

Development of long-acting human growth hormone receptor antagonist by next generation technology

Alteogen Inc.



METABOLIC	Candidate
Product Type	Biological, Fusion Protein
Indication	METABOLIC, Acromegaly
Target	Human growth hormone receptor antagonist
MoA(Mechanism of Action)	Binding to human growth hormone receptor → Prevention of the receptor dimerization → Blocking further signaling of the growth hormone
Competitiveness	ALT-B5, a long-acting GH receptor antagonist fusion protein, had superior characteristics compared to Pegvisomant (original drug, lyo-form) in increased binding ability with the receptor and inhibition of GH receptor signaling system. In in vitro system, ALT-B5 significantly inhibited the hGH signal by increasing the hGH receptor binding force by more than 10-fold. ALT-B5 reduced IGF-1 with higher efficacy than Pegvisomant in acromegaly mouse model, and reduced IGF-1 levels with high efficacy even with different administration cycles in a normal rabbit test. ALT-B5, the active substance of this study, is expected to be a new drug that can improve the quality of life of patients with acromegaly because it increases the drug administration cycle and enables a liquid formulation.
Development Stage	Candidate, Ready to Preclinical study
Route of Administration	Subcutaneous