MI-CRE 2025 Annual Research Symposium and Policy Forum

Real world use and outcomes of olaparib treatment in ovarian cancer: analysis from the Medicines Intelligence Data Platform.

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Disclosure of Interests Statement: SAP is a member of the Drug Utilisation Sub Committee of the Pharmaceutical Benefits Advisory Committee. The views expressed in this paper do not represent those of the Committee. The Medicines Intelligence Research Program, School of Population Health, UNSW has received research funding from IQVIA Australia, unrelated to this project.

Is the presenter an HDR student? No

Has this research been submitted or presented elsewhere? If so where and when? Yes, poster at the NSW Cancer Summit, Sydney, 13-14 August 2025 'Leveraging population-based, real-world data to study PARP inhibitor use in ovarian cancer.'

Abstract

Background and Aims: Poly (adenosine diphosphate-ribose) polymerase inhibitors, such as olaparib, are the most significant addition to treatment of epithelial ovarian cancer in decades. Olaparib was first listed on the Pharmaceutical Benefit Scheme (PBS) in 2017 as an oral maintenance therapy for patients with a germline *BRCA1* or *BRCA2* variant in the recurrent setting. PBS-listings were expanded to include somatic

gene alterations and first-line therapy in 2020, and all patients with homologous recombination DNA repair deficiency in 2024. We aim to describe the use of PBS-listed olaparib in NSW during 2017-2022, specifically treatment duration, adherence, and whether patients received subsequent therapy as an indicator of disease progression post-olaparib.

Design and Methods: We performed a retrospective cohort analysis using linked PBS and death records for all NSW adult residents, 2005 – 2022. We calculated treatment duration as the time from first to last dispensing +28 days. We considered people to be adherent if their daily olaparib supply of covered at least 80% of days between first and last olaparib dispensing (+28 days). We identified first subsequent therapy by chemotherapy dispensing records following olaparib discontinuation. We used Kaplan-Meier methods for all time-to-event analyses from the date of first olaparib dispensing and stratified outcomes by line of therapy.

Results: We identified 300 NSW residents dispensed olaparib indicated for ovarian cancer; 135 in first-line and 165 in the recurrent setting, with median follow-up of 13.6 and 37.4 months, respectively. For first-line patients, median treatment duration was 14.9 months, 69% were adherent, and at 1-year, 85% had not received a subsequent therapy. Patients treated at recurrence had a median treatment duration of 19.3 months, 55% were adherent, and 79% and 63% of patients had no subsequent therapy dispensed at 1- and 2- years, respectively.

Conclusions: Our study is the first to report population-based evidence for first-line olaparib use using dispensing records. Results in the first-line show reasonable treatment adherence, and our early results examining whether patients were free from subsequent therapy are comparable to the landmark clinical trials, SOLO1 (1-year 90%) and SOLO2 (1- and 2-years 75% and 55%, respectively), suggesting promise for real world patient outcomes.