LBA5500

Oral Abstract Session

Final results of BrUOG 354: A randomized phase II trial of nivolumab alone or in combination with ipilimumab for people with ovarian and other extra-renal clear cell carcinomas.

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Background: Extra-renal clear cell cancer (CCC) are rare tumors that can arise from any organ. Gynecologic CCC can originate from the ovaries, endometrium, or cervix. Compared to serous carcinomas, ovarian CCC is associated with poorer outcomes to standard chemotherapy, warranting a focused evaluation for innovative therapies. We completed a two-stage two-arm phase 2 trial evaluating immunotherapy for extra-renal CCC and present the final results of treatment using nivolumab (N) monotherapy and in combination with ipilimumab (I) in this population. **Methods:** This is a randomized two-stage phase II study evaluating single-agent N (240mg IV every two weeks) or in combination with I (1mg/kg every six weeks) (N/I) in people with relapsed extra-renal CCC after at least one prior therapy (no prior immunotherapy). Measurable disease was required. In the first stage, volunteers were randomly assigned to N or N/I with stratification by tumor site (ovarian vs extra-ovarian). Treatment was continued until disease progression or unacceptable toxicity. Each arm was evaluated for overall response rate (ORR) separately at stage 1 using RECIST and iRECIST criteria. In January 2022, the N arm was closed, and subsequent volunteers were treated with N/I. The study completed enrollment in April 2023. **Results:** Between July 2018 and April 2023, 46 volunteers provided consent for the study and 44 were treated (14 N, 30 N/I). The median age was 57 (range, 18-75) years. Across the study, 75% were White, 9.1% Black, 4.5% were Asian, and 11.4% were Hispanic. All volunteers had a gynecologic primary, 36 (82%) with ovarian CCC. The median number of prior lines was 1 (range, 1-7). The Overall Response Rate (ORR) is 14.3% (2 Partial Responses) with N and 33% (4 Complete and 6 Partial Responses) with N/I. Four people continue on treatment with N/I as of December 2023. With a median follow up of 11.3 (range, 1.6-46.4) months, the median Progression-Free Survival is 2.2 (95% CI 1.2-3.4) months with N and 5.6 (95% CI 1.6-29.1) months with N/I. The median Overall Survival is 17 (95% CI 2.1-NR) and 24.6 (95% CI 5.9-NR) months, respectively. Serious treatment-related adverse events were recorded in 3 (21%) treated with N (all grade 3) and 14 (47%) treated with N/I (two of whom had grade 4 pancreatic enzyme elevations). No new safety signals were noted, and no treatment-related deaths were observed in either arm. **Conclusions:** Immunotherapy demonstrated important, meaningful, and durable activity in people with previously treated gynecologic CCC including four (12%) volunteers who achieved a complete response with N/I. N/I warrant further evaluation against standard treatment for people with ovarian CCC, given the historically chemotherapy-resistant nature of the disease. Clinical trial information: NCT03355976. Research Sponsor: None.