New White Paper Highlights the Potential for Bioptic Telescopes to Mitigate Dementia Risk in Visually Impaired Patients

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Chapel Hill, North Carolina - December 10, 2025 -
Ocutech, Inc. has announced the publication of a new white paper that examines the potential of bioptic telescope low vision aids to help reduce the risk of cognitive decline and dementia in individuals with visual impairment. Written by Dr. Henry A. Greene, OD, FAAO, retired Professor and Director of the Low Vision Service at the University of North Carolina at Chapel Hill, the paper brings attention to a timely and urgent issue in aging and vision care.

The white paper, titled Reducing Dementia Risk: The Case for Bioptic Telescope Low Vision Aids, builds on a growing body of research that links vision loss with increased cognitive risk. It responds to a recent JAMA Ophthalmology* viewpoint by Dr. Joshua Ehrlich, which highlights visual impairment (VI) as a modifiable risk factor for dementia - but stops short of exploring the role that low vision rehabilitation may play in prevention.

?While medical treatments for eye disease are critical, rehabilitation strategies - particularly bioptic

telescopes - offer a powerful, underutilized tool for preserving quality of life and possibly even cognitive health,? said Dr. Greene.

The paper outlines how untreated visual impairment contributes to cognitive decline through multiple pathways. These include sensory deprivation, reduced social interaction, and diminished opportunities for mental stimulation - all of which are recognized contributors to Alzheimer?s and other forms of dementia.

Research shows that individuals with central vision loss often experience social withdrawal due to their inability to recognize faces, read body language, or navigate environments safely. This loss of connection can accelerate feelings of loneliness and depression, further compounding the risk of cognitive deterioration.

Ocutech?s bioptic telescope systems are designed to restore distance and mid-range vision for individuals with reduced central acuity - while preserving peripheral awareness. These devices allow users to momentarily switch between their regular vision and the magnified view offered by the telescope. In practical terms, that means users can read signs, see faces across a room, or even qualify for restricted driving privileges in most states in the US and increasingly in other countries.

But beyond the functional benefits, Dr. Greene?s white paper explores how bioptics may indirectly support cognitive resilience.

?Bioptics promote continued engagement in everyday life - attending events, having conversations, traveling independently. These activities are critical for mental stimulation and social participation, which are known to be protective against dementia,? said Dr. Greene.

Evidence cited in the paper suggests that individuals who maintain visual function through aids like bioptics are better able to preserve social bonds and remain active - two key lifestyle factors associated with reduced dementia risk

Despite their clinical value, bioptic telescopes and other low vision aids remain underutilized. As Dr. Greene notes, the American Academy of Ophthalmology recognizes vision rehabilitation as the standard of care, yet many patients never receive referrals or guidance on assistive devices.

?Low vision rehabilitation - including the use of bioptics - should be seen as part of a comprehensive care plan, not an optional add-on,? said Dr. Greene. ?The potential benefits extend beyond vision - into social, emotional, and cognitive health.?

Ocutech hopes the white paper will encourage more eye care professionals to consider bioptic devices not only for their visual enhancement but for their broader role in aging and wellness.

The white paper is available for download at www.ocutech.com.

About Ocutech, Inc.

Founded in 1984, Ocutech, Inc. is a global leader in advanced bioptic technologies for individuals with vision impairment. Headquartered in Chapel Hill, NC, the company is committed to designing tools that restore independence, mobility, and quality of life. Ocutech?s products are used by individuals around the world, empowering them to lead active and self-directed lives. To learn more, visit website or call 800-326-6460 (U.S.) / 919-967-6460 (international).

* Joshua R. Ehrlich. Untreated Vision Loss as a Modifiable Dementia Risk Factor. JAMA Ophthalmol. 2024;142(11):993?994.

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Ocutech

Ocutech is a global leader in telescopic low vision aids and develops innovative bioptic glasses that empower individuals with vision impairments to regain visual independence.

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