

# AAV Gene Therapy for Degenerative Retinal Diseases

ICM CO., LTD.



OPHTHALMOLOGY	Candidate
Product Type	Recombinant Adeno-Associated Virus (rAAV)
Indication	Dry-AMD and Inherited Retinal Diseases (IRDs)
Target	Nkx3 Homeobox 2 (Nkx3-2)
MoA(Mechanism of Action)	<ul style="list-style-type: none"> <li>• Supporting RPE viability by suppressing RIP3-mediated RPE necroptosis.</li> <li>• Suppressing inflammatory responses by inhibiting inflammatory cytokine and chemokines.</li> <li>• Inhibiting blood vessel invasion by inducing lysosomal protein degradation of HIF-1<math>\alpha</math>.</li> </ul>
Competitiveness	<ul style="list-style-type: none"> <li>• A novel gene therapy for retinal degeneration with a validated target, apart from the limited treatments employing VEGF inhibition approach.</li> <li>• Various biological activities of Nkx3.2 can control molecular events associated with retinal degeneration including a broad range of IRDs.</li> <li>• First-in-class AAV-based gene therapeutics has been developed and verified to be effective and safe.</li> <li>• Patient convenience and benefits from durable efficacies by single injection.</li> </ul>
Development Stage	Candidate
Route of Administration	Subretinal injection (SRI)