**Methodology**

Biomarkers analyzed in tumour tissue or blood were somatic and germline mutations by whole-exome sequencing and whole-transcriptomic profiling by RNAseq. Associations were assessed using the Cox proportional hazards model. For continuous biomarkers, hazard ratios (HRs) and 95% CIs were reported using a median cutoff.

**Results**

Within the avelumab alone arm, higher expression of CD8+ T-cell signature correlated with longer PFS (HR, 0.61 [95% CI 0.43-0.87]), and higher tumour mutational burden (>0.6 mut/Mb) and presence of the high-affinity FGFR2A allele correlated with longer OS (HR [95% CI], 0.63 [0.42-0.96] and 0.53 [0.34-0.83], respectively), while presence of APOBEC and homologous recombination deficiency (HRD) mutational signatures were associated with shorter OS (HR [95% CI], 2.17 [1.22-3.89] and 1.68 [1.07-2.62], respectively).

In patients with PFS of <6 months, a lower score for several signatures, including P53 and angiogenesis, predicted better outcomes within the avelumab alone arm (HR [95% CI], 0.37 [0.23-0.60] and 0.52 [0.33-0.82], respectively). BRCA1/2 mutations (germline and/or somatic) were not associated with improved outcomes. Within the avelumab alone arm, higher expression of TGF-β signaling, estrogen receptor expression signature, and epithelial-to-mesenchymal transition gene signatures correlated with shorter OS (HR [95% CI], 1.64 [1.10-2.47], 1.63 [1.09-2.45], and 1.57 [1.05-2.35], respectively). Higher expression of signatures for mesenchymal cells, cancer-associated fibroblasts, and fat cells were marginally associated with shorter OS (HR [95% CI], 1.47 [0.97-2.23], 1.45 [0.95-2.21], and 1.50 [0.99-2.27], respectively).

Multivariable analyses are ongoing.

**Conclusion**

Although JAVELIN Ovarian 200 did not meet its primary endpoints, these analyses indicate potential subgroup(s) of patients who could have improved outcomes with immunotherapy alone and provide insights into the biology of PRROCs that may inform future trials.

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236

**WHAT CAN WE LEARN FROM THE 10 MM LYMPH NODE SIZE CUT-OFF ON THE CT IN ADVANCED OVARIAN CANCER AT THE TIME OF INTERVAL DEBULKING SURGERY?**

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**Introduction/Background**

The benefit of a systematic lymphadenectomy in advanced ovarian cancer (OC) is still debated. In patients undergoing neo-adjuvant chemotherapy (NACT) followed by interval debulking surgery (IDS) in ovarian cancer (OC), the objective of this study was to evaluate the predictive value of the pre-NACT and post-NACT CT in predicting definitive histological lymph node involvement. The prognostic value of a positive node on the CT was also assessed.

**Methodology**

A retrospective, unicentric cohort study was performed including all patients with ovarian cancer who received pre-NACT chemotherapy and underwent interval debulking surgery with systematic lymphadenectomy. All patients had advanced stage III/IV OC at time of pre-NACT CT. A total of 118 patients met the inclusion criteria (i.e., pre-NACT CT performed including all patients with ovarian cancer who received pre-NACT chemotherapy and underwent interval debulking surgery with systematic lymphadenectomy). The mean age of patients was 55 ± 11 years, with a median follow-up of 36 months. The median grade of OC was 3 and most patients had FIGO stage IV disease (90%). The median tumor diameter measured on pre-NACT CT was 12 cm (range 5-25 cm).

**Results**

Using a 10 mm lymph node size cut-off on the CT, the sensitivity, specificity, positive likelihood ratio, and negative likelihood ratio of pre-NACT CT were compared. The sensitivity, specificity, positive likelihood ratio, and negative likelihood ratio of pre-NACT CT were 0.31, 0.85, 2.53, and 0.65, respectively.

**Conclusion**

The lymph node size cut-off of 10 mm on pre-NACT CT was significantly associated with histological lymph node involvement on post-NACT CT and overall survival. Further studies are needed to confirm these findings.