

Development of novel chemical immune checkpoint inhibitors by targeting CMTM6/PD-L1 axis in the tumor immune microenvironment for lung cancer immunotherapy

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ONCOLOGY	Lead
Product Type	Chemical-Small molecule (Immunotherapy)
Indication	Solid tumors [Primary: lung cancer, Secondary: solid tumors resistant to antibody-based immune checkpoint inhibitors (ICIs) such as pembrolizumab and atezolizumab]
Target	CMTM6
MoA (Mechanism of Action)	Inhibits CTMT6 binding to PD-L1 but not CD58, leading the lysosomal PD-L1 degradation in the tumor immune microenvironment. This results in a reorganization of the tumor immune microenvironment toward anti-tumor immunity.
Competitiveness	First In Class <ul style="list-style-type: none"> • No CMTM6-targeted immunotherapeutic agents or drugs • Can be used as an immunotherapy for lung cancer and other solid tumors by replacing antibody-based ICIs • Combination therapy with antibody-based ICIs can synergistically enhance the antitumor efficacy of antibody-based ICIs
Development Stage	Lead
Route of Administration	Oral or Intravenous administration