Development of macrophage-targeted clodronate-glycosylated albumin complex to inhibit tumor growth

Seoul National University



ONCOLOGY	Hit
Product Type	Albumin complex
Indication	Cancer patients, particularly those who are non-responsive to conventional immune checkpoint inhibitors (e.g. anti-PD-1)
Target	Immunosuppressive tumor-associated macrophage
MoA(Mechanism of Action)	 Tumor-associated macrophages play key roles in formation of immunosuppressive tumor microenvironment. Depletion of tumor-associated macrophages could reinvigorate infiltrated T cells to boost anti-tumoral immune response
Competitiveness	Taking advantages of albumin-based nanoplatform including biocompatibility, cost and long blood-circulation time, glycosylated-albumin enables its specific uptake in immunosuppressive tumor-associated macrophages. In addition, the delivery of clodronate, a macrophages-depleting drug, using this platform would reactivate immune responses in tumor microenvironment, thereby widening therapeutic window in potential patients refractory to conventional immune checkpoint inhibitors.
Development Stage	Hit
Route of Administration	Intravenous injection

