Development of recombinant protein targeting human complement C5 for dry age-related macular degeneration treatment

ImmunAbs Inc



OPHTHALMOLOGY	Lead
Product Type	Recombinant protein
Indication	Dry AMD(Age-related Macular Degeneration)
Target	Human Complement C5
MoA(Mechanism of Action)	C5 inhibitor
Competitiveness	Effective treatments for dry AMD have been scarce until the approval of Syfovre, a pegylated complement C3 inhibitor, by the FDA for the treatment of geographic atrophy, an advanced form of Dry AMD. Another promising drug, Izervay (formerly known as Zimura), a complement C5 peptide inhibitor, has also entered the market for dry AMD patients. The approval of these treatments underscores the efficacy of targeting complement activation to alleviate symptoms of dry AMD. While these breakthroughs bring hope to dry AMD treatment, it is important to note that existing complement inhibitors often carry a high risk of developing neovascularization, leading to wet AMD. Our lead molecule, IM-101, distinguishes itself with unparalleled efficacy in blocking both classical and alternative complement pathways. Preliminary analyses revealed that IM-101 negatively regulated VEGF expression in animal models, suggesting a potential reduction in risks of de novo wet AMD. Concurrently, our commitment has been directed towards the development of a novel molecule derived from IM-101. This molecule, characterized by a smaller size similar to scFv and Fab molecules, aims to enhance dosing intervals for the treatment of dry AMD.
Development Stage	Lead
Route of Administration	Intravitreal

