NOVEL ANTI-GLAUCOMA COMPOUNDS

THERAPEUTICS
First-in-class, small molecule therapy for glaucoma that directly targets intraocular pressure, offering neuroprotection and slowing disease progression.

TECHNOLOGY TYPE
Small Molecule
Ophthalmology
Glaucoma

STAGE OF DEVELOPMENT
- Proof of concept demonstrated in mice.
- Further testing in primate models to optimize composition for safety and topical delivery required.

IP PROTECTION
Provisional Patent Filed

FUNDING TO DATE
Received over 200k from the Moran Eye Center and Neuroscience Initiative.

LEARN MORE
Reference Number: U-6159

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TECHNOLOGY SUMMARY
Glaucoma is a progressive neurodegenerative disease of the eye, with the largest incidence of irreversible blindness in the world affecting 2.2 million Americans. Most current treatments lower intraocular pressure (IOP), and are only partially effective with no innovation in the last decade. Utah’s approach targets the fundamental mechanism for retinal pathology responsible for transducing the effects of eye pressure into degeneration of retinal ganglion cells. Utah small molecule inhibitor is a novel TRPV4 channel antagonist with an excellent in vivo profile suitable for clinical development.

FEATURES AND BENEFITS
- First-in-class TRPV4 small molecule inhibitor of Glaucoma.
- Lowers IOP and offers neuroprotection.
- Extended applications in chronic eye pain and vision loss associated with traumatic brain/eye injuries involving TRPV4 channel.

RECENT PUBLICATIONS

INVENTOR PROFILE
David Krizaj, Ph.D., Professor - Ophthalmology and Visual Sciences
Paul Sebahar, Ph.D., Research Associate Professor - Chemistry
Ryan Looper, Ph.D., Henry Eyring Associate Professor - Chemistry
Christopher Reilly, Ph.D., Associate Professor - Pharmacology and Toxicology

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