**Introduction**

Atezolizumab, a bispecific antibody (mCD8-4-1BB), has shown promising results in pre-clinical studies for its ability to activate CD8+ T cells in the tumor microenvironment. This study aimed to investigate the efficacy of Atezolizumab in combination with 4-1BB agonist in a phase I clinical trial.

**Background and Mode of Action**

Atezolizumab (4-1BB) is a novel anti-PD-L1 antibody that stimulates the activation of CD8+ T cells, leading to enhanced antitumor activity.

**Methods**

- **PD-L1/PD-L1 inhibitor** has revolutionized cancer treatment, but there are unmet clinical needs for PD-L1/PD-L1-inhibited patients. Atezolizumab-induced T cells activate in the tumor microenvironment and the recruitment of T cells was measured by flow cytometry.

**Results**

- Atezolizumab (4-1BB) antigenic activity was tested by 4-1BB bispecific antibody with PD-L1 expressing tumor cells and 4-1BB signaling reporter cells. PD-L1 expression was measured by caspase-dependent fluorescence.

**Conclusion**

Atezolizumab (4-1BB) shows promising efficacy in pre-clinical studies, and further clinical trials are needed to confirm its efficacy in cancer patients. The combination of Atezolizumab (4-1BB) and PD-L1/PD-L1 inhibitor is a promising strategy for the treatment of cancer patients.