TPS9600 **Poster Session**

A phase 1, open-label, dose expansion cohort of the tolerability of tolododekin alfa (ANK-101) in combination with cemiplimab in cutaneous squamous cell carcinoma.

Jong Chul Park, Marcus O. Butler, Brendan D. Curti, Gail Iodice, Danielle M. Pastor, Joseph Elassal, Howard L. Kaufman, John M. Kirkwood; Massachusetts General Hospital, Boston, MA; Division of Medical Oncology and Hematology, Princess Margaret Cancer Centre, University of Toronto, Toronto, ON, Canada; Earle A Chiles Research Institute, Portland, OR; Ankyra Therapeutics, Cambridge, MA; National Cancer Institute, National Institutes of Health, Bethesda, MD; UPMC Hillman Cancer Center, Pittsburgh, PA

Background: IL-12 stimulates innate and adaptive tumor immunity. Tolododekin alfa (ANK-101) is an anchored drug conjugate that creates a strong link between full-length IL-12 and aluminum hydroxide through an alum-binding protein (ABP) which localizes IL-12 to the tumor microenvironment (TME), resulting in sustained drug release, prolonged antitumor immune activation, increased PD-L1 expression, and minimal systemic adverse events. Cemiplimab is an anti-PD-1 monoclonal antibody approved in several countries worldwide for the treatment of metastatic or locally advanced cutaneous squamous cell carcinoma (CSCC) who are not candidates for curative surgery or radiation. This phase 1 clinical trial is designed to combine tolododekin alfa and cemiplimab to determine tolerability and initial biologic and clinical activity. **Methods:** This is an open-label study to evaluate locally administered tolododekin alfa and cemiplimab in patients with advanced CSCC who progressed on, are refractory to, or intolerant of prior SOC treatment. The combination cohort will consist of 15 participants. Participants will be treated with tolododekin alfa in combination with cemiplimab. Treatment will consist of up to eight cycles of tolododekin alfa in combination with cemiplimab followed by cemiplimab alone for up to one year. Follow-up imaging assessments will be performed every 12 weeks. Eligible participants must have histologically confirmed high-risk locally advanced or metastatic CSCC not amenable to surgical management, accessible tumors for injection and biopsy, and measurable disease by RECIST v1.1. Key exclusion criteria include tumors close to vital structures, uncontrolled bleeding disorders, and prior $\geq$ Grade 3 immune-mediated adverse events (imAEs) following treatment with an agent that blocks the PD-1/ PD-L1 pathway. Primary objectives include safety and tolerability of tolododekin alfa and cemiplimab. Secondary objectives include immunogenicity (ADA), and preliminary clinical activity measured by ORR, DCR, DOR, and PFS by RECIST v1.1. Exploratory objectives include QOL using FACT-G and immune pharmacodynamic (PD) changes. This clinical trial is in progress. Clinical trial information: NCT06171750. Research Sponsor: Ankyra Therapeutics.