RS-2026-25502818

Development of a Solid Tumor Therapeutic Candidate Using a T-Sphaera™-PD-L1 x VEGF Multi-specific Therapeutics (TSMT-01)

CELLemedy Inc.

CELL®emedy
㈜셀레메디

ONCOLOGY | **Candidate**

Product Type	rProtein
Indication	Solid Tumors including NSCLC and TNBC
Target	PD-L1 x VEGF (Multivalency, High Avidity)
MoA(Mechanism of Action)	- **PD-L1-mediated Selective Anchoring within the Tumor Microenvironment (TME)** : T-Sphaera™-based PD-L1 × VEGF multi-target particles selectively bind to PD-L1-expressing tumor cells located in immunosuppressive TMEs. : Multivalent binding enables high avidity and enhances tumor retention. - **Localized VEGF Trapping** : While anchored to PD-L1, the particles continuously capture surrounding soluble VEGF dimers by localized VEGF clustering. : This event locally reduces VEGF concentration within the tumor microenvironment, thereby suppressing VEGF/VEGFR signaling. - **Inhibition of Tumor Angiogenesis** : Reduction of VEGF signaling suppresses angiogenesis, decreases abnormal vascular formation, and promotes tumor vascular remodeling.
Competitiveness	- **Differentiated Multivalent Architecture Compared with Conventional PD-L1 × VEGF Bispecific Antibodies** : Simultaneous display of multiple PD-L1 and VEGF binders is possible up to 24-mers. : This platform enables multivalent avidity and target clustering. - **Sustained VEGF Neutralization through PD-L1 Membrane Anchoring** : Rather than transiently neutralizing VEGF, T-Sphaera™ stably anchors to PD-L1-positive tumor surfaces. : It functions as a localized spatial “VEGF sink” by continuously capturing surrounding VEGF molecules.
Development Stage	Candidate
Route of Administration	Intravenous Administration (IV)