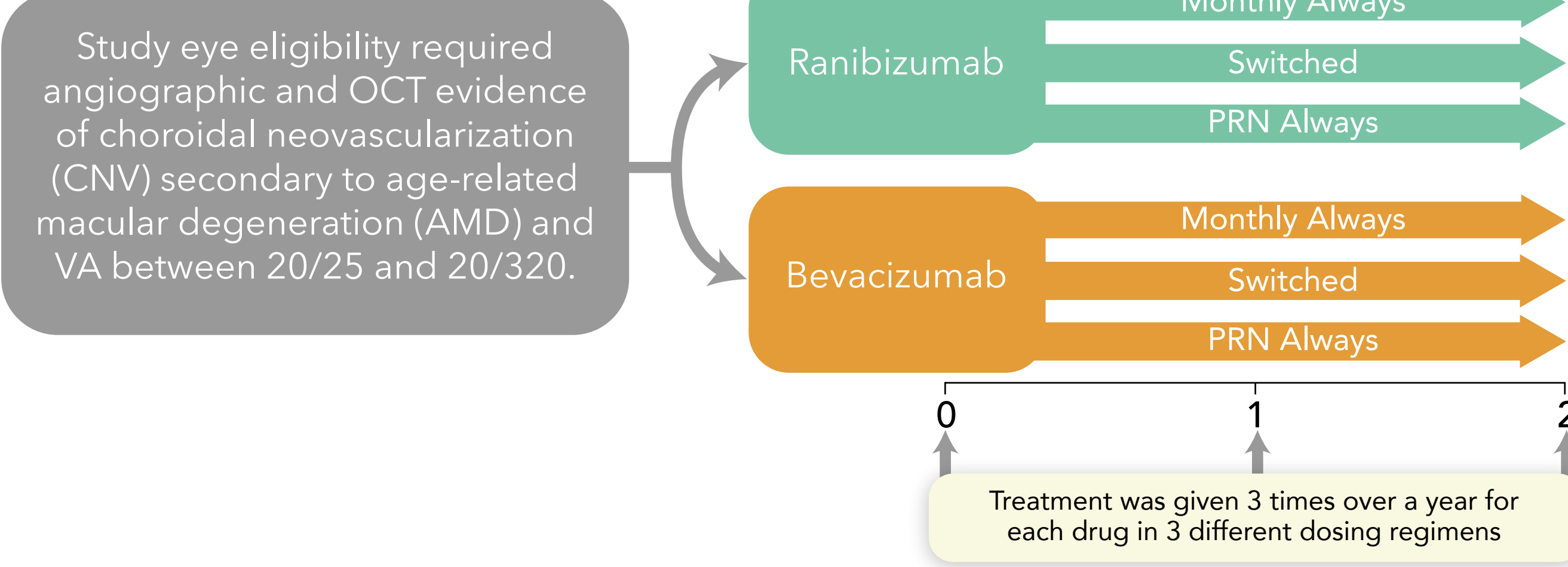


# Macular Morphology and Visual Acuity in the Second Year of the Comparison of Age-Related Macular Degeneration Treatments Trials

Sharma S, Toth CA, Daniel E, et al. *Ophthalmology*. 2016;123(4): 865–875.  
doi:10.1016/j.ophtha.2015.12.002

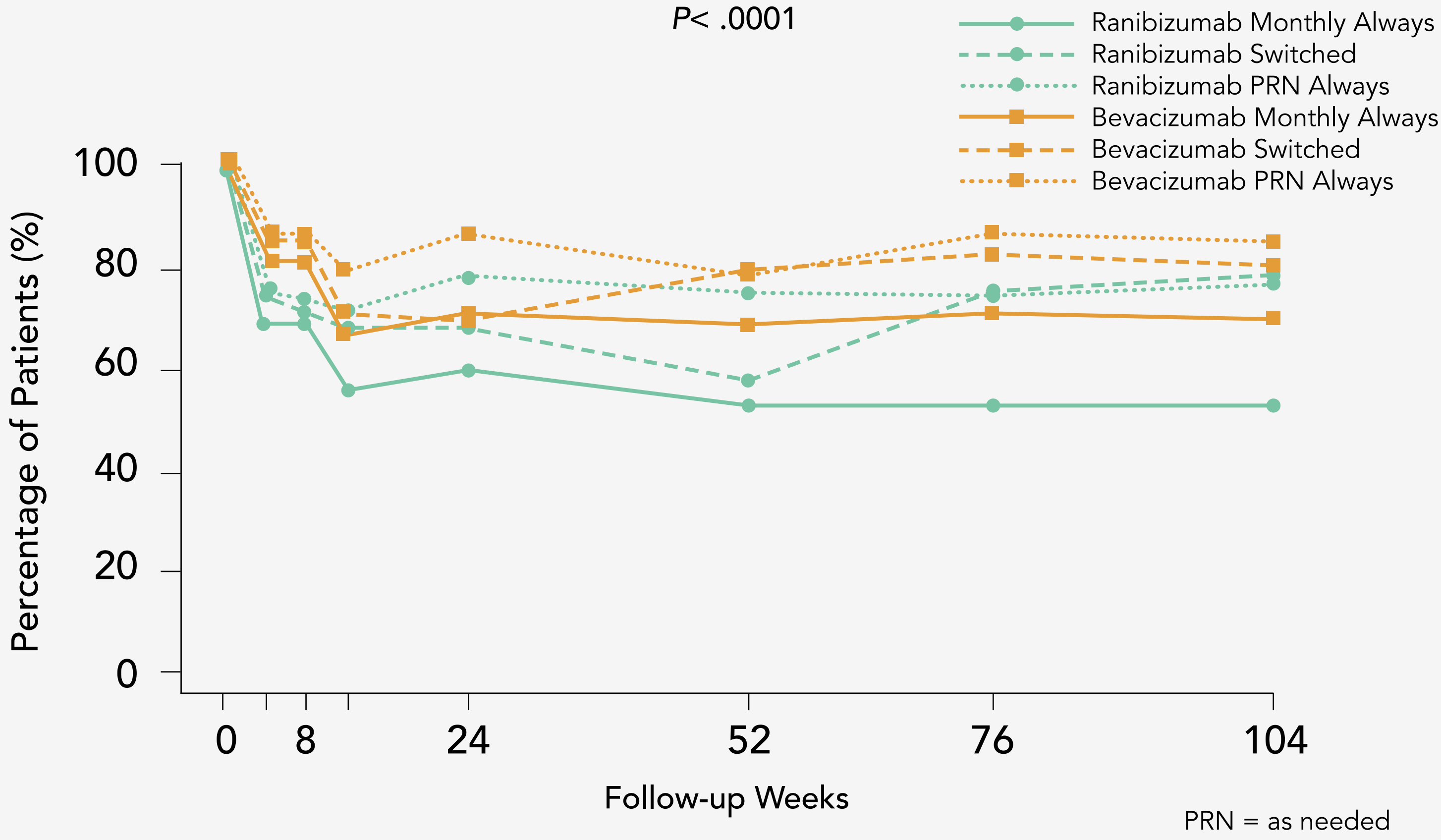
In this paper, the researchers described the association between morphologic features on fundus photography (FP), fluorescein angiography (FA), optical coherence tomography (OCT) and visual acuity (VA) in the second year of the Comparison of Age-related Macular Degeneration Treatments Trials (CATT).

This was a 2-year randomized trial of ranibizumab and bevacizumab with 3 different dosing regimens

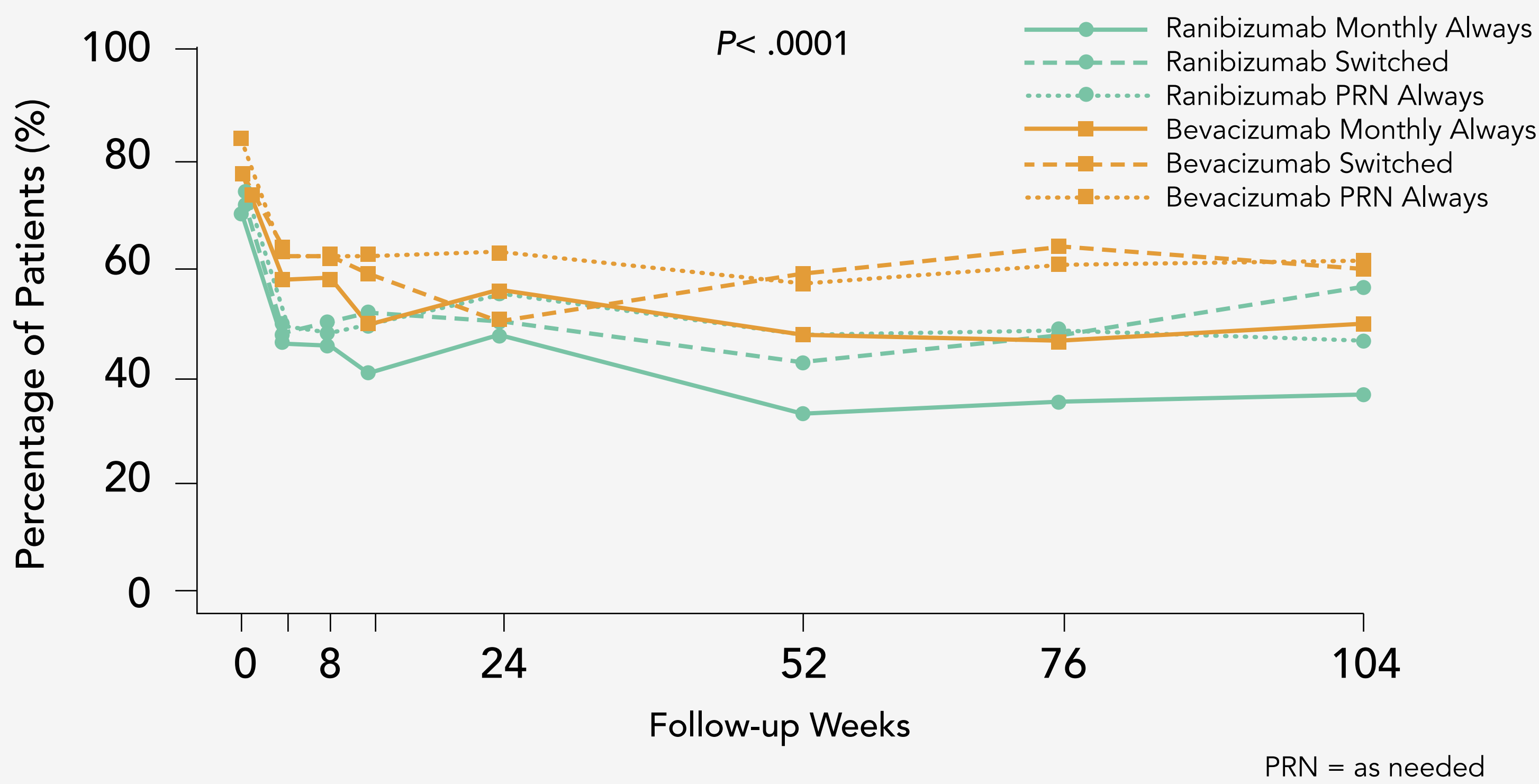


When compared with baseline, through week 104, there was a decrease in any type of fluid in all treatment groups

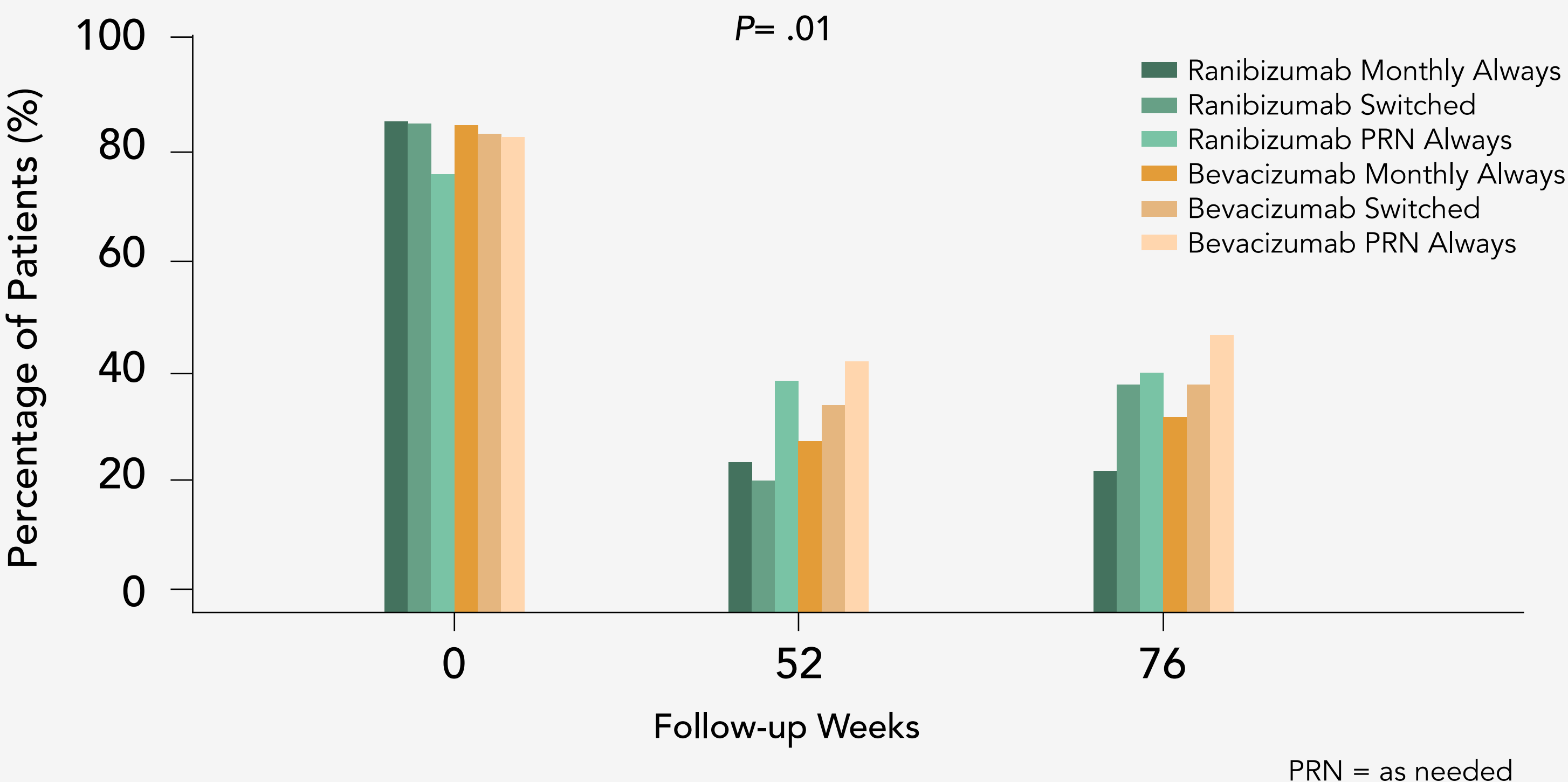
Relative Proportion of Participants (%) With Fluid of Any Type



Relative Proportion of Participants (%) With Intraretinal Fluid (IRF)

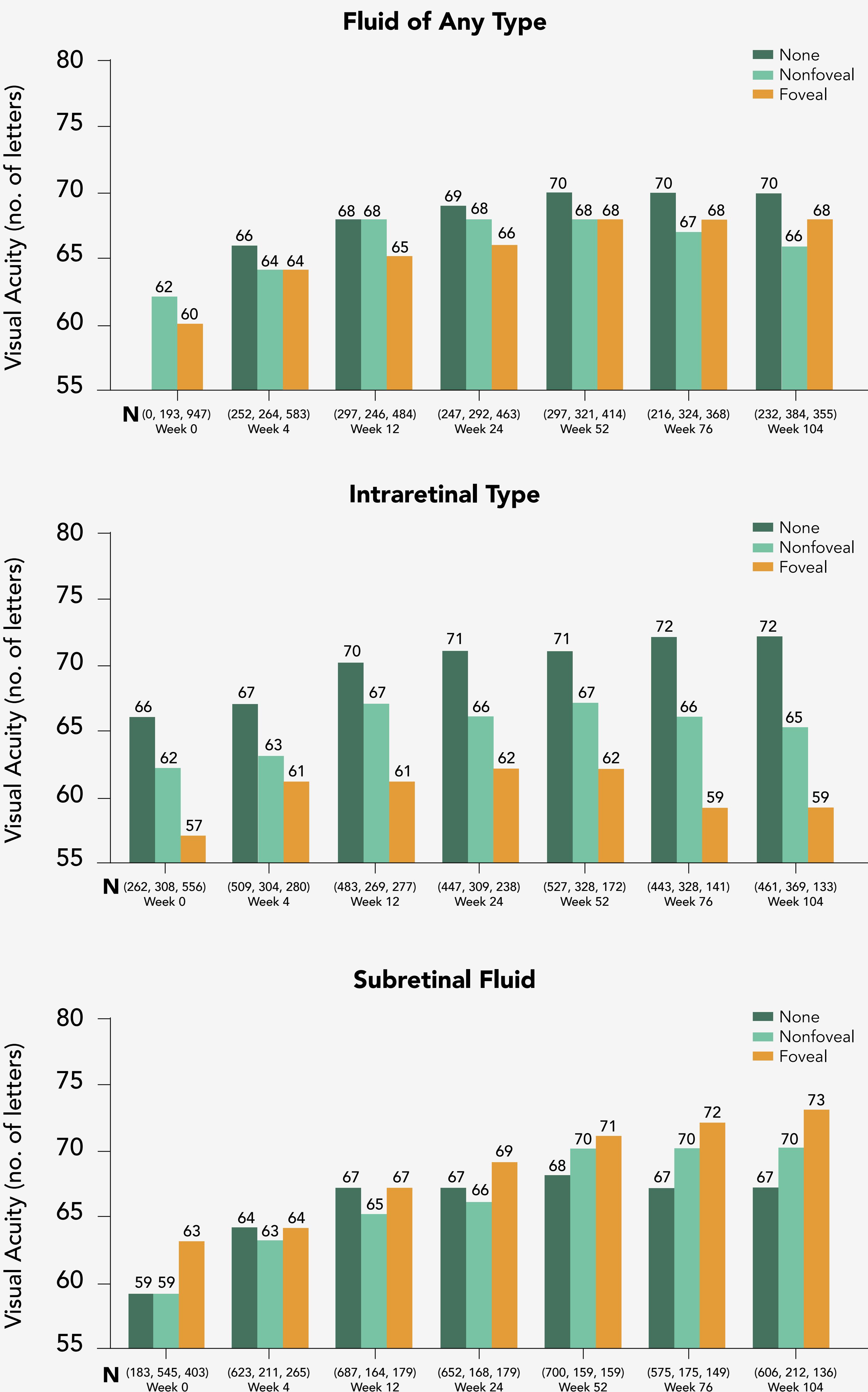


Relative Proportion of Participants (%) With Subretinal Fluid (SRF)



Intraretinal fluid had a negative impact on VA at all time points examined

Mean visual acuity by status of fluid by time



Conclusions

A key 1-year study finding was that IRF, as determined by OCT, had a negative impact on VA at all time points examined. The strength of this association increased throughout year 2 of this study. When controlling for other potential confounding variables, IRF was independently associated with worse VA at year 2. Paradoxically, the presence of SRF was associated with better VA at year 2 even when controlling for other potentially confounding variables. The strength of this effect was greater for eyes with foveal SRF and for small amounts of SRF. The reasons for the association between better VA and SRF are unclear.