

O003 / #557

**Plenary Session**

**PLENARY 01: OPENING CEREMONY AND ORAL ABSTRACT PRESENTATIONS**

**29-09-2022 8:00 AM - 10:30 AM**

**OVERALL SURVIVAL RESULTS FROM ARIEL3: A PHASE 3 RANDOMIZED, DOUBLE-BLIND STUDY OF RUCAPARIB VS PLACEBO FOLLOWING RESPONSE TO PLATINUM-BASED CHEMOTHERAPY FOR RECURRENT OVARIAN CARCINOMA**

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**Objectives:** In ARIEL3 (NCT01968213), rucaparib maintenance treatment significantly improved progression-free survival (PFS) vs placebo. We present updated PFS2 and preplanned final overall survival (OS) analyses.

**Methods:** Patients were randomized to receive rucaparib 600 mg BID or placebo. Efficacy was analyzed across the 3 protocol-defined nested cohorts (BRCA-mutant, homologous recombination deficient [HRD], and intent-to-treat [ITT]). PFS2 was an exploratory endpoint, defined as time from randomization to second event of investigator-assessed disease progression, or death due to any cause. OS was a secondary endpoint with analysis planned after 70% of death events. The data cutoff was April 4, 2022, for efficacy and December 31, 2019, for safety. Patients were followed after treatment discontinuation for incidence of myelodysplastic syndrome (MDS) or acute myeloid leukemia (AML); MDS/AML are reported as of April 12, 2022.

**Results:** Median follow-up was 77.0 months as of the efficacy data cutoff. In the ITT population, death events had occurred in 410/564 (72.7%) patients. PFS2 and OS are presented in the Table. Among placebo-arm patients, ≈45% received a PARP inhibitor as a subsequent treatment. Safety was consistent with prior reports; MDS/AML was reported in 14 (3.8%) rucaparib-arm and 6 (3.2%) placebo-arm patients

( $P=0.72$ ) (reported post-study drug treatment in 8 cases in the rucaparib arm and 6 in the placebo arm).

	BRCA		HRD		ITT	
	Rucaparib (n=130)	Placebo (n=66)	Rucaparib (n=236)	Placebo (n=118)	Rucaparib (n=375)	Placebo (n=189)
PFS2 events, n (%)	98 (75.4)	54 (81.8)	183 (77.5)	99 (83.9)	302 (80.5)	162 (85.7)
Median PFS2, months (95% CI)	26.1 (22.8–32.8)	18.4 (15.7–24.4)	24.7 (21.9–26.8)	18.4 (15.8–22.1)	20.6 (18.7–23.5)	16.3 (14.6–17.9)
	HR 0.672 (95% CI 0.480–0.941) $P=0.02$		HR 0.718 (95% CI 0.558–0.923) $P=0.01$		HR 0.703 (95% CI 0.579–0.854) $P<0.01$	
OS events, n (%)	82 (63.1)	48 (72.7)	159 (67.4)	85 (72.0)	270 (72.0)	140 (74.1)
Median OS, months (95% CI)	45.9 (37.7–59.6)	47.8 (43.2–55.8)	40.5 (36.6–48.4)	47.8 (42.7–53.0)	36.0 (32.8–39.4)	43.2 (38.1–46.9)
	HR 0.832 (95% CI 0.581–1.192) $P=0.32$		HR 1.005 (95% CI 0.766–1.320) $P=0.97$		HR 0.995 (95% CI 0.809–1.223) $P=0.96$	

HRs and associated  $P$  values were calculated using a stratified log-rank test and stratified Cox-proportional model.  $P$  values are nominal with no adjustment for multiplicity.  
CI, confidence interval; HR, hazard ratio.

**Conclusions:** These data support the use of rucaparib as a maintenance treatment for recurrent ovarian carcinoma; although no OS benefit was seen, the PFS benefit for rucaparib was maintained through the subsequent line of therapy.