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PROGRESSION FREE SURVIVAL AND OVERALL SURVIVAL AFTER BRCA1/2-ASSOCIATED EPITHELIAL OVARIAN CANCER: A MATCHED COHORT STUDY.

E-Poster Viewing
ORAL FEATURED POSTERS

Lecture Title:

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Objectives: BRCA1/2-associated epithelial ovarian cancer (EOC) has been associated with better progression-free survival (PFS) and overall survival (OS) than sporadic EOC. Higher sensitivity to chemotherapy may be an explanation, but data are scarce.

Methods: We matched 512 BRCA1/2-associated EOC patients selected from the national Hereditary Breast and Ovarian Cancer Netherlands (HEBON) database to 512 sporadic EOC patients from the National Cancer Registry on year of birth, year of EOC diagnosis (range 1989-2015), and FIGO stage (<=IIA/>=IIB). All patients were treated with chemotherapy. We used Cox models with the sporadic group as the reference to obtain hazard ratios (HR) with corresponding 95% confidence intervals (CI). Since BRCA1/2 mutation carriers who received a DNA test after EOC diagnosis survived at least until this DNA test, which may result in survival bias, we also performed prospective analyses including only BRCA1/2-associated EOC patients with a DNA test result before EOC diagnosis (n=82) and their matched sporadic controls.

Results: The mean follow-up was 4.4 years (range 0.1-30.1). For the first 5 years after EOC diagnosis, the HRs for PFS (0.85, 95% CI 0.73-0.98) and OS (0.58, 95% CI 0.49-0.69) were in favor of the BRCA1/2 EOC patients. In the prospective analyses, survival benefit withstand for PFS (HR 0.66, 95% CI 0.45-0.98), and – to a lesser extent – for OS (HR 0.69, 95% CI 0.44-1.1).

Conclusions: For EOC patients treated with chemotherapy, we confirmed survival benefit for BRCA1/2 mutation carriers. This may indicate higher sensitivity to chemotherapy, both in first line treatment and in the recurrent setting.