TRILACICLIB (G1T28), A CDK4/6 INHIBITOR, ENHANCES THE EFFICACY OF COMBINATION CHEMOTHERAPY AND IMMUNE CHECKPOINT INHIBITOR TREATMENT IN PRECLINICAL MODELS

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ABSTRACT #5628

OBJECTIVES

- Evaluate the ability of trilaciclib to combination chemotherapy/biotherapy regimens in preclinical preclinical models
- Examination of various therapeutic and prophylactic schedules of trilaciclib in combination with chemotherapy and immune checkpoint inhibitors
- Characterization of immune system changes in the tumor microenvironment

METHODS

EVALUATION OF ANTI-TUMOR ACTIVITY

TRILACICLIB (G1T28) is a highly potent, selective, and reversible cyclin-dependent kinase 4/6 (CDK4/6) inhibitor in preclinical models. Both CDK4/6 inhibitors and immune checkpoint inhibitors (ICIs) have shown clinical activity against small cell lung cancer (SCLC) and nonsmall cell lung cancer (NSCLC).

RESULTS

1. The ability of trilaciclib to preserve and enhance the function of the immune system in combination with chemotherapy and ICIs was evaluated in murine tumor models.

2. In combination with chemotherapy and ICIs, trilaciclib significantly enhanced efficacy and improved survival in murine tumor models.

3. Trilaciclib enhanced the function of T-effector cells and reduced intra-tumor Treg populations.

4. Trilaciclib preserved lymphocyte function when added to 5-FU treatment.

5. Trilaciclib improved tumor control and enhanced immune system changes in the tumor microenvironment.

SUMMARY

- Trilaciclib (G1T28) is a potent, selective, and reversible CDK4/6 inhibitor that enhances the efficacy of combination chemotherapy and immune checkpoint inhibitor treatment in preclinical models.
- Trilaciclib preserves and enhances the function of the immune system when added to chemotherapy and immune checkpoint inhibitor regimens.
- Trilaciclib improves tumor control and enhances immune system changes in the tumor microenvironment.

TRILACICLIB (G1T28) is a highly potent, selective, and reversible CDK4/6 inhibitor that enhances the efficacy of combination chemotherapy and immune checkpoint inhibitor treatment in preclinical models.