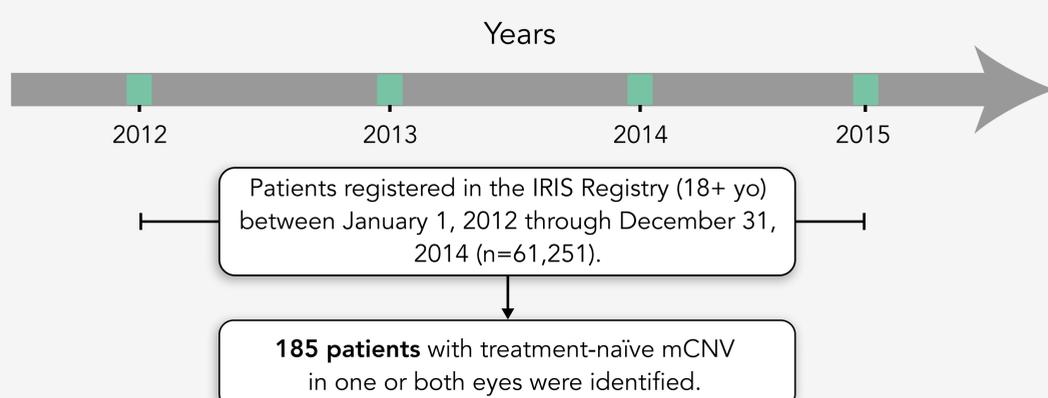


Treatment Patterns for Myopic Choroidal Neovascularization in the United States: Analysis of the IRIS Registry

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The aim of this retrospective cohort study was to characterize treatment patterns and outcomes in eyes with treatment-naïve myopic choroidal neovascularization (mCNV) in the United States (US). Participants consisted of individuals aged ≥ 18 years old (yo) seen in clinics participating in the American Academy of Ophthalmology's Intelligent Research in Sight (IRIS) Registry, a centralized data repository collecting data on real-world practice patterns via electronic health records from ophthalmology practices across the US.

This was a retrospective cohort study.



Treatment-naïve mCNV was defined as the presence of myopic refractive error worse than -6.0 diopters with the presence of subretinal/choroidal neovascularization as indicated by International Classification of Diseases, Ninth Revision, Clinical Modification diagnosis of "362.16: Retinal Neovascularization NOS."

The initial mCNV treatment was evaluated to assess the difference in visual acuity (VA) from the diagnosis date (baseline) and 1 year after diagnosis.

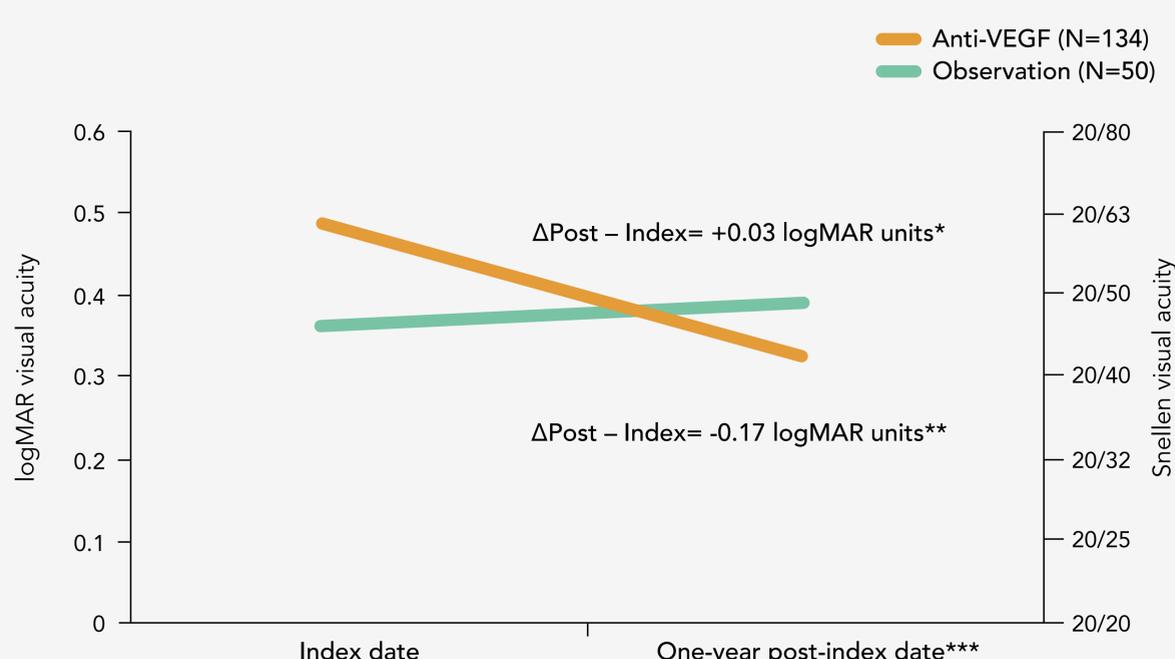
The type of initial treatment for mCNV was defined as the administration of one of the following within the first 365 days of the index date:



The difference between logarithm of the minimal angle of resolution (logMAR) VA at baseline and 1 year, as well as anti-VEGF injection frequency per treated eye over a 1-year period was assessed.

The mean number of anti-VEGF injections for an eye with mCNV during the first year after diagnosis was 2.8 (standard deviation 2.5, median 2, interquartile range 1-4).

Change in logMAR visual acuity among treatment-naïve mCNV patients by type of treatment



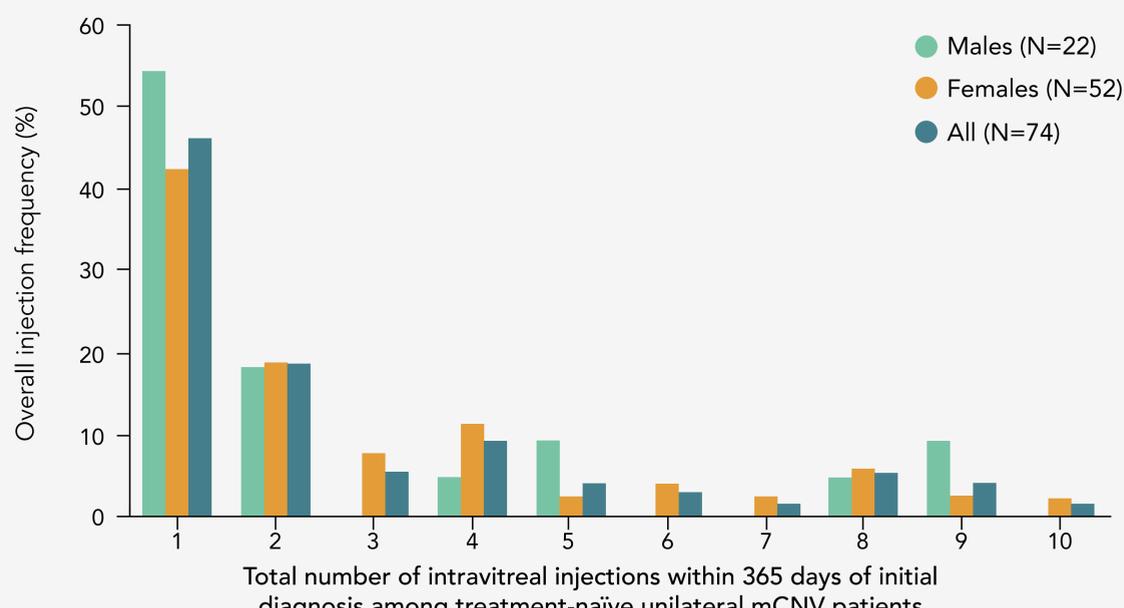
*Change in logMAR visual acuity (ie, 1-year post-index date visual acuity relative to index date visual acuity) among those who were observed during the first 365 days after diagnosis: $+0.03$ units (95% confidence interval 0.01, 0.05) ($P < .01$ based on signed rank test) (worsening in Snellen acuity: $\sim 20/45 \rightarrow \sim 20/50$).

**Change in logMAR visual acuity (ie, 1 year post-index date visual acuity relative to index date visual acuity) among those who were given anti-VEGF injections during the first 365 days after diagnosis: -0.18 units (95% confidence interval $-0.21, -0.12$) ($P < .01$ based on signed rank test) (improvement in Snellen visual acuity: $\sim 20/60 \rightarrow \sim 20/40$).

***Mean duration to 1-year post-index date: anti-VEGF injections group (386.6 ± 13.7 days) vs observation group (378.4 ± 7.5 days) ($P < .01$).

The mean number of administered injections did not differ between male and female subjects.

Intravitreal anti-VEGF injection burden among treatment-naïve unilateral mCNV patients



Conclusions

In the United States, anti-VEGF injection was the most frequently utilized treatment for mCNV. Those treated were observed to gain vision. However, one quarter of patients received no treatment and lost vision. Further studies are needed to understand the sociodemographic and health-systems barriers surrounding the delivery of anti-VEGF injections to patients with mCNV.