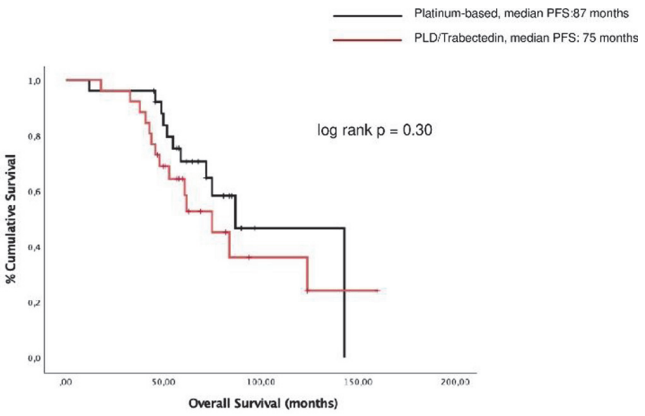
Results High mRNA and protein levels of PDE1A were observed in EOCs compared to borderline, benign and normal nonadjacent ovarian epithelial tissues ($p < 0.001$). Also, high expression of PDE1A was significantly associated with serous ($p = 0.023$), high grade ($p = 0.012$), advanced stage FIGO stage ($p < 0.001$), and resistance to platinum based chemotherapy ($p < 0.001$) EOCs. Importantly, high expression level of PDE1A was indicated as a prognosis predictive biomarker by Cox mulrivariate analysis. Specifically, we observed that PDE1Apromoted G2/M transition by regulating cyclin B1 trascription.

Conclusion Taken together, our findings suggested that PDEA1A is a promosing biomarker for prediction of progosnosis and resistance to platinum based chemotherapy in EOC patients.



Abstract 2022-RA-634-ESGO Figure 2 Overall survival

2022-RA-634-ESGO TRABECTEDIN PLUS PEGYLATED LIPOSOMALDOXORUBICIN IN PATIENTS WHO EXPERIENCED DISEASE PROGRESSION AFTER PARPI MAINTENANCE: A REAL LIFE CASE-CONTROL STUDY

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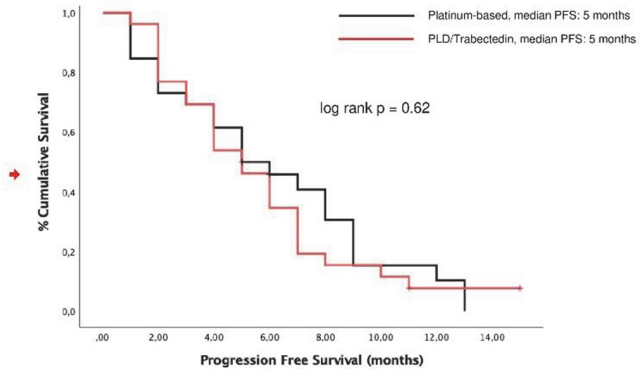
Introduction/Background PARP inhibitors resistance is a problematic step in epithelial ovarian cancer (EOC) management and sequencing strategies should be carried out to overcome it. In this context, to lack of data, our study evaluated the role of a non-platinum doublet pegylated liposomal doxorubicin(PLD)/trabectedin in ovarian cancer platinum-sensitive patients who experienced disease progression under PARP inhibitors maintenance.

Methodology This is a case-control study including patients with recurrent EOC treated between 2016–2021 who progressed under PARP inhibitors maintenance. Data of patients, treated with PLD/trabectedin were matched 1:1 with a series of patients who received platinum-based treatment. The study outcomes were: overall clinical benefit (including complete, partial and stable response), progression-free survival(PFS) and overall survival(OS). The safety of both treatments was also evaluated.



Abstract 2022-RA-634-ESGO Figure 1 Progression free survival

Results 26 patients in both groups were analyzed. Clinical benefit was achieved in 15 (57%) patients in study group and 17 (65%) in control one (p = 0.38). Patients receiving PLD/trabectedin had 5 months of PFS, compared with 5 months of patients treated with platinum-based treatment (p = 0.62). OS of the entire population was 84 months (95% CI = 68–99), with no significant difference between the experimental and control group (75 vs. 87 months, p = 0.30). No clinically relevant differences were found in terms of safety.

Conclusion PLD/trabectedin might be as effective as a platinum-based treatment in patients experiencing disease progression while on PARP inhibitors maintenance, with acceptable toxicity profile. Therefore, it could be a good therapeutic option in this setting, sparing platinum compounds for subsequent relapse.

2022-RA-636-ESGO DOES HEART-RATE VARIABILITY PREDICT PROGNOSIS IN WOMEN WITH OVARIAN CANCER?

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Introduction/Background The vagal nerve may have protective roles cancer. Its activity is indexed by heart-rate variability (HRV). This study aimed to examine the prognostic role of HRV in women with ovarian cancer.

Methodology This was a retrospective comparative cross-sectional study. Information obtained from medical records of patients with histologically confirmed ovarian cancer treated at a single institute, between the years 2014–2021. Background variables that were obtained included age, stage, white blood cells count (WBC) date of death or date of last contact, which ever came first. HRV, the index of vagal nerve activity, was derived from patients' 10 sec ECG near diagnosis.

Results 104 women were included in our final cohort. Mean age was 64.7. 11.4%, 4.9%, 54.5%, 29.3% of the women were stage I,II, III and IV respectively. After controlling for known prognostic factors log-HRV tended to significantly predict a lower risk of death (R.R = 0.20, 95% CI: 0.04 – 1.06) as well as the ratio of HRV/WBC