8:00 AM

Impact of Delayed Time to Treatment on Visual Outcomes in the HARBOR Trial

- Roger A. Goldberg, MD, MBA
- Tatiana Ecoiffier, PhD
- Lauren Hill, BA, MS
- Carlos Quezada-Ruiz, MD

OBJECTIVE To assess if the time from screening to first treatment impacts visual outcomes for patients with neovascular age-related macular degeneration (nAMD).

PURPOSE A widely held belief is that the longer fluid or hemorrhage is present in or under the retina, the worse the visual outcomes are in nAMD. One barrier to clinical trial recruitment in nAMD is the concern that treatment will be delayed for these patients as they proceed through the screening and enrollment process. The purpose of this study is to determine whether this is a valid concern.

METHODS HARBOR (ClinicalTrials.gov: NCT00891735) was a 24-month, phase 3, randomized, multicenter, double-masked, active treatment-controlled study that evaluated the efficacy and safety of intravitreal ranibizumab 0.5 mg and 2.0 mg given monthly or as needed (PRN) in patients with nAMD. This analysis included all randomized subjects (study eye only) in HARBOR who received a ranibizumab injection (intent-to-treat). Time to first ranibizumab injection was defined as the date the first injection was received on-study minus the screening date (Day 0). Delay was categorized into 2 groups: ≤6 days vs >10 days (Quartile [Q] 1 vs 4). Descriptive statistics were used.

RESULTS Of 1092 patients, time to first ranibizumab injection from screening was ≤6 days for 395 patients and >10 days for 230 patients. Baseline characteristics at screening were balanced, except for mean (standard deviation [SD]) best-corrected visual acuity (BCVA), which was higher for the ≤6-day group vs the >10-day group (55.3 [12.4] vs 52.4 [13.8], *P*=0.006), and ethnicity, for which more Hispanics/Latinos were in the >10-day group vs the ≤6-day group (5.2% vs. 1.5%, *P*=0.008). Mean (95% confidence interval [CI]) change in BCVA from baseline to Month 24 was 9.1 (7.4, 10.8) and 8.8 (6.7, 10.8) letters for the ≤6-day group vs the >10-day group (*P*=0.80). This finding for BCVA was maintained in a subgroup analysis of patients with predominantly classic lesions at baseline. Over 24 months, the mean (95% CI) total numbers of ranibizumab injections in the study eye for the PRN arms were 12.4 (11.6, 13.3) and 11.4 (10.3, 12.4) for the ≤6-day group (n=187) vs the >10-day group (n=122) (*P*=0.11).

CONCLUSION In HARBOR, for the ≤6-day and >10-day groups, there was no clinically meaningful association between time to first ranibizumab injection from screening and change in BCVA at Month 24, in all lesions and in predominantly classic lesions alone. There was no association between time to first ranibizumab injection from screening and total number of ranibizumab injections in the PRN arms.

TAKE HOME MESSAGE In HARBOR, there was no association between time to first ranibizumab injection from screening and change in BCVA at Month 24 or total number of ranibizumab injections in the PRN arms.

HUMAN RESEARCH This study involves human research.
IRB Approval Status: Approved by institutional review board

8:08 AM

Silicone Oil Droplets Are More Common in Fluid From BD Insulin Syringes As Compared To Other Syringes

- Geoffrey G. Emerson, MD, PhD

OBJECTIVE To determine if silicone oil droplets are more common in Becton Dickenson (BD) Insulin Syringes as compared to other syringes. To test the hypothesis that dead space at the syringe/needle junction proctects against silicone droplets.

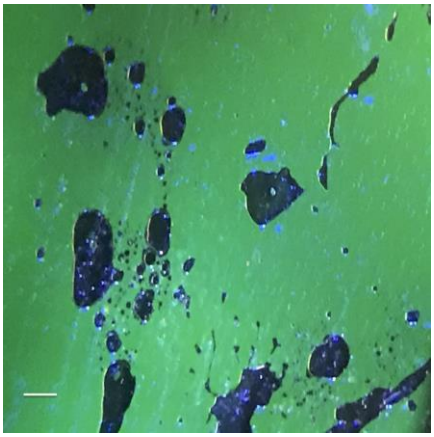
PURPOSE During 2016, ASRS received numerous reports of silicone oil droplets after intravitreal injection, primarily associated with insulin syringes with a fixed needle. Adverse event reports were relatively rare for tuberculin syringes even though they can also contain silicone lubricant. We hypothesized that insulin syringe injections have more droplets due to lack of dead space at the syringe/needle junction.

METHODS Becton Dickenson (BD) insulin syringes, BD tuberculin syringes, Henke Sass Wolf (HSW) insulin syringes, and HSW silicone free syringes (20 of each) were loaded with 0.06 mL of fluorescein ophthalmic solution (Baush & Lomb) and incubated at 4 °C for 2-4 weeks. Syringe fluid was ejected onto slides and examined microscopically for air and oil droplets. Fluid was sampled at the beginning, middle, and end of injection from the syringe. Droplets were photographed and quantified using an area calculator.

RESULTS Silicone oil droplets were identified in 5 (25%) of the BD insulin syringes; no oil droplets were found in BD tuberculin syringes, HSW insulin syringes, or HSW silicone-free syringes (ANOVA, $P<0.05$). All 5 samples with silicone oil droplets were from the end of injection (full depression of the plunger) while samples from the beginning and middle of injections from the same syringes were free of silicone oil droplets. Air bubbles were visible in the majority of samples from all types of syringes. For the BD insulin syringes and HSW insulin syringes, there was more air in samples from the end of injection as compared to beginning or middle of injection, although this trend was not statistically significant (ANOVA, $P = 0.2$ and 0.36 for BD and HSW, respectively).

CONCLUSION In this study silicone oil droplets were most common in BD insulin syringes. Oil droplets occur primarily when the plunger is depressed maximally, supporting the hypothesis that insulin syringe injections have more droplets due to lack of dead space where the plunger meets the hub of the needle. However, there are likely additional factors such as the amount or type of silicone lubricant in a syringe.

TAKE HOME MESSAGE Silicone oil droplets are a potential complication in any syringe that is lubricated by silicone. However, oil droplets are most commonly observed with BD insulin syringes, especially when the plunger is depressed maximally.



8:13 AM

Presumed Silicone Oil Droplets in the Vitreous Cavity After Intravitreal Bevacizumab Injection With Insulin Syringes

- Rahul N. Khurana, MD
- Louis K. Chang, MD, PhD
- Travis Porco, PhD, MPH

OBJECTIVE To determine the incidence of silicone oil droplets after intravitreal bevacizumab preloaded with insulin syringes.

PURPOSE In August of 2016, the American Society of Retina Specialists reported a nationwide series of reports of silicone oil droplets associated with intravitreal bevacizumab with insulin syringes. We report a dramatic increase in the incidence of this complication over a seven month time period observed in our practice in comparison to the previous seven months.

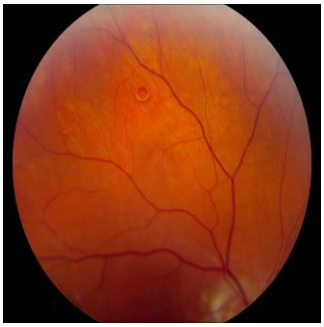
METHODS This was a retrospective review of all patients who experienced intravitreal silicone oil droplets after intravitreal bevacizumab injections from a single practice (Northern California Retina Vitreous Associates, Mountain View, CA) from 10/1/2015-11/30/2016. The clinical history of the patients, intravitreal injection techniques, and lot numbers of the bevacizumab are reviewed. The incidence of silicone oil droplets over time was analyzed with the Mann-Kendall Trend Test. The Fischer Exact Test was used

to compare the proportion of injections showing complications over seven month periods and intravitreal injection techniques.

RESULTS There were 60 cases of intravitreal silicone droplets identified over a 14 month period involving 6,632 intravitreal bevacizumab injections. From October 2015 to April 2016, the incidence of silicone oil droplet injections was 0.03% (1/3230) while it was 1.73% (59/3402) from May to November 2016 (Fischer Exact Test, P<0.001), an odds ratio of 57 (95% CI: 9.8, 2260). From May to November 2016, non-priming the syringe before the intravitreal injection was identified with a substantially higher risk of intravitreal silicone oil droplet in comparison to priming the syringe (6.4% (47/739) vs 0.5% (12/2627), Fischer Exact Test P<0.001), an odds ratio of 15.1 (95% CI: 7.9, 33.4). Among the 60 cases, 41 patients (68%) were symptomatic and the main complaint was floaters with spots of light. Among the patients symptomatic with floaters, 88% (36/41) improved over time (range 2 months to 8 months) despite the silicone droplets still being present on fundoscopic exam.

CONCLUSION We report a substantial increase in the intravitreal silicone oil associated with bevacizumab preloaded with insulin syringes. Priming the syringe before injection was associated with a lower frequency of this complication. Physicians should counsel their patients of the risk of floaters with intravitral bevacizumab preloaded with insulin syringes.

TAKE HOME MESSAGE Physicians should counsel their patients of the risk of floaters with intravitreal bevacizumab preloaded with insulin syringes.



HUMAN RESEARCH This study involves human research.
IRB Approval Status: Approved by institutional review board

8:25 AM

Prognostic Value of Subretinal Hyperreflective Material in Neovascular Age-Related Macular Degeneration Treated With Bevacizumab

- Russell Pokroy, MD
- Ori Segal, MD
- Michael Mimouni
- Edward Barayev

OBJECTIVE To correlate the SD-OCT characteristics of baseline subretinal hyperreflective material with visual outcome after intravitreal bevacizumab injection in neovascular AMD.

PURPOSE To study the correlation between subretinal hyperreflective material (SHRM) seen on spectral-domain optical coherence tomography (SD-OCT) at baseline and visual outcomes after intravitreal bevacizumab injection (IVB) in neovascular age-related macular degeneration (nAMD).

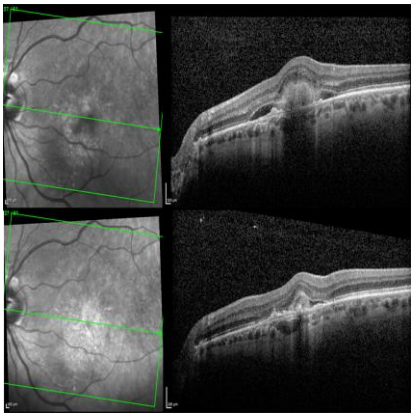
METHODS We restrospectively reviewed charts and SD-OCTs of consecutive center-involved treatment-naïve nAMD eyes treated with IVB from 2011 and to 2014. Baseline SD-OCT SHRM parameters (height, width, area, reflectivity, border definition, and homogeneity) were collected. In addition other baseline OCT biomarkers (intraretinal

fluid, subretinal fluid, retinal volume, central retinal thickness, PED presence) were collected. These were correlated with visual acuity at baseline, 3 and 12 months.

RESULTS Seventy-three eyes of 73 patients were studied. The mean age of the participants was 79 ± 9 years. Mean baseline BCVA was 0.70 ± 0.57 logMAR (20/100). After 3 and 12 months, mean BCVA was 0.73 ± 0.55 (20/107) and 0.76 ± 0.63 (20/115), respectively. Forty-seven of these cases had central SHRM at baseline. Baseline parameters with significant predictive value of 12-month VA by univariate analysis were presence of intraretinal fluid, presence of SHRM, highly reflective SHRM, well-defined SHRM borders, and thick SHRM. These parameters, with the exception of high reflectivity, were significant on stepwise multivariate regression analysis. The most predictive baseline parameter was well-defined SHRM borders.

CONCLUSION SHRM appears to be a useful prognostic SD-OCT biomarker when interpreting SD-OCT scans in treatment-naïve nAMD. Baseline parameters predicting poorer vision 1 year after IVB treatment are: presence of central SHRM, well-defined SHRM borders, intraretinal fluid, and thicker SHRM.

TAKE HOME MESSAGE Subretinal hyperreflective material is a useful biomarker for interpreting baseline OCT scans in exudative AMD.



HUMAN RESEARCH This study involves human research.
IRB Approval Status: Approved by institutional review board

8:33 AM

Correlation of Subretinal Hyperreflective Material Morphology and Visual Acuity in Neovascular AMD

- Jaya B. Kumar, MD
- Glenn J. Jaffe, MD
- Sandra S. Stinnett, DrPH
- Jungil Han, MD,PhD

OBJECTIVE To evaluate the association of subretinal hyperreflective material (SHRM) morphological features with visual acuity in eyes with neovascular AMD.

PURPOSE SHRM likely consists of fluid, fibrin, blood, scar, and CNV. Characterizing the morphology of SHRM will provide practitioners with a framework to predict morphologic and visual prognosis. While the clinical appearance of SHRM is variable, we hypothesized that specific SHRM morphologic characteristics would be correlated with worse visual acuity.

METHODS We reviewed retrospectively 170 patients within randomized anti-VEGF/anti-PDGF interventional clinical trials of treatment-naÃ¯ve patients with NVAMD. Standardized spectral-domain (SD) OCT images were graded at baseline, 12 week, and 24 week follow up visits. Masked readers evaluated the morphology of SHRM (reflectivity, shape, anterior and posterior boundaries), noted presence of subretinal or intraretinal fluid, determined whether specific retinal layers were disrupted, and measured SHRM height, width, and area within the fovea, within the center 1 mm^2, or outside the center 1 mm^2.

RESULTS Baseline SHRM characteristics that correlated with worse VA at 12 and 24 weeks included tall shape (p=0.001, 0.001), layered appearance (p=0.007, 0.002), hyperreflective spots in SHRM (p=0.001, 0.011), and separation between SHRM and outer retina (p=0.03, 0.019) and SHRM and RPE (p=0.044, 0.013). The disappearance of SHRM correlated with better VA at weeks 12 and 24 (p<0.001), and more SHRM hyperreflective lesions at baseline correlated with worse VA at 12 (p=0.165) and 24 weeks (p=0.205). Increased height, width, and area of SHRM correlated with worse VA at 12 weeks at foveal center (p= 0.046, 0.0001, 0.01), within the center 1 mm^2 (0.0021, 0.001, 0.001), and the entire macula (p=0.001, 0.001, 0.0001). Increased height, width, and area of SHRM also correlated with worse VA at 24 weeks at the foveal center (p=0.048, 0.0001, 0.001), within the center 1 mm^2 (0.008, 0.001, 0.001), and the entire macula (p=0.0008, 0.001, 0.001).

CONCLUSION Several attributes of SHRM including taller shape, layered appearance, increased reflectivity, larger size, and hyperreflective spots correlated with worse VA at 12 and 24 week follow up. Baseline SHRM characteristics can help practitioners predict visual and morphological prognosis and guide therapy.

TAKE HOME MESSAGE Baseline SHRM morphologic characteristics on OCT can help practitioners predict visual and morphological prognosis and guide therapy in wet AMD.

HUMAN RESEARCH This study involves human research.
IRB Approval Status: Exempt from approval

8:45 AM

Sirolimus in Conjunction With Aflibercept vs Aflibercept Monotherapy for the Treatment of Chronic Exudative AMD

- Raj K. Maturi, MD
- Ashley Harless
- Peter Bracha, MD
- Jay Chhablani, MD
- Ayesha Jabeen

OBJECTIVE To determine the efficacy and safety of intravitreal Sirolimus in patients with wet AMD and persistent intra-retinal or sub-retinal edema despite previous intravitreal Anti-VEGF treatment.

PURPOSE In a previous study, we compared Silorimus to standard anti-VEGF treatment for chronic wet AMD in 40 eyes. This study achieved its primary end point of a significant decrease in CST (30 um) in the Sirolimus group vs an increase (by 7.5 um) in the standard anti-VEGF group (p=0.049). We wish to determine if the addition of Aflibercept to Sirolimus would improve the biological response further.

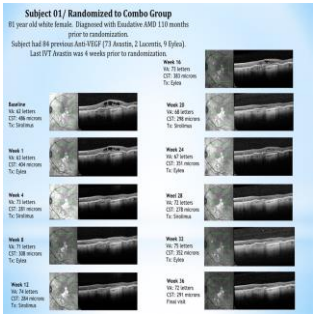
METHODS A prospective, subject masked, randomized study of subjects with persistent intra-retinal or sub-retinal fluid despite appropriate treatment with anti-VEGF agents for exudative AMD. Subjects in group 1 received intravitreal injections of Sirolimus (440 ug) at baseline, week 4, 12, 20 and 28 and aflibercept at weeks 1, 8 and 16. Future aflibercept injections were based on continued fluid. Group 2 received aflibercept at baseline, week 8, 16, 24 and 32. Twenty subjects were randomized (1:1) with the primary end point at nine months. A number of standard safety and efficacy measures were

performed at each visit, including fluorescein angiography at baseline and at the end of the study.

RESULTS The study is fully recruited and ongoing. We anticipate that the last subject visit will be complete in March 2017. At baseline, the visual acuity of the combination group was 63 letters and that of Aflibercept alone was 61 letters. The OCT CST and volume were comparable between groups. There have been no study related SAE's to date and no safety issues with providing both Sirolimus and Eyela one week apart to the same eye for each subject in group 1 at the start of the study. At this point, 100% of the subjects have completed week 28, and 60% of the subjects have completed the study (week 36). There has been 100% retention of subjects, and only one missed visit.

CONCLUSION We anticipate presenting the complete results of this 9 month study at the meeting.

TAKE HOME MESSAGE Chronic wet AMD has a poorer visual prognosis and could benefit from alternatives to anti-VEGF agents. Sirolimus has both anti-VEGF as well as anti-proliferiative charecteristics.



HUMAN RESEARCH This study involves human research.
IRB Approval Status: Approved by institutional review board

8:53 AM

A Phase 2 Study (EMERGE) Evaluating Repeated Intravitreal Administration of ICON-1 in Patients With Choroidal Neovascularization (CNV) Secondary to Age-related Macular Degeneration (AMD)

- Christine R. Gonzales, MD
- Gabriela Burian, MD, MPH

OBJECTIVE The study examined the hypothesis that ICON-1, an anti-Tissue Factor (TF) immunoconjugate protein, which binds to CNV overexpressing TF will demonstrate biological effect on the CNV lesion alone or in combination with ranibizumab (RBZ).

PURPOSE Current anti-VEGF therapies for wet AMD reduce leakage and exudation but do not appear to impact CNV progression. Antagonizing Tissue Factor (TF) signalling in the CNV cells provides a new mechanism of action which could lead to reduction of CNV lesion size and exudation, and ultimately lead to the modification of the underlying CNV progression.

METHODS EMERGE was a prospective, randomized, double-masked, active control study which enrolled 88 patients with treatment naïve CNV secondary to AMD. Patients were randomized 1:1:1 and received intravitreal injections of ICON-1 0.3mg as monotherapy

(n=30), ICON-1 0.3mg in combination with ranibizumab 0.5mg (n=30) or ranibizumab 0.5mg monotherapy (n=28). Patients received 3 initial monthly injections, then remained masked in their respective randomized group for an additional 3 possible injections as needed, based on protocol retreatment criteria. Safety, BCVA letter score and CNV lesion activity were assessed monthly with optical coherence tomography (sdOCT) and quarterly with fluorescein angiography (FA).

RESULTS No serious ocular adverse events were reported. The most frequently reported study eye ocular adverse events (AEs) in all groups were conjunctival hemorrhage (13.3-26.7%), vitreous floaters (10.7-13.3%), eye pain (3.3-23.3%) and retinal hemorrhage due to AMD (0-26.7%). After the 3 required injections, mean BCVA increased from baseline to Month 3 (primary endpoint) by 0.3 letters with ICON-1 monotherapy, 6.8 letters with ICON-1 in combination with RBZ, and 7.6 letters with RBZ monotherapy and was associated with CRT reduction in all treatment groups. From Month 3 to 6, fewer patients in the ICON-1 combination group (60%) received one or more additional re-treatment injection compared to ICON-1 (82.8%) and RBZ (85.2%) monotherapy. Mean BCVA and mean CRT between months 3 and 6 were maintained in all treatment groups. At 6 months, the highest reduction in the CNV lesion area was observed in the combination group and a higher proportion of patients had a dry retina at Month 6 in the combination group compared to either monotherapy group.

CONCLUSION Repeated intravitreal ICON-1 0.3mg injections alone or in combination with RBZ were well tolerated. BCVA gain and CRT reduction was similar in the ICON-1 combination and RBZ groups, although they were maintained with fewer treatments from Month 3 to 6 with ICON-1 combination. Together with signs of reduction in CNV lesion area and exudation, these results provide biological signals of ICON-1 activity on the reduction of CNV progression.

TAKE HOME MESSAGE Repeated intravitreal injections with ICON-1 (0.3mg) alone or in combination with Ranibizumab were well tolerated and demonstrated biologic signals by reduction of CNV progression.

HUMAN RESEARCH This study involves human research.
IRB Approval Status: Approved by institutional review board

9:01 AM

A Phase 1/2a Study of Intravitreal OPT-302, A Novel VEGF-C/D Inhibitor, Alone or in Combination With Ranibizumab in Patients With Wet AMD

- Pravin U. Dugel, MD
- David S. Boyer, MD
- Andrew N. Antoszyk, MD
- Nathan C. Steinle, MD
- Michael P. Varenhorst, MD
- Joel Pearlman, MD, PhD
- Patrick M. Higgins, MD
- Joseph P. Walker, MD, FACS
- Michael Tolentino, MD
- John A. Wells, MD, FACS
- Lawrence J. Singerman, MD,FACS
- Robert P. Finger, MD, PhD
- Sunil Gupta, MD
- Ian Leitch, PhD
- Megan E. Baldwin, PhD

OBJECTIVE First time presentation of a Phase 1/2a study of the VEGF-C/-D inhibitor OPT-302 alone or in combination with the anti-VEGF-A agent ranibizumab in patients (pts) with wet AMD.

PURPOSE OPT-302 is a biologic inhibitor of VEGF-C/D that reduces vascular leakage and neovascularization in mouse models. VEGF-C/D are associated with sub-optimal response to anti-VEGF-A therapy and thus OPT-302 + ranibizumab may improve

outcomes in wet AMD patients. The purpose of this Phase 1/2a study was to determine the effects of OPT-302 alone or with ranibizumab in 51 patients with wet AMD.

METHODS The Phase 1/2a trial (NCT02543229) in pts who were either treatment naïve or prior treated with intravitreal (IVT) anti-VEGF-A therapy, comprised a Part 1 dose escalation (20 pts) and a Part 2 dose expansion (31 pts). In Part 1, 4 cohorts of 5 pts received OPT-302 (0.3, 1 or 2 mg) in combination with ranibizumab (0.5 mg); or OPT-302 monotherapy (2 mg). In Part 2, 31 pts were randomized in a 3:1 ratio to two cohorts with OPT-302 at 2 mg, either in combination with ranibizumab (n=23) or as monotherapy (n=8). Pts received IVT OPT-302 ± ranibizumab once every 4 weeks for a total of 3 doses and were assessed for safety, best-corrected visual acuity (BCVA), and anatomic measurements on SD-OCT.

RESULTS All doses of IVT injections of OPT-302 ± ranibizumab were safe and well tolerated. There were no dose limiting toxicities and a maximum tolerated dose was not reached with OPT-302 up to 2 mg. There were no treatment related serious adverse events. The most common treatment-emergent adverse events were ocular adverse events of conjunctival hemorrhage, punctate keratitis and eye pain, which were mostly mild and manageable and related to the IVT injection procedure. Analysis of changes from baseline in BCVA and anatomic measures on SD-OCT following the 3-month dosing period have demonstrated preliminary clinical activity.

CONCLUSION This first time presentation will show that inhibition of VEGF-C/D by intravitreal injections of OPT-302 in doses up to 2 mg either as monotherapy or combined with suppression of VEGF-A was safe and well tolerated with preliminary evidence of clinical activity. Further clinical evaluation of OPT-302 in combination with anti-VEGF-A therapy is warranted.

TAKE HOME MESSAGE Inhibition of VEGF-C/D by intravitreal injections of OPT-302 in doses up to 2 mg and combined with the anti- VEGF-A ranibizumab, was well tolerated and feasible in patients with neovascular AMD.

HUMAN RESEARCH This study involves human research.
IRB Approval Status: Approved by institutional review board

9:10 AM

RAPTR: ERG/EOG Study in AMD Patients Treated With Ranibizumab

- Abdhish R. Bhavsar, MD
- Ryan Scheurer, MD

OBJECTIVE The objective of this study is to determine the quantitative changes in the electrophysiologic amplitudes and latencies from baseline to month 12 in ranibizumab-treated eyes with exudative AMD (age related macular degeneration).

PURPOSE The objective of this study is to determine the quantitative changes in the electrophysiologic amplitudes and latencies from baseline to month 12 in ranibizumab-treated eyes with exudative AMD (age related macular degeneration).

METHODS This is an open label study assessing ERG (electroretinogram) and EOG (electrooculogram) outcomes in patients with exudative AMD. ERG and EOG testing were conducted at baseline, and at 6 and 12 months after initiating ranibizumab treatment. Ten patients with exudative AMD were enrolled and received monthly intravitrous ranibizumab injections.

RESULTS No statistically significant differences were identified in ERG or EOG testing including: single photopic flash, maximal photopic response, rod response, 30 Hz flicker, notation of oscillatory potentials, multifocal ERG, EOG testing.

CONCLUSION Monthly intravitreous injection of ranibizumab for treatment of exudative AMD did not demonstrate statistically significant ERG or EOG changes over the course of 1 year treatment.

TAKE HOME MESSAGE Although there is a possibility that inhibiting VEGF (vascular endothelial growth factor) could damage retinal function over a 1 year course of therapy, this study showed that there was no significant differences in ERG or EOG changes over the course of 1 year of ranibizumab treatment.

HUMAN RESEARCH This study involves human research.
IRB Approval Status: Approved by institutional review board

9:15 AM

Outcomes in Patients With Neovascular Age-Related Macular Degeneration Based on Dosing Subgroups in the Second Year of the VIEW 1 and VIEW 2 Studies

- Anthony Joseph, MD

OBJECTIVE To explore vision outcomes in extended and more frequent dosing-interval subgroups of patients following first year of fixed-dosing in the VIEW 1 and VIEW 2 Studies.

PURPOSE To evaluate outcomes in patients (pts) with neovascular age-related macular degeneration (AMD) during the second year (weeks[wks] 52-96) of treatment following fixed dosing with intravitreal aflibercept injection (IAI) and ranibizumab during the first-year in the VIEW studies.

METHODS In year 1, pts received 0.5 mg ranibizumab q4 wks (Rq4), 2 mg IAI q4 wks (2q4), 0.5 mg IAI q4 wks (0.5q4), or 2 mg IAI q8 wks after 3 monthly injections (2q8). In year 2, pts received their randomized assignment (IAI or ranibizumab) using a modified quarterly regimen based on prespecified criteria with a mandatory dose at least q12 wks. Two subgroups of pts who received Rq4 and 2q4 were evaluated for efficacy: 1) pts who only received injections at ³12 wk intervals (≥q12-wk subgroup), and 2) Pts who received at least one injection at <12 wk interval (<12q-wk subgroup). Only

pts who completed 2 years of follow-up were included. Integrated data from VIEW studies are reported here.

RESULTS At week 96, 42.5%, 53.9%, and 47.9% of pts in the Rq4, 2q4, and 2q8 groups, respectively, were in the ³q12-week subgroup. Corresponding proportions of pts in the (<12q-week subgroup were 57.5%, 46.1%, and 52.1%, respectively. Mean BCVA gains achieved at week 52 in both subgroups were largely maintained through week 96, and these outcomes were consistent with the BCVA gains for the total population (Table). Incidences of Antiplatelet Trialists' Collaboration defined arterial thromboembolic events were similar across treatment groups (2.4% to 3.8%) from baseline to week 96.

CONCLUSION A numerically higher proportion of pts treated with IAI received injections at ³q12 week intervals compared to ranibizumab from week 52 to 96. BCVA gains achieved at week 52 were largely maintained through week 96 in both subgroups indicating many pts maintained their visual and anatomic improvements with dosing at ≥q12â€‘week intervals following fixed-dosing during the first year

TAKE HOME MESSAGE A numerically higher proportion of patients treated with IAI received injections at ≥q12 week intervals and maintained their improvements compared to ranibizumab in the second year of VIEW studies.

Table. Mean BCVA Gains from Baseline in Total Patient Population and the ≥q12-Week and <q12-Week Subgroups at Weeks 52 and 96.

	Mean BCVA gain from baseline (letters)					
	Week 52			Week 96		
	Rq4	2q4	2q8	Rq4	2q4	2q8
Total patient population	8.7	9.3	8.4	7.9	7.6	7.6
≥q12-week subgroup	8.7	9.9	9.7	8.5	8.8	9.2
<q12-week subgroup	10.3	9.7	8.9	9.1	7.7	8.1

HUMAN RESEARCH This study involves human research.
IRB Approval Status: Approved by institutional review board