**INTRODUCTION**

Rucaparib is a poly(ADP-ribose) polymerase (PARP) inhibitor that is approved for the treatment of high-grade ovarian carcinoma (HGOC).

We evaluated the correlations between rucaparib pharmacokinetic (PK) exposure and efficacy/safety in the treatment setting for patients with recurrent HGOC using pooled data from Study 10 (NCT01482715) and ARIEL2 (NCT01891344).

**METHODS**

In Study 10, Part 1, patients with solid tumors received oral rucaparib 40–500 mg once daily (QD) or 240–840 mg twice daily (BID); in Study 10, Part 2, and ARIEL2, patients with relapsed HGOC received rucaparib 600 mg BID.

A population PK model was developed and used to estimate the area under the concentration-time curve (AUC) and maximum concentration (C_max) for the exposure-efficacy analyses shown in Table 1.

**RESULTS**

- Rucaparib PK exposure was dose proportional and not associated with baseline germline BRCA2 mutation status.
- No significant correlations were observed for other efficacy endpoints (Table 3).

**SUMMARY**

- The exposure-response analyses supported the approved starting dose of rucaparib 600 mg BID with subsequent dose reductions following the occurrence of a treatment-emergent adverse event in platinum-sensitive, BRCA-mutated recurrent ovarian cancer.
- Higher rucaparib AUC_{max} was associated with improved independent radiologic review-assessed response, but no significant correlations were observed for other efficacy endpoints.
- No statistically significant correlations have been observed between rucaparib AUC_{max} and efficacy endpoints in patients with recurrent ovarian cancer associated with wild-type BRCA and high genomic loss of heterozygosity in rucaparib clinical trials.
- Clinical significance of QTcF decrease from baseline (ie, >20 ms) is unlikely following rucaparib 600 mg BID.

**REFERENCES**


**ACKNOWLEDGMENTS**

This research was sponsored by Clovis Oncology, Inc. Medical writing and editorial support funded by Clovis Oncology were provided by Stephen Mason, PhD, and Frederique H. Evans, MBS, of Ashfield Healthcare Communications.