

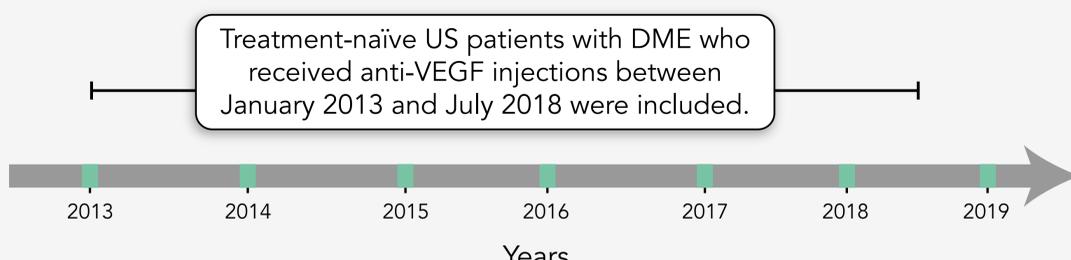
# Visual Acuity Outcomes and Anti-VEGF Therapy Intensity in Diabetic Macular Oedema: A Real-World Analysis of 28,658 Patient Eyes

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The aim of this study was to assess visual acuity (VA) outcomes and anti-vascular endothelial growth factor (anti-VEGF) treatment intensity in diabetic macular edema (DME). Information from nearly 1.5 million unique patients and over 11 million encounters was utilized, comprised of a panel of 350 retina specialists within the United States in various locations, diversified by population density (65% urban, 32% suburban, and 3% rural) and geographic region (24% Mid-Atlantic, 24% Southeast, 20% West, 12% Southwest, 8% Northeast, 7% Great Lakes, and 4% North Central).



Retrospective analysis on 1-year VA outcomes and relationships with anti-VEGF treatment intensity was performed using a database of aggregated de-identified electronic medical records (Vestrum Health).

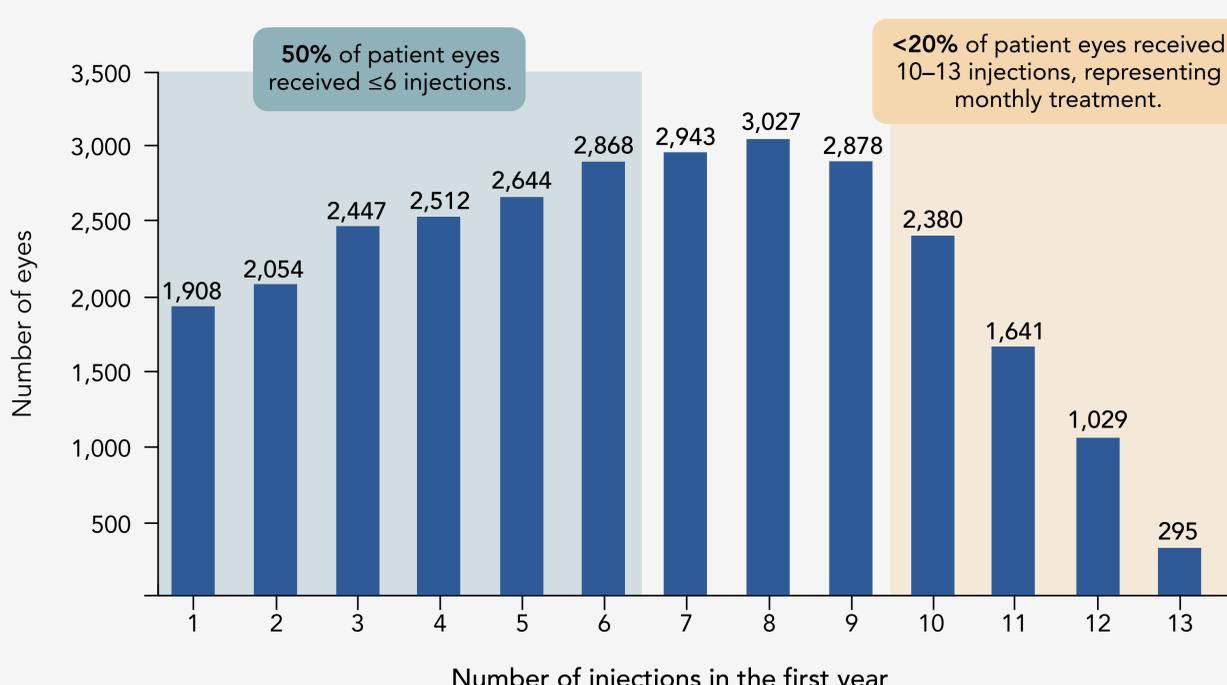


This study excluded patients with other retinal diagnoses. Gender, age, VA, and anti-VEGF medications were extracted from the database.



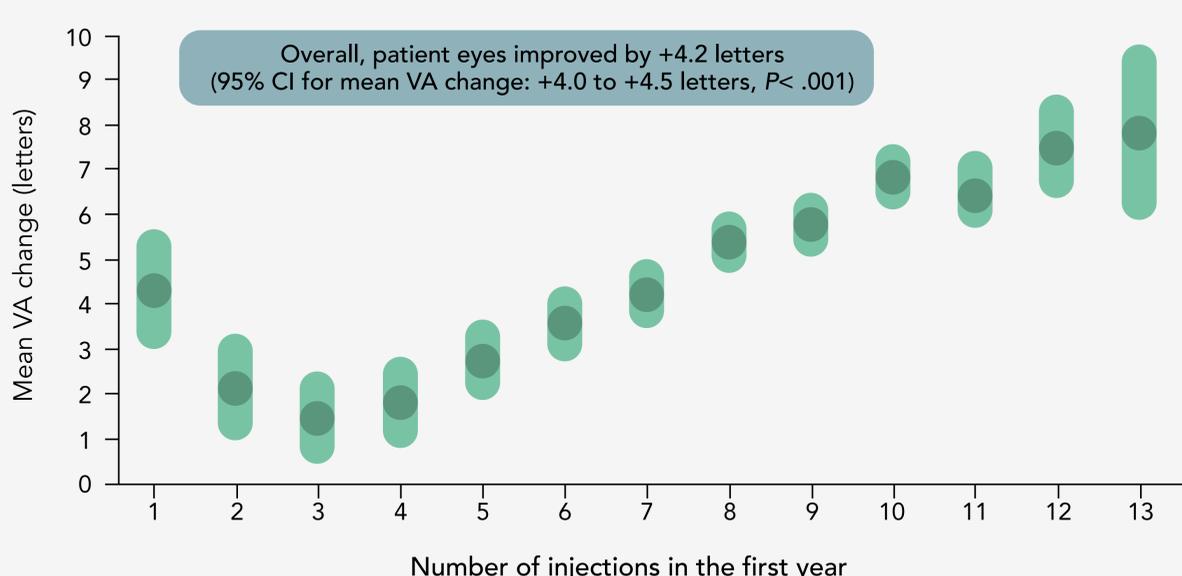
By year 1, patient eyes underwent a mean of 6.4 and a median of 6.0 anti-VEGF injections.

Year 1 distribution of DME patient eyes stratified by number of anti-VEGF injections received



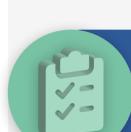
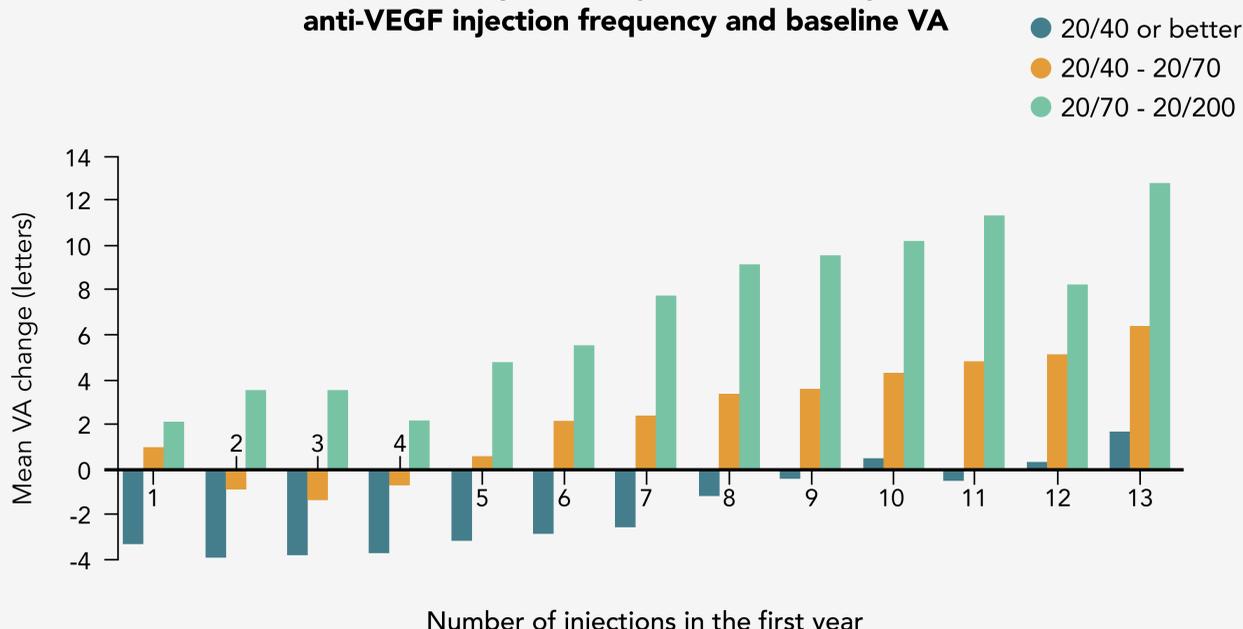
By year 1, mean letters gained showed a linear relationship with number of anti-VEGF injections, beyond 2 injections.

Year 1 change in VA versus anti-VEGF injections administered to all DME patient eyes



The mean 1-year VA change tended to increase in patient eyes with both increased anti-VEGF injection frequency and decreased baseline VA, although there were ceiling effects related to baseline VA.

Mean VA change over 1 year, stratified by both anti-VEGF injection frequency and baseline VA



## Conclusions

In clinical practice, patients with DME undergo fewer anti-VEGF injections and exhibit worse visual gains compared with patients in randomized clinical trials. Visual outcomes correlate with treatment intensity at 1 year, with ceiling effects related to baseline VA.