

## MYOPIA CONGRESSIONAL BRIEFING



Myopia is a prevalent vision condition affecting millions of people worldwide that is expected to affect more than half of the global population by 2050. As the global prevalence of myopia continues to rise, researchers are diligently working to understand and manage this vision impairment effectively. To bring awareness to the importance of myopia management research, AEVR partnered with the American Academy of Ophthalmology (AAO) and the American Academy of Optometry (AAOptom) as part of its *Research Saving Sight, Restoring Vision Initiative* to conduct its Myopia Briefing on October 19 entitled *Myopia: It No Longer is Just About Glasses*.

The briefing featured Michael Repka, MD, MBA, from Johns Hopkins University who serves as Medical Director for Government Affairs for AAO, and Paul Walline, OD, PhD, from Ohio State University who serves as the President-Elect for AAOptom, each of whom has made

significant contributions to understanding research management of myopia.

Dr. Repka began by emphasizing the projected growth of high myopia and his research into the risk factors for myopia development and progression in children which include parental myopia, ethnicity, use of electronic devices, low light levels, low time outdoors, education, family income, high-pressure educational system, reading at close distance, urban environments, and gender, with females seeing a higher incidence. Dr. Repka also highlighted research that investigates the link between outdoor activities and myopia which finds that increased time spent outdoors may play a protective role against the onset and progression of myopia in children.

Dr. Walline shared research into strategies that slow down the progression of myopia, particularly in children. These studies investigated the effectiveness of multifocal contact lenses in

controlling myopia compared to contact lenses that reshape the cornea (Orthokeratology) with data showing that both treatments work equally effectively and are safe in helping slow myopia progression and eye growth.

Dr. Repka then shared research into the use of low-dose atropine eyedrops which have shown promise and limited side effects, but the conclusion is that more data is needed and the long-term outcomes of patients who have undergone treatment need to be clarified.

Finally, Dr. Walline shared additional research on the future of myopia control, including red light, spectacles, delaying myopia onset, and a broader combination of treatments. Dr. Walline shared that while red light myopia

control has shown some positive benefits, it may also cause retinopathy and additional data is needed. Concerning spectacle control, Dr. Walline emphasized that spectacles still play an important role in effective management and further emphasized how low-dose atropine eye drops may delay the onset of myopia. In looking at a combination of treatment methods, Dr. Walline explained that progress is being made but more research is needed to establish effective methods that may be available and emphasized many of these still need to go through the regulatory process for effectiveness and safety.

Both Dr. Walline and Dr. Repka's work underscores the importance of a multi-disciplinary approach to myopia management. Their research not only provides valuable insights into effective interventions but also emphasizes the need for continued collaboration between researchers, clinicians in optometry and ophthalmology, and educators to address the growing global burden of myopia.

In addition to partnering with AAO and AAOptom with our featured speakers, AEVR also thanks member supporters of its Myopia briefing which included:

- Association for Research in Vision and Ophthalmology
- Research to Prevent Blindness
- American Association for Pediatric Ophthalmology and Strabismus
- American Optometric Association
- Global Myopia Awareness Coalition
- Genentech

As the prevalence of myopia continues to rise globally, the impact of myopia research extends beyond the laboratory, influencing clinical practice and public health strategies. With ongoing collaborative efforts and innovative research, the future holds promising prospects for enhanced myopia management strategies that can benefit individuals of all ages.

