Poster 20: Correlation of survival to length of neoadjuvant chemotherapy in high-grade epithelial ovarian cancer

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Topic
Ovarian

Large randomized controlled trials support the use of neoadjuvant chemotherapy (NACT) followed by interval debulking surgery (IDS) in the primary treatment of high-grade epithelial ovarian cancer (EOC), with study design using 3-4 cycles of NACT prior to IDS. Real world experience shows variability in the number of NACT cycles. The objective of this study was to assess the impact of the number of NACT cycles received on progression free (PFS) and overall survival (OS).

Methods
Retrospective cohort study of stage III-IV high-grade EOC patients undergoing NACT followed by IDS. Demographics and clinicopathologic data were collected after IRB review, including age at diagnosis, stage, histology, and germline mutation/HRD status. NACT regimens and number of cycles, adjuvant chemo regimens and number of cycles, time to adjuvant therapy and any maintenance therapy were collected. Primary endpoint was PFS. Survival analyses were performed using Kruskal-Wallis and Kaplan-Meier comparisons with the log rank test by dividing NACT cycle volume into 4 cohorts: 3-4, 5-7, 8-10, and > 10 cycles. Cox proportional hazards model with ungrouped cycle volume as a covariate was also performed (SAS).

Results
114 patients from 2007-2024 were reviewed, 89 patients met inclusion criteria 60%of patients had stage IIIC disease. Median number of NACT cycles was 4 (range 3-19). 44 patients (49.4%) received > 5 cycles. Median number of adjuvant cycles received was 4 (range 2-14). The majority received Carbo/Taxol +/- Bev q 3w (68.4%). 93.2% had optimal resection, including 60.6% R0 resection. Median overall PFS and OS were 19 mo (7-194 mo) and 34 mo (9-194 mo), respectively. In the 3 analyses models, there was no significant difference in median PFS or OS between NACT cohorts (Figure 1) or by ungrouped cycle volume (PFS: HR 0.983, p=0.793; OS: HR 1.037, p=0.806).

Conclusions
Number of NACT cycle before IDS did not impact PFS or OS. Over 90% had optimal IDS. Median overall survival seen in this cohort was similar to historic controls.