

First-in-class pancreatic cancer therapy targeting both tumor metabolism and fibrosis for enhanced efficacy

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ONCOLOGY	Lead
Product Type	Small molecules
Indication	Primary indication: pancreatic cancer Secondary indications: refractory triple-negative breast cancer, colorectal cancer, etc.
Target	NUAK1
MoA(Mechanism of Action)	NUAK1 inhibition → simultaneous suppression of pancreatic cancer cells and fibrosis (decreased p-AKT inhibits cancer metabolic signaling / inhibition of fibrosis via TGF-β-YAP signaling) → tumor-selective therapeutic effect
Competitiveness	Currently, there are no clinically approved drugs targeting NUAK1 alone. However, several candidates are under development: HTH-01-015 (IC ₅₀ : 100 nM), WZ4003 (IC ₅₀ : 80 nM): Preclinical and basic research development has been discontinued. ON123300 (IC ₅₀ : 12 nM): A multi-kinase/CDK4 inhibitor currently in Phase II clinical trials for cancer treatment. OST-122: A JAK3/TYK2-NUAK1 inhibitor in Phase II clinical trials for ulcerative colitis (IBD, fibrosis).
Development Stage	Lead
Route of Administration	Oral administration

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