Conclusion This study is the first to describe characteristics of real-world patients who initiated 1LM niraparib monotherapy based on niraparib’s approval status. Study findings suggest that BRCA/HRD testing has increased over time. Moreover, understanding dosing patterns and associated treatment duration can help optimise disease management. These outcomes will be explored in the next study phase.

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OVEREXPRESSION OF PDEA1 IS A PREDICTIVE BIOMARKER FOR PLATINUM RESISTANCE AND POOR PROGNOSIS IN EPITHELIAL OVARIAN CANCER BY REGULATING CELL CYCLE

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Ovarian cancer has become the most common gynecologic malignancy and the leading cause of gynecologic cancer deaths in the world. The sensitivity of ovarian cancer to platinum-based chemotherapy has been decreased and the chemotherapy resistance has become a big problem. In this study, the mRNA and protein expression of PDEA1 in 30 patients with ovarian cancer were measured. The expression of PDEA1 was found to be higher in platinum-resistant ovarian cancer cells than in sensitive ovarian cancer cells. The mRNA expression level of PDEA1 was found to be increased in tumour samples and cell lines with platinum resistance. The expression levels of PDEA1 were positively correlated with the clinical stage, histological grade, and the expression of BRCA1 and BRCA2. The expression of PDEA1 was found to be associated with poor prognosis in stage III and IV ovarian cancer patients. The high expression of PDEA1 was also found to be associated with shorter survival time in ovarian cancer patients. The expression of PDEA1 was found to be regulated by the transcription factor E2F1, which is activated by the BRCA1/BRCA2 pathway. The overexpression of PDEA1 was found to be associated with the activation of the PI3K/AKT/mTOR pathway, which is known to be involved in platinum resistance. The results of this study suggest that the overexpression of PDEA1 is a predictive biomarker for platinum resistance and poor prognosis in epithelial ovarian cancer. The overexpression of PDEA1 can be regulated by the transcription factor E2F1, which is activated by the BRCA1/BRCA2 pathway. The overexpression of PDEA1 can contribute to the development of platinum resistance and poor prognosis in epithelial ovarian cancer.