AB308 is an Anti-TIGIT Antibody That Enhances Immune Activation and Anti-Tumor Immunity Alone and in Combination With Other I-O Therapeutic Agents


AB308 is a high affinity anti-TIGIT blocking antibody that has the capacity to induce ADCC. CD8+ T cells may represent pre-dysfunctional populations akin to reported cellular targets of anti-TIGIT PD-1 and thus probable targets for anti-TIGIT PD-1. AB308 can enhance T cell functionality alone and in combination with Zimbrestat (Zm, anti-PD-1).

**OVERVIEW**

- TIGIT (T-cell immunoreceptor with Ig and ITIM domains) is an inhibitory receptor expressed on CD8+ T cells, CD4+ T cells, natural killer (NK) cells and regulatory T cells (T(regs)).
- TIGIT competes with another activating receptor, DNAM-1/CD226, for shared receptor ligands (mainly CD155) that are expressed by cancer and antigen-presenting cells (Chauvin & Zarour, 2020 JITC).
- When TIGIT is blocked, binding of CD155 to CD226 promotes immune activation and anti-tumor immunity through multiple mechanisms and shows promise preclinical and clinical activity. (Pan, Rodriguez et al., 2020). ABOG, Lasso; Johnson, et al., 2020 (preclinical).
- We describe the preclinical characteristics of AB308, a humanized anti-TIGIT antibody that is currently undergoing clinical evaluation.

**RESULTS**

**Motivation**

- AB308 blocks the~TIGIT-CD155 interaction~and enhances immune synapse formation (Fig. 4).
- Anti-PD-(L)14,5 and thus probable targets for anti-TIGIT PD-1.

**TIGIT and CD226 are Co-Expressed on Tumor Infiltrating CD8+ T cells at Various Stages of Dysfunction**

- CD8+ T cells in Tumor

**AB308 Has the Capacity to Induce FcγR-mediated Signaling and Enables NK Cell-mediated Antibody-Dependent Cell-Mediated Cytotoxicity (ADCC) Against a Subset of TIGIT+ Expressing Target Cells**

- FcγR-mediated Signaling and Enables NK Cell-mediated Antibody-Dependent Cell-Mediated Cytotoxicity (ADCC) Against a Subset of TIGIT+ Expressing Target Cells

**SUMMARY**

- AB308 is an Anti-TIGIT Antibody That Enhances Immune Activation and Anti-Tumor Immunity Alone and in Combination With Other I-O Therapeutic Agents

**REFERENCES**

1. Blackburn et al., 2020 (preclinical).
2. Lasso; Johnson, et al., 2020 (preclinical).