Introduction/Background Ovarian cancer is the leading cause of cancer death from gynaecologic malignancy in the UK. Over the last few years, Poly ADP ribose polymerase inhibitors (PARPi) becomes the mainstay treatment for patients with ovarian cancer including those patients with BRCA1/BRCA2 mutations. (PARPi) has shown efficacy as a maintenance treatment in platinum-sensitive relapsed ovarian cancer.

Methodology We retrospectively evaluated patients with (HGSOC) treated with maintenance Olaparib (300 mg bid, tablets), Niraparib (300 mg OD) and Rucaparib (600 mg BD) who received ≥2 platinum-based chemotherapy (CT) and had a partial or complete response to the last platinum-based regimen. Patients who received Olaparib were BRCA 1/2 mutated (germline and/or somatic) and those who received Niraparib or Rucaparib were BRCA 1/2 wild-type. Study endpoints were progression-free survival (PFS), overall survival (OS) and adverse events (AEs).

Results In the period between September 2018 and December 2021, 36 patients received maintenance PARPi (9 received Olaparib and 11 received Rucaparib&16 received Niraparib). The median age was 55 years, and all patients had ECOG ≤1. The majority had an ovarian primary tumour with high grade serous histology (8%). Most patients (77.6%) received 2 prior platinum regimens. Twelve patients died (2 had Olaparib 16.6%, 2 had Rucaparib 16.6% and 8 had niraparib 66.6%). Median PFS was 9.8 months (median PFS for BRCA 1/2 mutated and BRCA 1/2 wild-type patients was 12.1 and 9 months, respectively). Toxicities were assessed with CTCAE Grade ≥3 AEs (anaemia, thrombocytopenia, neutropenia and nausea & elevated LFT) occurred in 8 patients (15.4% with niraparib). Treatment was suspended in 25 patients due to disease progression (3 with olaparib, 8 Rucaparib &13 with niraparib).

Conclusion This retrospective study provides real-world data which demonstrating the efficacy and safe toxicity profile of PARPi as a maintenance therapy in relapsing BRCA-mutated and non-mutated high-grade serous or endometrioid ovarian cancers.

Introduction/Background To ascertain the clinicopathological and treatment factors of recurrent ovarian adult-type granulosa cell tumours (AGCTO) and evaluate outcomes of women who underwent secondary and tertiary cytoreductive surgery (CRS) for recurrent AGCTO.

Methodology This was a retrospective cohort study, spanning the period 2000–2022. Population-based prospectively collected data on AGCTO were retrieved via the Pan-Birmingham Gynaecological Oncology database. 38 women with AGCTO were enrolled. Clinicopathological, and treatment data were analysed to identify plausible predictors of recurrence. Survival analysis was performed via the Kaplan-Meier method, log-rank test and Cox-regression. Census day was April 1st, 2022. Statistical significance was set at p-value<0.05.

Results The median age at diagnosis was 48.5 years. 78.96% of women had stage IA, 10.52% stage IC, and 10.52% stage IIIC, respectively. All women underwent primary surgical staging, including eight (21.1%) women who underwent fertility-sparing surgery (FSS). During follow-up (median, 128.5 months), 11 recurrences (28.9%) were observed. The mean time to recurrence was 235.11 months. The cumulative recurrence free rate for the first 3 and 5 years was 97.4% and 89.5%, respectively. There was a significant correlation between tumour size (p-value=0.006), stage (p-value=0.0008), solid component (p-value=0.02), moderate/severe nuclei atypia (p-value=0.0004), necrosis (p-value=0.04), mitotic index (MI) (p-value=0.0001), hormonal treatment (p-value=0.02), and recurrence. In multivariate analysis, MI (HR=11.95, p-value=0.03) was found to be independent prognosticator. FSS was not associated with recurrence. Six women underwent complete secondary cytoreductive surgery (CRS). The median time interval between the first and second recurrence (R-PFS) was 59 months. Two women underwent complete tertiary CRS for three and four subsequent recurrences, respectively.

Conclusion Surgical management represents the cornerstone of treatment in AGCTO. Several pathological factors should be taken into consideration when tailoring post-operative management. The role of post-operative chemotherapy and hormonal therapy remains vague. Secondary and tertiary CRS should be offered at highly experienced centres to improving R-PFS.