A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multicenter Trial of Maintenance Treatment With Pamiparib Versus Placebo in Chinese Patients With Platinum-Sensitive Recurrent Ovarian Cancer

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Objective Ovarian cancer (OC) is the tenth most prevalent cancer among Chinese women. Platinum (plt)-based regimens are the most common chemotherapy for advanced OC. Poly(ADP-ribose) polymerase proteins 1 and 2 (PARP1/2) are involved in DNA damage repair, and their inhibition is cytotoxic for cells with homologous recombination deficiencies (HRD). PARP inhibitors have shown anticancer activity in patients with OC with a germline or somatic *BRCA* mutation (*BRCA*^{mut}). Pamiparib is a selective PARP 1/2 inhibitor with potent PARP trapping ability that can cross the blood-brain barrier and has demonstrated antitumor activity in both *in vitro* and *in vivo* nonclinical tumor models harboring *BRCA*^{mut} and other HRD. In early phase clinical studies in Caucasian and Chinese patients (NCT02361723; NCT03333915), pamiparib was generally well tolerated and showed preliminary antitumor activity, notably in patients with *BRCA*^{mut} OC. These studies also established 60 mg orally twice daily (PO BID) as the recommended phase 2 dose.

Methods This double-blind, placebo-controlled, phase 3 study (NCT03519230) was designed to investigate the efficacy, safety, and tolerability of pamiparib versus placebo as maintenance therapy in Chinese patients with recurrent high-grade, serous or endometrioid OC. Patients must have received ≥2 plt-based chemotherapy regimens, must have plt-sensitive disease (disease progression >6 months after penultimate plt-based regimen), and must have achieved a complete or partial response with the most recent plt-based chemotherapy. Patients who are ≤8 weeks from their last plt-based treatment will be randomized (2:1) to receive pamiparib or placebo. Pamiparib will be administered at 60 mg PO BID in 28-day treatment cycles until disease progression. Progression-free survival by blinded independent review committee assessment will be the primary outcome. Overall survival, objective response rate, duration of response, and safety/tolerability will be key secondary measures. Pharmacokinetics, predictive biomarkers, and quality of life measures will be exploratory outcomes.