Intravitreal Aflibercept for Retinal Nonperfusion in Proliferative Diabetic Retinopathy:

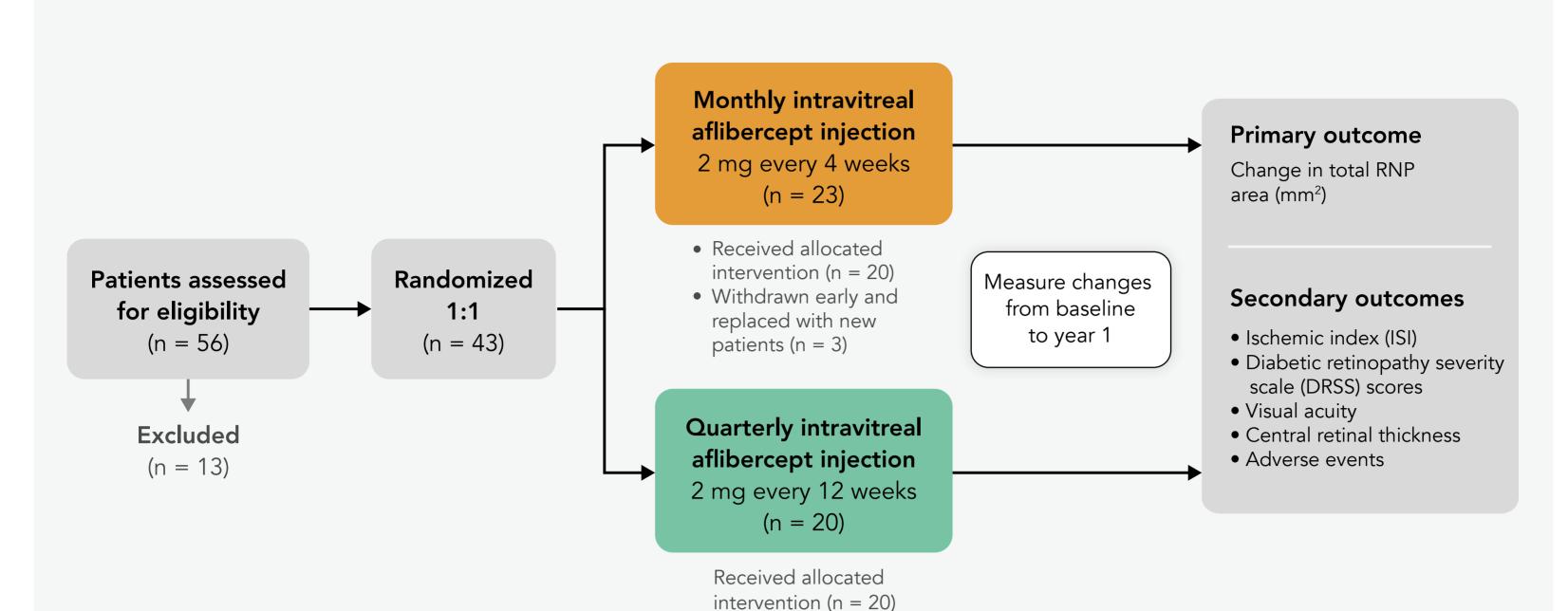
Outcomes from the Randomized RECOVERY Trial

Wykoff CC, Nittala MG, Zhou B, et al. *Ophthalmol Retina*. 2019;3(12):1076-1086. doi:10.1016/j.oret.2019.07.011

The purpose of this prospective, randomized, open-label study was to evaluate the impact of intravitreal aflibercept on retinal nonperfusion (RNP) in eyes with proliferative diabetic retinopathy (PDR).

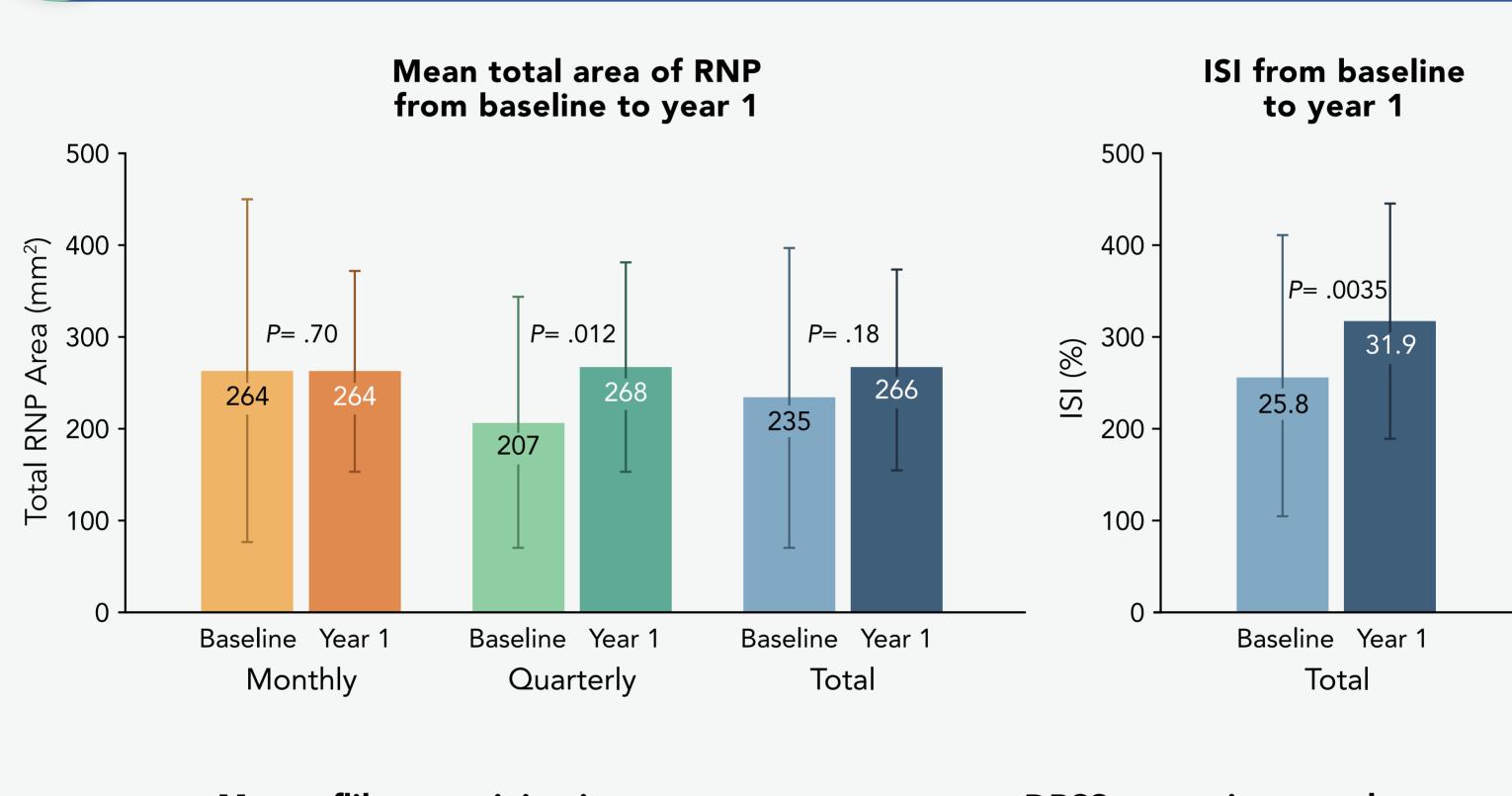


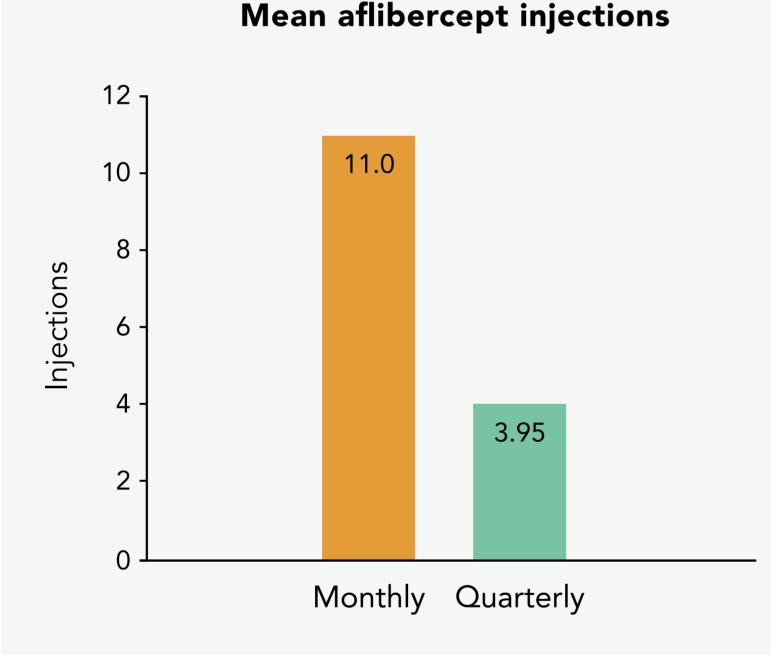
Participants were randomized 1:1 to intravitreal aflibercept monthy or quarterly dosing, in eyes with treatment-naïve PDR and extensive RNP without diabetic macular edema.

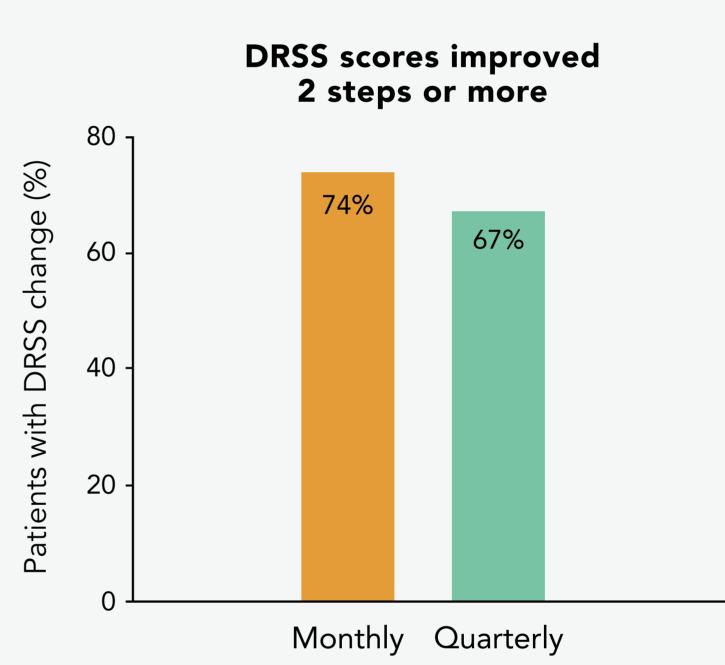




Mean total area of RNP and ISI increased among all patients through year 1, although RNP outcomes favored monthly dosing of aflibercept over quarterly.



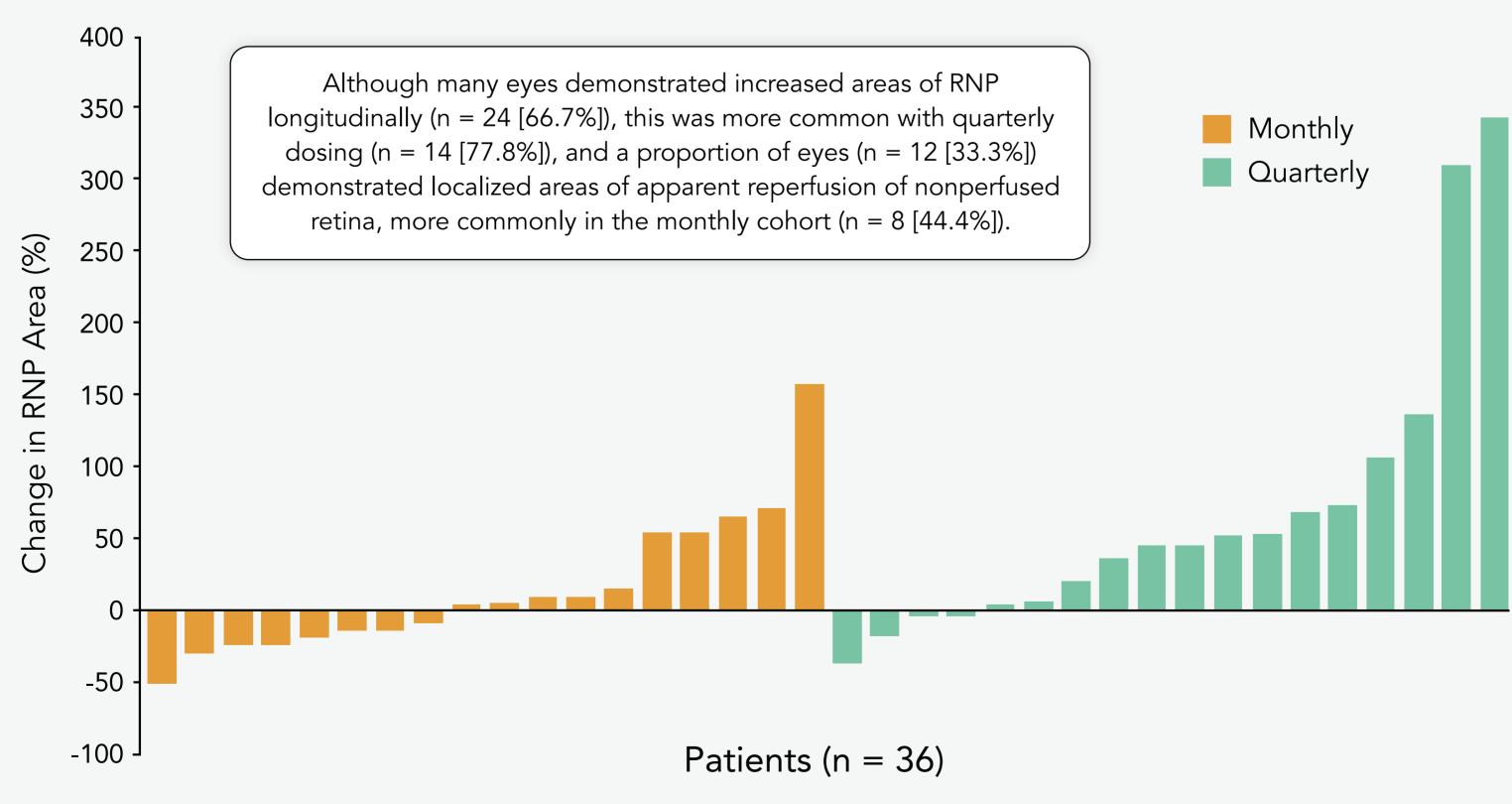


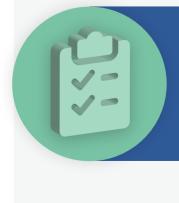




Although most eyes demonstrated an increase in area of RNP longitudinally, some eyes did demonstrate localized areas of apparent reperfusion of nonperfused retina.







Conclusions

While the RECOVERY study did not identify widespread retinal reperfusion with aflibercept treatment among PDR eyes with extensive RNP at baseline, zones of reperfusion were identified in some patients. There was evidence of a dose-dependent response with a reduction of RNP progression with monthly compared to quarterly aflibercept dosing. Continued study of RNP, its evolution in the natural history of diabetic retinopathy, and how current and future interventions can impact this course are needed.