

ABSTRACT

Provided is an insulin derivative, a pharmaceutical formulation thereof, a pharmaceutical composition of same with a long-acting GLP-1 compound, and a medical use of the acylated insulin, said pharmaceutical formulation, and said pharmaceutical composition. In comparison with insulin degludec or other insulin derivatives, the insulin derivative has unexpectedly significantly increased efficacy, longer duration of action, longer half-life in vivo, good bioavailability, and better physical and chemical stability.