

Debio 0123, a highly selective WEE1 inhibitor in adult patients with advanced solid tumors: A phase 1 dose escalation and expansion monotherapy study.

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Background: Debio 0123 is an oral, highly selective WEE1 inhibitor. WEE1 inhibition leads to S phase and G2/M cell cycle checkpoint bypass, allowing mitosis to occur without DNA repair, leading to mitotic catastrophe and cell death. This Phase 1 study (NCT05109975) is evaluating Debio 0123 monotherapy in patients with advanced solid tumors who have recurred or progressed following prior therapy and/or without available standard therapy. During the recently completed dose escalation, Debio 0123 was given once daily over a 21-day cycle and had a manageable safety profile with dose proportional pharmacokinetics. The recommended phase 2 dose is 260 mg (Papadopoulos, et al. ASCO2024, #2426). **Methods:** Following selection of RP2D, a 3-arm expansion phase is ongoing and currently enrolling patients, in both biomarker selected and unselected cohorts. Arm A includes patients with recurrent uterine serous carcinoma progressing after at least one prior line of platinum-based chemotherapy. Arm B includes patients with high-grade epithelial ovarian cancer, primary peritoneal cancer, or fallopian tube cancer that recurred to at least one prior line of platinum-based chemotherapy with high cyclin E1. Lastly, a biomarker-driven cohort (arm C) will enroll patients with specific locally advanced or metastatic solid tumors who have recurred or progressed following prior therapy and/or for whom no standard therapy is available. Additional key inclusion criteria are ECOG Performance Status 0-1, and measurable disease per RECIST 1.1. Debio 0123 will be administered once daily until disease progression, unacceptable toxicity, or withdrawal from the study. Primary endpoints are safety and tolerability and overall response rate (ORR) at recommended dose. Secondary endpoints include duration of response (DOR), progression-free survival (PFS), and overall survival (OS). Enrolment is ongoing in Spain, Switzerland and US. Clinical trial information: NCT05109975. Research Sponsor: None.