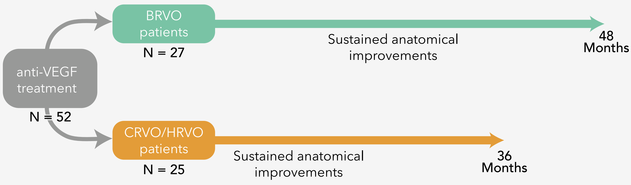
Long-Term Outcomes of Anti-VEGF Therapy in Patients With Macular Edema Secondary to Retinal Vein Occlusion

Young JM, Wai KM, Silva FQ, et al. *J Vitreoretin Dis*; 2017,5;298-304.
doi:10.1177/2474126417721560

In this study, the researchers evaluated long-term visual and anatomical outcomes of anti-vascular endothelial growth factor (VEGF) therapy for macular edema (ME) secondary to retinal vein occlusion (RVO) in routine clinical practice.

Patients with ME secondary to hemi-RVO (HRVO), central RVO (CRVO), or branch RVO (BRVO) after initiating anti-VEGF therapy were followed for at least 36 months.

Patients with BRVO and patients with CRVO/HRVO had continued benefits of anti-VEGF treatment beyond 2 years.

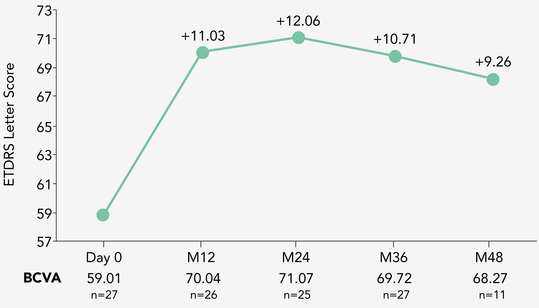


These findings are similar to those found at 36 months in both the RETAIN study and those found by Rezar et al, but with slightly less improvement in best visual acuity (BVA) and central subfield thickness (CST).

There is a strong relationship with initial BVA and CST in both BRVO and CRVO/HRVO diagnoses.

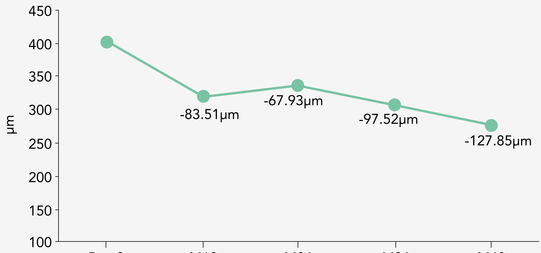
For both groups of patients, those with lower ETDRS letter score at baseline showed greater visual improvement at 3 years, whereas a higher CST on initial presentation was predictive of greater anatomic improvement at year 3.

Mean BVA in ETDRS letters of patients with BRVO plotted at 12-month intervals from initial diagnosis and treatment through 48 months



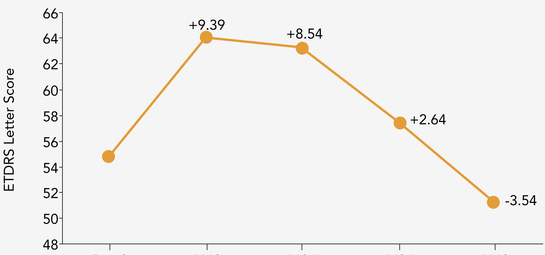
	Day 0	M12	M24	M36	M48
BCVA	59.01	70.04	71.07	69.72	68.27
	n=27	n=26	n=25	n=27	n=11

Mean CST of patients with BRVO plotted at 12-month intervals from initial diagnosis and treatment through 48 months



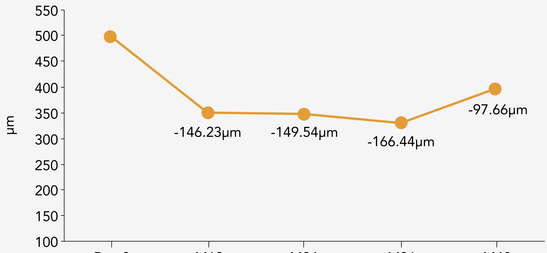
	Day 0	M12	M24	M36	M48
CST	403.41	319.9	335.48	305.89	275.56
	n=27	n=26	n=25	n=27	n=11

Mean BVA in ETDRS letters of patients with CRVO/HRVO plotted at 12-month intervals from initial diagnosis and treatment through 48 months



	Day 0	M12	M24	M36	M48
BCVA	54.77	64.16	63.31	57.41	51.23
	n=25	n=25	n=25	n=25	n=9

Mean CST of patients with CRVO/HRVO plotted at 12-month intervals from initial diagnosis and treatment through 48 months



	Day 0	M12	M24	M36	M48
CST	496.72	350.49	347.18	330.28	399.06
	n=25	n=25	n=25	n=25	n=9

Conclusions

In routine clinical practice, visual and anatomical benefits of anti-VEGF agents in patients with BRVO were sustained at 36 and 48 months. For patients with CRVO/HRVO, anatomical improvements were maintained for 36, but not 48 months, while visual improvements were no longer maintained by 36 months.