TPS2686 **Poster Session**

A phase 1a/1b study to evaluate the safety, tolerability, pharmacokinetics, and anti-tumor activity of IMGS-001 in patients with relapsed or refractory advanced solid tumors.

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Background: IMGS-001 is a fully human, dual specific immunoglobulin G1 (IgG1) monoclonal antibody (mAb) that binds both PD-L1 and PD-L2, silencing the entire PD-1 inhibitory circuit, with an engineered fragment crystallizable (Fc) region designed to induce robust antibody-dependent cell-mediated cytotoxicity (ADCC) and phagocytosis (ADCP). IMGS-001 mediated killing of PD-L1+ and PD-L2+ tumor and stromal cells can reduce the level of multi-modal immune suppression throughout the tumor microenvironment while catalyzing cross presentation of tumor antigens to the adaptive immune system. IMGS-001 also blocks binding of the T cell co-inhibitory receptor PD-1 with its ligands, restoring activation and function to tumor-specific T cells. In addition, IMGS-001 blocks binding of PD-L1 to B7-1, increasing costimulation of tumor-specific T cells. A phase 1a/1b study has been opened to investigate IMGS-001 safety, anti-tumor activity, and pharmacokinetics (PK) in solid tumor patients (Protocol IMGS-001-011; NCT06014502). **Methods:** This multi-center, first-in-human study is enrolling subjects with advanced solid tumors refractory to standard of care therapy. Phase 1a uses a Bayesian optimal interval (BOIN) dose-escalation design to investigate doses from 0.3-15 mg/kg (Q2W). Phase 1b is a two-part design in subjects with PD-L1+ expression $\geq$ 5% across 5 tumor types: triple negative breast, bladder, gastric/esophageal, colorectal, ovarian. Part 1 will enroll up to 10 subjects per cohort. Cohorts meeting prespecified efficacy criteria will proceed to Part 2 dose optimization randomly assigning 40 subjects (1:1) between two doses. The primary objective of Phase 1a is to assess IMGS-001 safety, and of Phase 1b is to define the pharmacologically optimal dose (POD). Both study phases will assess tolerability, PK, immunogenicity, and anti-tumor activity including objective response rate and progression free survival, as well as exploratory tissue and serum biomarker analyses. The study will enroll approximately 25 patients in Phase 1a and up to 250 in Phase 1b. The first two cohorts (0.3 and 1 mg/kg) have completed without any dose limiting toxicities (DLTs), and cohort 3 (3 mg/kg) is enrolling as of the submission date. Clinical trial information: NCT06014502. Research Sponsor: ImmunoGenesis; Cancer Prevention and Research Institute of Texas (CPRIT); Cancer Focus Fund.