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Scientists in Korea develop retinal therapy to restore lost vision?

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First successful induction of long-term neural regeneration in mammalian retinas

Researchers at Korea Advanced Institute of Science and Technology (KAIST) have successfully developed a novel drug to restore vision. While recent advancements in retinal disease treatments have successfully slowed disease progression, no effective therapy has been developed to restore already lost vision—until now.

The research team at KAIST has successfully induced retinal regeneration and vision recovery in a disease-model mouse by administering a compound that blocks the PROX1 (prospero homeobox 1) protein, which suppresses retinal regeneration. Furthermore, the effect lasted for more than six months.

This study marks the first successful induction of long-term neural regeneration in mammalian retinas, offering new hope to patients with degenerative retinal diseases who previously had no treatment options.

Dr Eun Jung Lee, at KAIST Department of Biological Sciences, stated, "We are completing the optimisation of the PROX1-neutralising antibody (CLZ001) and move to preclinical studies before administering it to retinal disease patients. Our goal is to provide a solution for patients at risk of blindness who currently lack proper treatment options."

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