**Prophylaxis Intravitreal Aflibercept against Conversion to Neovascular Age-Related Macular Degeneration in High Risk Eyes (PRO-CON): 24 Month Results**

Sumit P Shah, MD  
New Brunswick, NJ

David Boyer, MD, David Brown, MD, Namrata Saroj, OD, Sabin Dang, MD, Nadia Khalida Waheed, MD, MPH, Charles C. Wykoff, MD, PhD, Jonathan Prenner, MD, Jeffrey S. Heier, MD

**Purpose:**

To evaluate intravitreal aflibercept (IAI) 2 mg as prophylaxis against the conversion to neovascular age-related macular degeneration (AMD) in high-risk eyes at 24 months.

**Methods:**

Prospective, single-masked study evaluating IAI versus sham as prophylaxis treatment against conversion to nAMD in patients with intermediate AMD in one eye (study eye), defined as presence of >10 intermediate sized drusen (≥ 63 and <125 μm), >1 large druse (≥125 μm), and/or retinal pigmentary changes with nAMD in the fellow eye. Patients were randomized 1:1 to receive either IAI or sham quarterly for 24 months. The primary endpoint was proportion of patients converting to nAMD at Month 24 characterized by development of choroidal neovascularization (CNV) assessed by leakage on FA and fluid on SD-OCT by an independent masked reading center.

**Results:**

Of the 128 patients enrolled in the study, 113 completed the Month 24 visit. Baseline best-corrected visual acuity (BCVA) was 78.7 and 77.3 letters in the IAI and sham groups respectively. By Month 24, 6/63 (9.52%) and 7/64 (10.90%) eyes in the IAI and sham groups, respectively, converted to nAMD. This difference was not statistically significant (p=0.98). The time to conversion was not different between both groups (p=0.50). In patients with non-exudative CNVs at any point prior to the Month 24 visit as determined by OCT-Angiography, 3/11 (27%) and 4/13 (31%) eyes in the IAI and sham groups, respectively, converted to nAMD (p=0.79 for rate of conversion). The rate of CNV conversion by duration of exudative disease in the fellow eye was 9/63 (14%) for disease duration less than or equal to 2 years and 4/64 (6%) for disease duration greater than 2 years (p=0.135). No new safety events were identified.

**Conclusions:**

Quarterly aflibercept injections did not demonstrate prophylactic effect against conversion to nAMD in high risk eyes. Exudative disease in the fellow eye of £ 2 years had a higher conversion rate. Presence of non-exudative CNV was more likely to convert in either group.