**PREREADING FOR A PARADIGM SHIFT IN THE TREATMENT OF OVARIAN CANCER: EFFECT OF ONLINE CME ON ONCOLOGISTS’ KNOWLEDGE AND COMPETENCE**

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**INTRODUCTION**

Ovarian cancer is the leading cause of death from cancers of the female reproductive system. Despite a high initial response rate to conventional chemotherapy approaches, most ovarian cancers recur and develop increasing resistance to treatment, underscoring the need for more effective treatment strategies. As the biology and genetics of ovarian cancer are evolving, Oncologists self-report increased interest in case-based roundtables for detecting ONCOLOGIST repair mutations that can be targeted by novel poly(ADP-ribose) synthetase-1 poly(ADP-ribose) polymerase (PARP) inhibitors. Since molecular testing for all patients with ovarian cancer is a new element of the diagnostic and treatment paradigm, oncologists who order molecular testing for ovarian cancer may be unfamiliar with many of the nuances associated with its use and interpretation.

Our study was to determine the effect of an online continuing medical education (CME) on the knowledge and competence of oncologists regarding the use of PARP inhibitors.

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**RESULTS**

Of the 194 oncologists who participated in at least 1 of the 2 activities, an analysis of interactive responses was completed for 655, while outcomes assessment was conducted based on the 153 oncologists for whom analysis of interactive responses was completed for 655, while outcomes assessment was conducted based on the 153 oncologists for whom outcomes assessment questions for each activity were completed (Figure 1).

**Specific findings include:**

- 36%–39% were more likely to be able to identify how BRCA mutations lead to the development of cancer as well as the mechanism of action that underlies PARP inhibitors (Figure 1).
- 44% were more likely to recognize that patients with ovarian cancer who were treated with the BRCA inhibitors (Figure 2A). In relation to this question, only 54% of oncologists who would recommend BRCA mutational testing for a 56-year-old woman with newly diagnosed ovarian cancer following treatment with cetuximab/oxaliplatin (Figure 2B).
- 35% were more likely to identify the correlation between BRCA mutations, PARP inhibitors, and survival outcomes as reported in the literature (Figure 3).
- Approximately one third of oncologists were not at all confident in their ability to manage patients with BRCA-mutated or BRCA-like disease (Figure 3).
- However, in the post-test 27% were more likely to correctly understand how counselors who could benefit from PARP inhibitors in the management of ovarian cancer (data not shown).
- 50% were more likely to recognize the role of PARP inhibitors in the management of ovarian cancer (data not shown). 50% were more likely to recognize the role of PARP inhibitors in the management of ovarian cancer (data not shown).

**Finally, in recognition that PARP inhibitors may also play a role in wild-type ovarian cancer, 44% were more likely to recognize that all patients with ovarian cancer to optimize clinical outcomes.

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**CONCLUSIONS**

This study demonstrated the effectiveness of online education in 2 different video-based formats for improving knowledge and competence of oncologists regarding the use of PARP inhibitors in the management of ovarian cancer. However, analysis of self-reported assessment and post-assessment outcomes demonstrates persistent gaps in knowledge and competence regarding appropriate diagnosis and management of ovarian cancer including:

- The MBG of PARP inhibitors and how that correlates to its study and use as a targeted therapy for patients with BRCA-mutated or BRCA-like disease or as part of combination therapy for patients with wild-type BRCA ovarian cancer.
- Patient selection for BRCA testing and when to test for BRCA mutations due to increased awareness of homologous recombination deficiencies (ie, BRCA-like disease) among patients with ovarian cancer to optimize clinical outcomes.
- Understanding and application of drug efficacy and safety of PARP inhibitors in patients with ovarian cancer.

Therefore, additional education is warranted to enhance oncologists’ knowledge, competence, and performance in the management of ovarian cancer as well as further study to understand why evidence is not consistently translated from the bench to clinical practice.