AEVR Holds Briefing on Genetic Basis of AMD During AMD Awareness Week

On September 21, 2005, AEVR hosted a Capitol Hill briefing featuring Dr. Gregory Hageman (University of Iowa Carver College of Medicine), a lead investigator of one of the four independent teams funded by NEI that recently reported discovery of a gene strongly associated with a person’s risk of developing age-related macular degeneration (AMD), the leading cause of vision loss. The gene, Complement Factor H (CFH), is associated with the body’s inflammatory response.

“Variants in the CFH gene account for 30-50 percent of the overall risk for developing AMD,” said Dr. Hageman, who added, “individuals have a two- to four-fold increased risk of developing the disease if they inherit the risk CFH gene variant from one parent, and a five- to seven-fold risk if they inherit the risk variant from both parents.”

Dr. Hageman noted, however, that protective forms of the CFH gene have been identified, which could pave the way for strategies to treat and prevent AMD. “With continued NEI funding, researchers can now develop diagnostic platforms for early detection and therapeutic strategies such as gene therapy can be evaluated,” said Dr. Hageman, who examined more than 3,200 pairs of human donor eyes over the past 15 years to make the CFH/AMD association.

Dr. Hageman concluded by emphasizing that NIH Director Dr. Elias Zerhouni’s characterization of the discovery as one of NIH’s most important breakthroughs of the year is not to be taken lightly. “Variants of the CFH gene might also be involved with other inflammation-associated diseases such as Alzheimer’s and various kidney diseases, so understanding this gene may elucidate the immune system’s relationship to a variety of debilitating diseases. That is why continued funding of medical research at the NIH is so important, as we are now benefiting from an acceleration of discovery from past NIH research investments.”

In introducing Dr. Hageman, ARVO Executive Director Joanne Angle reminded attendees that this “breakthrough” was 15 years in the making, and that basic research should be funded over the long-term. AEVR Executive Director James Jorkasky added that the CFH/AMD association represents a tangible return on investment in the NEI, which “is working on all circuits, collaboratively with other Institutes and in public/private partnerships, which is the very intent of the draft NIH reauthorization legislation pending in the House.”

The Senate Special Committee on Aging minority staff distributed a “Dear Colleague” letter supporting the briefing, which included 60 Congressional staff attendees. NAEVR also issued its inaugural electronic “E-Zine” to Members of Congress and their staffs, which summarized recent NEI-funded research and promoted the event. AEVR’s briefing was one of many events held worldwide during AMD Awareness Week. The previous day, the AMD Alliance, the Macular Degeneration Partnership, Prevent Blindness America and the Seniors Coalition held a briefing to educate Congress about the significant impact of AMD on the productivity, independence and quality of life of seniors. At the event, the AMD Alliance released its 2005 Global Report Awareness of AMD and Associated Risk Factors which is available at www.amdalliance.org.