Mean 1-Year Visual Acuity Change in Retinal Vein Occlusion-Related Macular Edema Correlates with Anti-VEGF Treatment Intensity: An Analysis of 12,214 Eyes

Abstract Id:	30063640
Topic:	RETINA, VITREOUS Case Series Medical Retinal Diseases

Abstract Body:

Purpose: To describe VA outcomes of anti-VEGF therapy for RVO-related ME.

Methods: Treatment-naïve RVO patients with ME who underwent anti-VEGF injections between 2013 and 2019 were retrospectively assessed, using the Vestrum Health Retina Database.

Results: In 6,914 eyes with BRVO-related ME, after a mean of 7.4 anti-VEGF injections at 1 year, mean VA gain was 8.1 letters (95% CI +7.55 to +8.57, P < 0.001). In 5,300 eyes with CRVO-related ME, after a mean of 7.6 anti-VEGF injections at 1 year, mean VA gain was 7.1 letters (95% CI +6.31 to +7.95; P < 0.001). These VA gains compare favorably to those in neovascular AMD (49,485 eyes; 7.3 injections; +1.0 letter at 1 year; P < 0.001) and DME (28,658 eyes; 6.4 injections; +4.2 letters at 1 year; P < 0.001). For RVO-related ME, at 1 year, there was a linear relationship between mean letters gained and mean number of injections. Patient eyes with baseline VA of 20/40 or better tended to lose VA at 1 year.

Conclusion: In practice, RVO-related ME patients experience greater 1-year VA gain than patients with AMD and DME, but exhibit a larger gap in VA gain when compared to respective randomized trials.

Course Format:	Paper/Poster
Financial Interest:	No
Industry Employed:	Yes
Study Design:	Noncomparative Case Series
Approved by IRB:	No, Not Required
Précis:	In practice, RVO-related macular edema patients experience greater 1-year VA gain than patients with AMD and DME, but exhibit a larger gap in VA gain when compared to respective randomized trials. Mean change in VA correlates with treatment intensity at 1 year. Patients with better VA at presentation tend to be particularly vulnerable to vision loss.
Background Statement:	As the healthcare system shifts from a volume-based to a value-based one, real-world outcomes become increasingly important. However, there have been few large real world studies of anti-VEGF therapy for retinal vein occlusion-related macular edema.

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Other Information

Is the Presenting Author of this submission in a residency program (formal training) or subspecialty training for ophthalmology?

No

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Yes