

Phase 1 clinical study of FB849, HPK1 inhibitor as a next-generation immuno-oncology therapy

1ST Biotherapeutics, Inc.



ONCOLOGY	Phase 1
Product Type	NCE
Indication	Advanced solid tumor
Target	HPK1 kinase inhibitor
MoA(Mechanism of Action)	<ul style="list-style-type: none"> • Hematopoietic progenitor Kinase 1 (HPK1), also known as MAP4K1, is a negative immune regulator of T cell receptor (TCR) and B cell signaling. • Inhibition of HPK1 elicits anti-tumor immune response by promoting T cell functions through T cell activation and proliferation while reinvigorating T cell exhaustion, enhancing APC function by promoting dendritic cell maturation and activation leading to enhanced antigen presenting cell function and suppressing Prostaglandin E2-mediated tumorigenesis.
Competitiveness	<ul style="list-style-type: none"> • The most selective HPK1 inhibitor in the clinic, minimizing off target liabilities. • Exhibits ideal ADME properties and PK profiles, showcasing excellent bioavailability and permeability. • Elicits strong anti-cancer potency through reinvigoration of exhausted T cells, increase of tumor-specific T cells and non-T cell-driven efficacy, providing a favorable TME for combination with T cell-based therapies.
Development Stage	Phase I
Route of Administration	Oral Administration (PO)