MODULATION OF WNT5A TO TREAT GLAUCOMA

Tech ID: 27654 / UC Case 2017-162-0

PATENT STATUS

Country	Type	Number	Dated	Case
Hong Kong	Issued Patent	HK40022797	05/08/2026	2017-162
Austria	Issued Patent	3668487	02/18/2026	2017-162
Belgium	Issued Patent	3668487	02/18/2026	2017-162
Bulgaria	Issued Patent	3668487	02/18/2026	2017-162
Switzerland	Issued Patent	3668487	02/18/2026	2017-162
Germany	Issued Patent	3668487	02/18/2026	2017-162
Denmark	Issued Patent	3668487	02/18/2026	2017-162
Estonia	Issued Patent	3668487	02/18/2026	2017-162
European Patent Office	Issued Patent	EP3668487	02/18/2026	2017-162
Spain	Issued Patent	3668487	02/18/2026	2017-162
Finland	Issued Patent	3668487	02/18/2026	2017-162
France	Issued Patent	3668487	02/18/2026	2017-162
United Kingdom	Issued Patent	3668487	02/18/2026	2017-162
Ireland	Issued Patent	3668487	02/18/2026	2017-162
Italy	Issued Patent	3668487	02/18/2026	2017-162
Lithuania	Issued Patent	3668487	02/18/2026	2017-162
Luxembourg	Issued Patent	3668487	02/18/2026	2017-162
Latvia	Issued Patent	3668487	02/18/2026	2017-162
Malta	Issued Patent	3668487	02/18/2026	2017-162
Netherlands (Holland)	Issued Patent	3668487	02/18/2026	2017-162
Norway	Issued Patent	3668487	02/18/2026	2017-162
Portugal	Issued Patent	3668487	02/18/2026	2017-162
Romania	Issued Patent	3668487	02/18/2026	2017-162
Sweden	Issued Patent	3668487	02/18/2026	2017-162
Slovenia	Issued Patent	3668487	02/18/2026	2017-162
Unitary Patent	Issued Patent	3668487	02/18/2026	2017-162
Japan	Issued Patent	7299889	06/20/2023	2017-162
Japan	Published Application	2025-107451	07/17/2025	2017-162
United States Of America	Published Application	20240124538	04/18/2024	2017-162
China	Published Application	CN 117379543 A	01/12/2024	2017-162
China	Published Application	CN 117159463 A	12/05/2023	2017-162
China	Published Application	CN 117159718 A	12/05/2023	2017-162
Japan	Published Application	2023-099171	07/11/2023	2017-162
United States Of America	Published Application	20200157158	05/21/2020	2017-162

Additional Patents Pending

BRIEF DESCRIPTION

A major risk factor for glaucoma which affects over 3 million Americans and 60 million people worldwide is increased intraocular pressure (IOP), which can damage the optic nerve and cause permanent blindness without treatment. Currently, there is no cure for glaucoma. Existing eye drops or oral medications are of limited efficacy with many side effects, and surgeries often fail with scar formation and fibrosis. Schlemm's canal (SC) is a circumferential channel located at the iridocorneal angle in the ocular anterior chamber. It is part of the conventional aqueous humor outflow system, which accounts for 70–90% of the total aqueous humor that drains out of the eye in human. The endothelial cell lining of Schlemm's canal is one of the primary sites of resistance to aqueous humor drainage and is a major determinant of IOP. When canal

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OTHER INFORMATION

CATEGORIZED AS

» **Biotechnology**

» Health

» **Medical**

» Delivery Systems

» Disease: Ophthalmology and Optometry

RELATED CASES

2017-162-0

resistance increases with age or under pathological situation, IOP is elevated leading to glaucoma with irreversible optic nerve damage and vision loss. It is therefore an important target for glaucoma therapy.

UC researchers have discovered that Wnt5a is expressed on Schlemm's canal, where its expression is regulated in response to sheer stress change, and devised a method for treating Glaucoma or pathogenic intraocular pressure by locally administering to an eye in need thereof formulations of a Wnt5a inhibitor.

SUGGESTED USES

Treatment of Glaucoma or intraocular pressure.

ADVANTAGES

A dramatic improvement over current therapies.

RELATED MATERIALS

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- Treatment Of Glaucoma By Neuroprotection
- Modulation of Sc Function To Treat Glaucoma
- Live Imaging of Corneal Lymphatic Vessels

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