

Development of DWRX2008 as a Novel Therapeutic for Intractable Ocular Angiogenesis

Daewoong Therapeutics



OPHTHALMOLOGY	Non-Clinical
Product Type	Small Molecule Inhibitor
Indication	1st Indication: Diabetic Retinopathy and Macular Edema (DR/DME) 2nd Indication: Anti-VEGF Adjunct Therapy
Target	Sodium Glucose Cotransporter 2 (SGLT2)
MoA (Mechanism of Action)	Inhibition of SGLT2 in the retina → less ocular glucose uptake → reduced mitochondrial oxidative stress and ROS/AGE production → decreased VEGF expression and neovascularization
Competitiveness	<p>First in Class</p> <ul style="list-style-type: none"> World's first small molecule eyedrop treatment as an alternative to invasive anti-VEGF intravitreal antibody injections with comparable efficacy Differentiated MoA that reprograms abnormal energy metabolism in the retina, thereby addressing the fundamental cause of ocular angiogenesis while providing flexibility for combined treatments and increased dosing interval. Full patent protection on the proprietary compound and usage of other SGLT2i for targeted indications
Development Stage	<p>Staged for P1CT IND</p> <p>[Parallel, Double-blind, Randomized, Placebo-Controlled Phase 1 Clinical Study to Assess the Safety, Local Tolerance, and Pharmacokinetics after Single Ascending and Multiple Ascending Doses of DWRX2008 in 56 healthy Korean and Caucasian Volunteers]</p>
Route of Administration	Ocular Instillation (Eyedrop)