

Courtney T. Harding
L2
LSU Health Sciences Center, New Orleans, LA

Dr. Tara Castellano
LSUHSC, Department of Medicine, Section of Obstetrics and Gynecology Oncology

“Association of Chemotherapy Dose Reductions, Treatment Delays, and Treatment Discontinuation With Progression-Free and Overall Survival Among Patients With Epithelial Ovarian and Advanced Endometrial Adenocarcinoma: A Retrospective Cohort Study”

Background: ¹First-line platinum-taxane chemotherapy is the standard of care for epithelial ovarian cancer (EOC) and advanced recurrent endometrial carcinoma (AREC); however, treatment-related toxicities frequently necessitate chemotherapy dose reductions, treatment delays, or premature treatment discontinuation. The impact of these modifications on progression-free survival (PFS) and overall survival (OS), particularly among racially diverse and medically complex populations, remains incompletely understood.

Objectives: To evaluate the association between chemotherapy dose reductions, treatment delays, and treatment discontinuation during first-line platinum-taxane chemotherapy and PFS and OS among patients with EOC and AREC, and to determine whether age, race, body mass index, and comorbidity are associated with an increased likelihood of chemotherapy modification.

Methods: This retrospective cohort study will identify eligible adults with EOC or AREC who initiated first-line platinum-taxane chemotherapy between 2018 and 2023 using the LSU Gynecologic Oncology Registry (Protocol #1830) and manual Epic chart review. Data will be abstracted into REDCap. Chemotherapy modifications are defined as dose reductions $\geq 15\%$, treatment delays ≥ 7 days, and failure to complete planned chemotherapy. Approximately 1,000 charts will be screened to identify 500 eligible patients. A priori Schoenfeld power analysis demonstrated that this sample size provides 80% power ($\alpha=0.05$) to detect clinically meaningful differences in PFS and OS.

Results: Data collection is ongoing. To date, 70 patient charts have been reviewed, with 15 meeting eligibility criteria and entered into the study database.

Conclusion: We hypothesize that chemotherapy modifications will be associated with worse PFS and OS and will occur more frequently among racially diverse and medically complex patients. Findings may help identify patients at greatest risk for treatment modification and inform strategies to improve equitable chemotherapy delivery and survival outcomes.