encouraging survival outcomes in patients with gynecological tumors. Safety was consistent with the known profile. These data support T-DXd as a potential treatment for patients with gynecological HER2-expressing tumors who progressed on prior therapy.

Plenary 03: Oral Abstract Presentations – Ovarian Cancer

AS11. Ovarian cancer

PO008/#393 TIMED ADOPTIVE T-CELL THERAPY DURING CHEMOTHERAPY IN PLATINUM SENSITIVE RECURRENT EPITHELIAL OVARIAN CANCER, THE OVACURE PHASE I/II TRIAL

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Introduction T-cell infiltration correlates with epithelial ovarian cancer (EOC) survival, suggesting that EOC may be sensitive to ACT with autologous TIL. Carboplatin-paclitaxel (CP) chemotherapy lowers tumor induced immune-suppressive myeloid-cells, thereby creating a window-of-opportunity for TILs. IFNα may support the TIL.

Methods This phase I/II OVACURE trial (NCT04072263) studied the feasibility and safety of TIL during CP +/- IFNα in patients with recurrent platinum-sensitive EOC. Sixteen patients were enrolled. Patients received CP iv q3 weeks, 6x and TIL iv 2 weeks after the 2nd, 3rd and 4th CP +/- IFNα 12 weeks around the TIL infusion. CP +/- IFNα were used for lymphodepletion instead of IL-2. Patients who received 3 TIL cycles were evaluable. Secondary, signs of activity, immunomodulation, and T-cell reactivity were studied.

Results Fourteen patients were evaluable. Median age: 63 years (29–77), 13 HGSOC and 1 LGMOC. TIL could successfully be cultured for all patients. Addition of TIL during CP did not add toxicity, while additional IFNα resulted in grade 3 thrombocytopenia in the first 2 patients. Therefore, it was decided to continue treatment without IFNα. CP reduced plasma IL-6 levels and circulating myeloid-cell numbers. The optimal myeloid/lymphocyte ratio reduction was obtained 1–2 weeks after the 2nd CP. Interestingly, the platinum-free interval (PFI) exceeded the previous PFI after similar CP in 2 patients, including an ongoing PFI which increased from 8 to currently 43 months.

Conclusion/Implications Combined treatment with CP chemotherapy and timed TIL did not increase toxicity and may result in clinical benefit for patients with EOC.