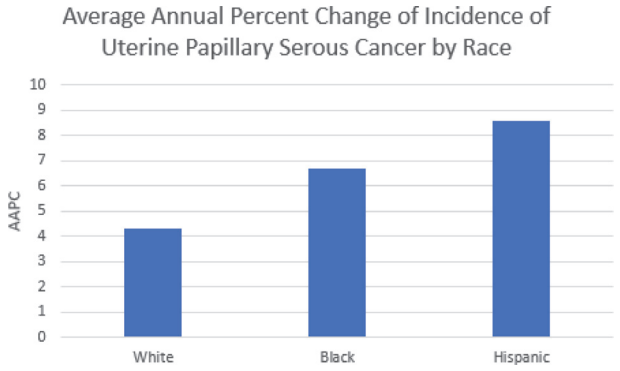


**Abstract 41 Figure 2**

hysterectomy prevalence based on Behavioral Risk Factor Surveillance System data. SEER*Stat and Joinpoint regression were used to calculate incidence (per 100,000) and average annual percent change (AAPC).

**Results** Of 720,984 patients (78% White, 10% Black, 8% Hispanic, 3% Asian/Pacific-Islander), the proportion of endometrioid, uterine serous carcinoma (USC), clear-cell, and sarcoma were 73.7%, 5.9%, 1.3%, and 2.0% respectively. In 2016, incidence of endometrioid was approximately 10-fold higher than USC (30.6 vs. 3.6). Of USC patients, the age group with the highest incidence was 75–79 year olds (24.7). Of note, Blacks had the highest incidence of USC at 9.1 compared to 3.0 in Whites.

Over the 15 year study period, there was a 4.6% increase in USC per year compared to no increase in endometrioid cancer ($p<0.05$).

Of USC patients, the highest increase was in ages 70–74 (AAPC 5.7%). Blacks, Hispanics, and Whites had an annual increase of +6.7%, +8.6%, and +4.3%, respectively. The intersectionality of age 70–74 and Black with USC had an AAPC of +7.3%. A predictive model shows USC incidence would surpass endometrioid in Blacks within 15 years.

**Conclusion** Compared to Whites, Blacks have a 3-fold higher overall incidence of uterine serous cancer and is increasing at 6.7% per year. For Black women, this aggressive histology is projected to surpass endometrioid cancer in 15 years.

## IGCS20_1450

### 42 CLINICOPATHOLOGIC PREDICTORS OF EARLY RELAPSE IN ADVANCED EPITHELIAL OVARIAN CANCER; DEVELOPMENT OF PREDICTION MODELS USING NATIONWIDE DATA

[1]S Said*, [2]R Bretveld, [3]H Koffijberg, [4]G Sonke, [5]RFPM Kruitwagen, [1]JA de Hullu, [1]AM van Altena, [2]S Siesling, [2]MA van der Aa. *[1]Department of Obstetrics and Gynecology, Radboud Institute for Health Sciences, Radboud university medical center, Netherlands; [2]Department of Research and Development, Netherlands Comprehensive Cancer Organization (IKNL), Netherlands; [3]Department of Health Technology and Services Research, Technical Medical Center, University of Twente, Netherlands; [4]Department of Medical Oncology, The Netherlands Cancer Institute, Netherlands; [5]Department of Obstetrics and Gynecology, Maastricht University Medical Centre, Netherlands*

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**Objective** To identify clinicopathologic factors predictive of early relapse (i.e. a platinum-free interval (PFI) of ≤6 months) in advanced epithelial ovarian cancer (EOC) in first-line treatment, and to develop and internally validate risk prediction models for early relapse.

**Methods** All consecutive patients diagnosed with advanced EOC between 01-01-2008 and 31-12-2015 were identified from the Netherlands Cancer Registry. Patients who underwent debulking and platinum-based chemotherapy as initial EOC treatment were selected. Two prediction models, a pretreatment and postoperative model, were developed. Candidate predictors of early relapse were fitted into multivariable logistic regression models. Model selection was performed using backward selection (p-value<0.20). Model performance was assessed on calibration and discrimination. Internal validation was performed through bootstrapping to correct for model optimism.

**Results** A total of 4,557 advanced EOC patients were identified, including 3,171 late or non-relapsers and 1,302 early relapsers. Early relapsers were more likely to have FIGO stage IV, mucinous or clear cell type EOC, ascites, >1 cm residual disease, and to have undergone interval debulking. The final pretreatment model demonstrated subpar model performance (AUC=0.65 [95%-CI 0.64–0.67]). The final postoperative model based on FIGO stage, histologic subtype, presence of ascites, type of debulking, and residual disease after debulking, demonstrated good model performance (AUC=0.72 [95%-CI 0.71–0.74]). Bootstrap validation revealed minimal optimism of the final postoperative model.

**Conclusion** A good (postoperative) discriminative model has been developed and presented online that predicts the risk of early relapse in advanced EOC patients. Although external validation is still required, this prediction model can support treatment decision-making in daily clinical practice.

# Poster

## IGCS20_1001

### 43 HYPERPROGRESSION OF CHORIOCARCINOMA AFTER TREATMENT WITH PEMBROLIZUMAB

[1]N Yeganeh Kazemi*, [2]C Langstraat, [3]J Weroha. *[1]Medical Scientist Training Program, Mayo Clinic Alix School of Medicine, USA; [2]Department of Obstetrics and Gynecology, USA; [3]Department of Medical Oncology, USA*

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**Objectives** We describe the case of a woman with non-gestational, extra-gonadal, choriocarcinoma who developed hyperprogression on pembrolizumab and review the literature regarding this phenomenon in gynecologic cancers.

**Methods** The medical record was reviewed with close attention to β-hCG trends associated with multiple lines of therapy. A literature review was done to summarize the potential mechanisms behind hyperprogression in response to immune checkpoint blockade.

**Results** A 49-year old, G2P2 woman with no history of molar pregnancy presented with high-grade fevers, persistent cough and right upper quadrant pain. β-hCG was elevated at 79,000 IU/L and a liver biopsy revealed choriocarcinoma but imaging did not identify a primary tumor. She was initially managed as gestational trophoblastic tumor (GTD) and achieved a brief complete radiographic and biomarker response with EMA-CO chemotherapy. Subsequently, she received TPE and later 5FU. Eventually, molecular analysis was consistent with non-