

**Poster 54:** Venous thromboembolism in recurrent ovarian cancer: associations with treatment burden, nutritional decline, and disease trajectory

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Topic  
Ovarian

## Objectives

The purpose of this study is to evaluate associations between venous thromboembolism (VTE), nutritional status, and clinical outcomes in recurrent ovarian cancer.

## Methods

We performed a retrospective cohort study of patients with recurrent ovarian cancer from 2011–2023. Clinical, treatment, and laboratory variables were collected, and Khorana scores and prognostic nutritional indices (PNI) were calculated at recurrence and at VTE. Temporal relationships between recurrence, VTE, and death were assessed. Comparisons between VTE and non-VTE cohorts were made using two-sample t-tests, chi-square or Fisher's exact tests as applicable. Overall survival was compared using the Kaplan–Meier method.

## Results

Among 158 patients with recurrent ovarian cancer, 39 (24.7%) developed VTE with a median onset of 15.6 months after first disease recurrence (IQR 6.1–30.3). Median time from first line treatment completion to recurrence was 8.4 months (IQR 4.1–13.5), and median follow-up after recurrence was 22.5 months (IQR 12.3–34.6). Of the cohort, 105 patients (66%) died of disease during follow-up. Overall survival after recurrence did not differ between patients with and without VTE (log-rank  $p=0.23$ ). Median time from VTE diagnosis to death was 3.1 months (IQR 1.5–14.1), with 56% of VTEs occurring within 6 months of death. Baseline characteristics at recurrence, including age, body mass index, albumin, PNI, and platinum resistance, did not differ significantly between the VTE and non-VTE cohorts. Mean Khorana score was higher in the VTE group (1.6 vs 1.3,  $p=0.04$ ), as was mean number of chemotherapy lines during follow-up (5.1 vs 4.1,  $p=0.03$ ). At the time of VTE, 34/39 patients (87%) were receiving systemic therapy, with 20/39 (51%) on at least their fourth line of therapy (range 2–14). Mean PNI declined from 41.2 at recurrence to 34.6 at VTE ( $p<0.05$ ) and albumin from 4.1 to 3.5 ( $p<0.05$ ), with 31/39 patients (79%) experiencing weight loss (median 5 kg, IQR 0–10).

## Conclusions

Approximately one in five patients with ovarian cancer develop VTE after first disease recurrence, with the majority of VTEs occurring within 6 months of death. VTE is more common in heavily treated patients and is accompanied by substantial nutritional decline. Future studies will evaluate more refined nutritional indices to clarify the predictive effect of nutrition on VTE occurrence.

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