

Lenses for Degenerative Vitreous Syndrome (DVS) and its retinal correlations

DESCRIPTION:

The objective is twofold: (1) to develop and test new soft photochromatic contact lenses for DVS; (2) to validate pigmented contact lenses and blue-blocking IOLs, evaluating their efficacy to improve visual quality and reduce vitreous oxidative stress for DVS and its retinal correlations.

ABSTRACT:

Eye floaters are a leading cause of ophthalmic consultations, however there is no specific therapy and little can be done excluding surgery or yag-laser, often considered too risky. There is evidence that sunglasses can reduce floaters perception by increasing pupil diameter and lowering light contrast. But sunglasses cannot be worn throughout the day and tinted contact lenses cannot adapt to light changes. Soft photochromatic contact lenses (SPCLs) would be a very useful device for patients with DVS. Furthermore there is evidence that UV light can promote DVS: so adding an UV absorber to contact lenses and/or IOLs can reduce DVS progression. Proving the clinical efficacy of SPCLs and evaluating if they can really reduce the oxidative stress in the vitreous are key points to turn them into a new business product. In addition we aim to test the efficacy of already existing lenses with respect to DVS, for contact or intraocular use, creating a new brand of validated products for DVS.