for precision prevention. This study aims to estimate cost-effectiveness and population impact of parallel panel-germline and somatic *BRCA*-testing all OC-patients incorporating PARP-i therapy, compared with family-history (FH)/clinical-criteria based germline *BRCA*-testing in UK and USA health-systems.

**Methodology** Microsimulation cost-effectiveness modelling using data from 2,391 unselected population-based OC-patients recruited to UK (n=1,483) and USA (n=908) research studies. The lifetime costs-&-effects of *BRCA1/BRCA2/RAD51C/RAD51D/BRIP1* germline-testing and somatic *BRCA1/BRCA2*-testing in all OC-cases (*BRCA*-mutated patients undergo PARP-i therapy) (Strategy-A), was compared with FH/clinical-criteria based germline *BRCA*-testing (Strategy-B). Unaffected relatives with germline *BRCA1/BRCA2/RAD51C/RAD51D/BRIP1* PVs identified through cascade-testing undergo relevant OC and breast-cancer (BC) risk-reduction interventions (risk-reducing salpingo-oophorectomy, MRI/mammography, chemoprevention or risk-reducing-mastectomy). We also evaluated cost-effectiveness of germline-panel testing alone (without PARP-i therapy). A lifetime horizon with payer/societal perspectives, along-with probabilistic and one-way sensitivity-analyses are presented. Incremental-cost-effectiveness-ratio (ICER): incremental-cost per quality-adjusted-life-year (QALY) gained, was compared to £30,000/QALY(UK) and $100,000/QALY(USA) thresholds. OC-incidence, BC-incidence and prevented deaths were estimated.

**Results** Compared with clinical-criteria/FH-based *BRCA*-testing, *BRCA1/BRCA2/RAD51C/RAD51D/BRIP1* germline-testing and *BRCA1/BRCA2* somatic-testing all OC patients incorporating PARP-i therapy demonstrates UK-ICERs (payer-perspective=£42,433/QALY; societal-perspective=£41,622/QALY) and USA-ICERs (payer-perspective=$145,071/QALY; societal-perspective=$144,564/QALY) are higher than UK/NICE and USA cost-effectiveness thresholds. Strategy-A becomes cost-effective if PARP-i costs fall by 32% (UK) or 33% (USA), or overall-survival (OS) with PARP-i reaches HR=0.28. Unselected panel-germline testing (without PARP-i therapy) is extremely cost-effective from payer-perspective (UK-ICER=£11,291/QALY; USA-ICER=$68,808/QALY); and societal-perspectives (UK-ICER=£6,923/QALY; USA-ICER=$65,786/QALY). One year's unselected testing could prevent 199 BC/OC-cases and 236 deaths in UK-women; and 523 BC/OC-cases and 581 deaths in USA-women.

**Conclusion** Unselected panel-germline and somatic *BRCA*-testing is currently not cost-effective but becomes cost-effective if PARP-i costs fall by 32%-33% or OS reaches HR=0.28. Regarding germline-testing, unselected panel-germline testing is highly cost-effective and should replace *BRCA*-testing alone.

## 2022-RA-1311-ESGO IMPACT OF OBESITY ON THE MANAGEMENT OF PATIENTS WITH OVARIAN CANCER: ANALYSIS OF DATA FROM THE FRANCOGYN GROUP

[1]Johanna Ilic, [2]Yohann Dabi, [2]Cyril Touboul, [2]Emile Darai. *[1]Department of Obstetrics Gynecology and Reproductive Medicine, Tenon Assistance Publique des Hôpitaux de Paris (AP-HP), PARIS, France; [2]Department of Obstetrics and Gynecology, Sorbonne University, Tenon Assistance Publique des Hôpitaux de Paris (AP-HP), PARIS, France*

10.1136/ijgc-2022-ESGO.686

**Introduction/Background** While obesity is associated with a higher risk of mortality in several cancers, this relationship is equivocal in ovarian cancer. Some studies show a significant impact of this comorbidity on both incidence and survival. However, other studies do not show a significant difference in survival and recurrence-free survival. The primary objective of our study is to investigate the impact of obesity in the management of patients with FIGO III or IV high-grade serous epithelial ovarian cancer. Secondary objectives include evaluation of postoperative complications, number of patients treated according to the referral, and analysis of survival data

**Methodology** Retrospective multicenter cohort study of epithelial ovarian cancer from the FRANCOGYN database. The inclusion criterion is surgical management of high-grade invasive epithelial ovarian cancer, FIGO stage III or IV, regardless of treatment strategy. All patient characteristics will be analyzed as risk factors for the development of postoperative complications and adjuvant treatments. Patients were stratified by body mass index (BMI) according to World Health Organization definitions into 3 groups (<25 kg/m2, between 25 and 29.9 kg/m2, and >30 kg/m2). Surgical procedures and intraoperative complications were studied. Comparison of group characteristics will be performed using Chi-2 Test and ANOVA, and survival analysis will be performed using Kaplan-Meier method and Log-Rank test.

**Results** A total of 2288 patients were included in the study. Regarding disease-free survival, there was no significant difference between the 3 groups(p=0.3). However, there was a lower overall survival in the obese group compared to overweight patients with a normal BMI(p=0.02). There was no significant difference regarding the operative time nor regarding the per- and postoperative complications.

**Conclusion** There is an impact of obesity on overall survival in patients with epithelial ovarian cancer, and the initial treatment strategy remains unchanged in these patients with a high BMI.

## 2022-RA-1312-ESGO FEASIBILITY OF CARBOPLATIN MONOTHERAPY VERSUS CARBOPLATIN-PACLITAXEL IN FRAIL ELDERLY EPITHELIAL OVARIAN CANCER PATIENTS

[1]Tamara Yu, [2]Ronas Taner Kesmez, [1]MJ Flynn, [1]JA Ledermann, [1]M Lockley, [1]N MacDonald, [1]M McCormack, [1]S Nicum, [2]SM Crusz, [1,2]RE Miller, [1]Eve Merry. *[1]University College Hospital, University College London Hospital NHS Foundation Trust, 235 Euston Road, NW1 2BU, London, UK; [2]St Bartholomew's Hospital, Barts Health NHS Trust, West Smithfield, EC1A 7BE, London, UK*

10.1136/ijgc-2022-ESGO.687

**Introduction/Background** Frail elderly patients with ovarian cancer (OC) are often treated with 3-weekly carboplatin (3wC) rather than carboplatin-paclitaxel (CP). Elderly Women with OC (EWOC)-1 trial demonstrated that 3-weekly carboplatin-paclitaxel (3wCP) achieved better survival outcomes and was more feasible (defined as the ability to complete 6 chemotherapy cycles without disease progression, death, or premature discontinuation due to toxicity) than 3wC in patients ≥70 years old (≥70 yo) with FIGO stage III/IV OC. We compared the feasibility of treatment with 3wC or 3wCP in frail elderly OC patients.

**Methodology** Data from two cancer centres was retrospectively analysed for newly-diagnosed stage III/IV OC patients ≥70 yo treated with 3wC or 3wCP. Frailty was scored using the Charlson-Comorbidity Index (CCI) and ECOG performance status. Toxicity was graded using CTCAE v5.0.