

Phase 1 clinical Study of ENPP1 inhibitory Immunotherapy TXN10128

Txinno Bioscience



ONCOLOGY	Phase 1
Product Type	New Chemical Entity (NCE)
Indication	Various advanced solid cancers
Target	ENPP1
MoA (Mechanism of Action)	<ul style="list-style-type: none"> • Cytosolic DNA in cancer cell activates STING pathway through cGAMP production by cGAS sensor. • ENPP1 hydrolyzes cGAMP, prevents STING activation and reduces anti-tumor immune response. • ENPP1 inhibitor restores STING signaling in TME, increases activities of NK cells/DC cells, converts cold tumor into hot tumor by inducing lymphocyte infiltration, and augments anti-tumor immune responses.
Competitiveness	<ul style="list-style-type: none"> • TXN10128 is a potent and selective ENPP1 inhibitor that can exert immune responses in 3D co-culture condition. • TXN10128 augments synergistic tumor growth inhibition with anti-PD-L1 antibody and favorable TIL profile in MC38 syngeneic mouse model. • TXN10128 has promising drug-likeness and PK profile. • TXN10128 is a suitable candidate for clinical investigation as a combination partner with existing immunotherapies. • The preclinical studies were completed 4Q 2022 and the phase 1 clinical trial was started by July 2023
Development Stage	Phase 1
Route of Administration	Oral Q.D.; combined with chemotherapy, XRT, ICI