

Topical peptide treatment for retinal neurodegeneration

Peptides to be used in the topical treatment of retinal neurodegenerative diseases have been discovered. They are particularly useful in early stages of the diabetic retinopathy, as well as other retinal diseases in which neurodegeneration plays an essential role. Partners to establish licensing or co-development agreements are sought.

The Need

Diabetic retinopathy (DR) is the most common complication of diabetes and remains the leading cause of blindness among working-age individuals in developed countries. Current treatments are indicated in too advanced stages of the disease and they are associated with significant adverse effects. Therefore, it is necessary to find a treatment that can reach the retina to target early neurodegeneration, since eye drops cannot.

The Solution

Contrary to all prejudices, the inventors have solved a long-felt need in the field of ophthalmology by providing peptides that, administered topically and despite their high molecular weight, can reach the retina and exert therein a neuroprotective effect to prevent it from early degeneration. In addition, the topical administration of these peptides limits their action to the eye and minimizes the associated systemic adverse effects.

Innovative Aspects

- ✓ A novel peptide therapy for the early treatment of retinal neurodegeneration, in particular DR.
- ✓ Non-invasive early treatment and/or prevention of retinal neurodegeneration
- ✓ Localized topical treatment, reaching therapeutic concentrations without other systemic effects.

Stage of Development

The efficacy of the peptides was studied in a significant number of animal models for obesity-induced type 2 diabetes. *In vitro* tests have been done in human postmortem eyes.

Target Market

Diagnostic companies.



Features of
diabetic
retinopathy



On the left, view from a normal eye. On the right, view from a DR patient's eye.

IP rights

EP priority application

Portfolio of technologies

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We are looking for...

Partners to further develop and commercialize the technology through co-development or licensing agreements.

Contact details

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