Pre-clinical development of anticancer candidate to treat small cell lungcancer (SCLC) through PROTAC-based PLK1 protein degradation

UPPTHERA Inc.

UPPTHERA SYNTHESIZE POSSIBILITIES, DEGRADE DESPAIR

ONCOLOGY	Non-Clinical
Product Type	Small molecule (PROTAC, Proteolysis Targeting Chimera)
Indication	SCLC (Small Cell Lung Cancer)
Target	PLK1 (Polo like kinase 1)
MoA(Mechanism of Action)	TPD (Target Protein Degradation)
Competitiveness	 PLK1 is a promising anticancer target, but most small molecule inhibitors (SM) have failed clinical trials due to DLT. PLK1 PROTAC overcomes the cause of failure of the inhibitors based on superiority of MoA catalyticly degrading PLK1. Compared to Onvansertib which is only PLK1 inhibitor in clinical phase, it is demonstrated by our studies that PLK1 PROTAC shows stronger G2/M arrest, DNA damage and apoptosis induction to cancer cells. PLK1 PROTAC shows superior anti-tumor efficacy with wider dosing margin In vivo small cell lung cancer CDX model, compared to Onvansertib.
Development Stage	Non-Clinical
Route of Administration	P.O.

