF HIPEC AT TIME OF INTERVAL DEBULKING SURGERY. A PROSPECTIVE ANALYSIS ON PERIOPERATIVE AND ONCOLOGIC OUTCOMES

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Introduction/Background In advanced ovarian cancer, randomized data showed that hyperthermic intraperitoneal chemotherapy(HIPEC) after interval debulking surgery(IDS) determined improvement in both progression free(PFS) and overall survival (OS). However, data include only patients with FIGO stage III disease receiving ≤ IV cycles of neoadjuvant chemotherapy (NACT). We aimed to assess perioperative outcomes and PFS of FIGO stage IV and/or patients receiving up to VI cycles of NACT undergoing IDS+HIPEC.
Methodology This study included prospectively collected cases from 01/01/2019 to 31/07/22.Patients were suitable for HIPEC if: age>18 but≤75 years, Body Mass Index(BMI)≤ 35 kg/m2, ASA score≤ 2,FIGO stage III/IV epithelial disease treated with up to 6 cycles of NACT, residual disease at IDS<2.5 mm. Participation to clinical trials and uncontrolled medical conditions were exclusion criteria.
Results 205 patients were included. 76 (37.1%) had FIGO stage IV disease and 44 (21.5%) received >4 cycles of NACT. No significant difference was found in patients' and disease' characteristics between FIGO Stage III and FIGO Stage IV cases, while rate of stable disease after NACT (p=0.004), mean surgical complexity score (SCS) at IDS(p=0.001) and bowel resection rate(p=0.046) were higher in patients undergoing delayed IDS. No difference in both perioperative outcomes and complication rate were identified among the populations, however a trend towards a higher rate of severe postoperative complications was shown in case of delayed IDS (p=0.07) and FIGO stage III disease(p=0.052), the latter remaining the only independent risk factor for severe postoperative complications at multivariate analysis (p=0.02). No difference in PFS was identified neither between FIGO stage III and FIGO Stage IV patients(p=0.44), nor between patients receiving 3–4 cycles vs >4 cycles of NACT(p=0.85).
Conclusion In relation to the absence of additional complications and positive survival outcomes, we offer a background to consider the use of HIPEC in selected FIGO stage IV patients and women receiving >4 cycles of NACT.
Disclosures none

#823 COMPREHENSIVE CHARACTERIZATION OF NAÏVE TREATMENT SAMPLES OF HIGH GRADE SEROUS OVARIAN CANCER ADDRESSED TO NEOADJUVANT CHEMOTHERAPY: A HYPOTHESIS-GENERATING STUDY ON BIOMARKERS OF RESPONSE TO PLATINUM-BASED CHEMOTHERAPY

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Introduction/Background Neoadjuvant chemotherapy (NACT) followed by interval debulking surgery (IDS), has been shown to be not oncologically inferior to primary debulking surgery for patients affected by advanced epithelial ovarian cancer (EOC). However, 20% of patients don't respond and therapeutic options are limited. The genomic landscape could, at least partially, explain this phenomenon. By correlating mutational profiles with clinical outcomes, we aimed at identifying genomic features of resistance to platinum-based chemotherapy.
Methodology FPG500 (IRB 3837) is a comprehensive cancer genome profiling programme at Fondazione Policlinico Agostino Gemelli IRCCS. An evaluation of 523 genes (TSO500HT, Illumina) is provided. All EOC patients addressed to NACT and enrolled in FPG500 were included. Response to NACT was scored following the chemotherapy response score (CRS): no/minimal tumor response (CRS1), partial response (CRS2), and total response (CRS3). Age, residual tumour at IDS, and stage were also considered.
Results At data cut-off of the 9th of January 2023, 96 EOC patients were included in this preliminary analysis. 85 patients had at least one genomic alteration (78%). The overall mean of alterations was 1.75 (SD=1.37). CCNE1 amplifications were associated with older age (17% age < 64 years vs