

LAPTOP Study: A 24-Month Trial of Verteporfin Versus Ranibizumab for Polypoidal Choroidal Vasculopathy (PCV)

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The researchers conducted a 24-month trial of ranibizumab (Lucentis) And Photodynamic Therapy On Polypoidal choroidal vasculopathy (LAPTOP), which compared the vision enhancing effect of ranibizumab and photodynamic therapy (PDT) in PCV.



This was a randomized, controlled study.

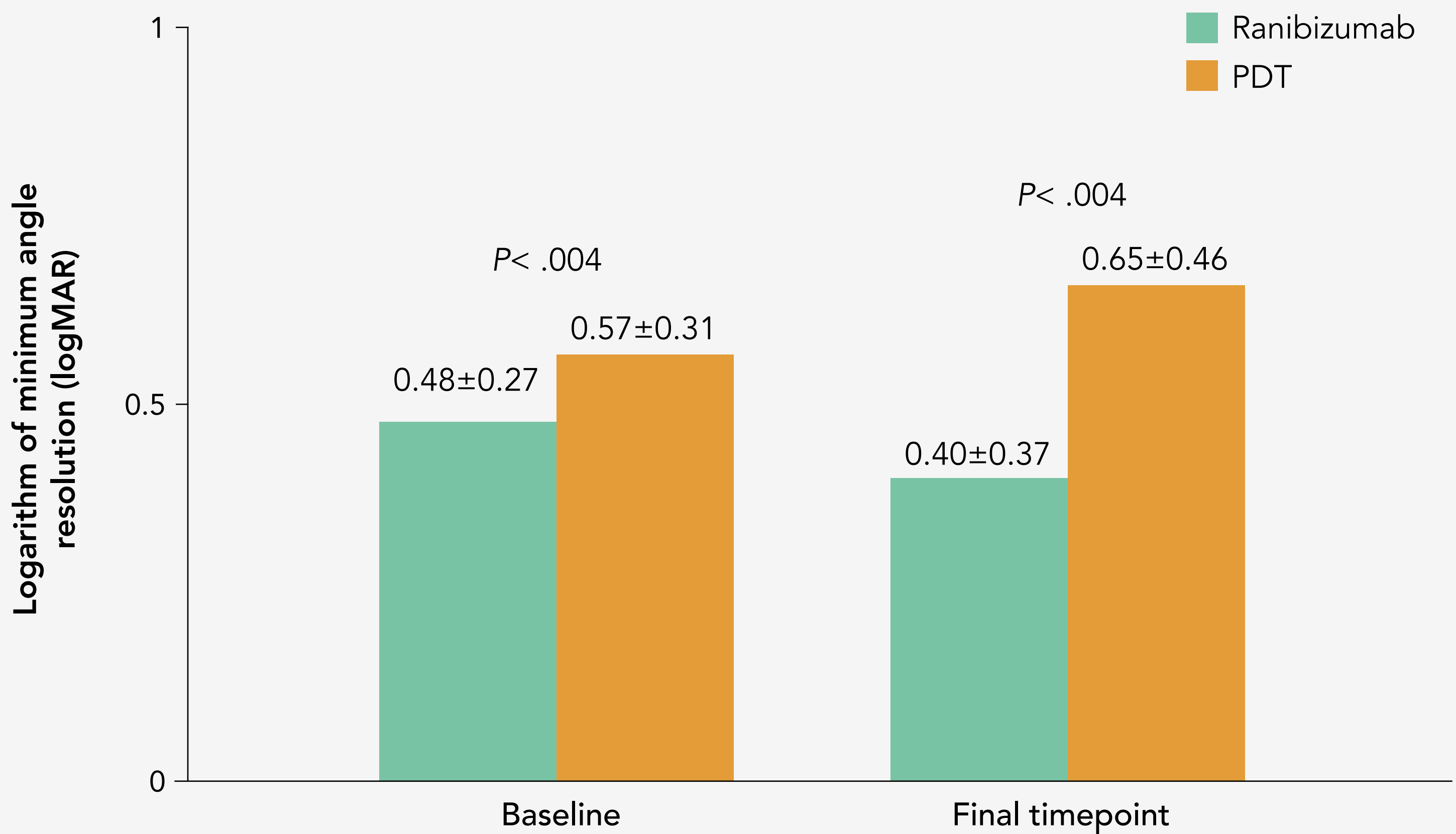


Mean numbers of treatment in ranibizumab arm were 4.4 and 1.4 times in the first and the second years, respectively. The numbers in the PDT arm were 1.8 and 0.4 times, respectively.

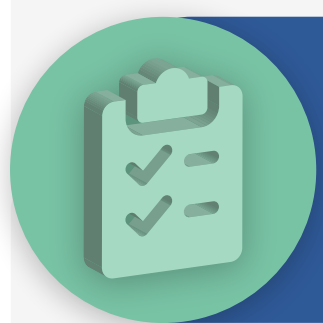
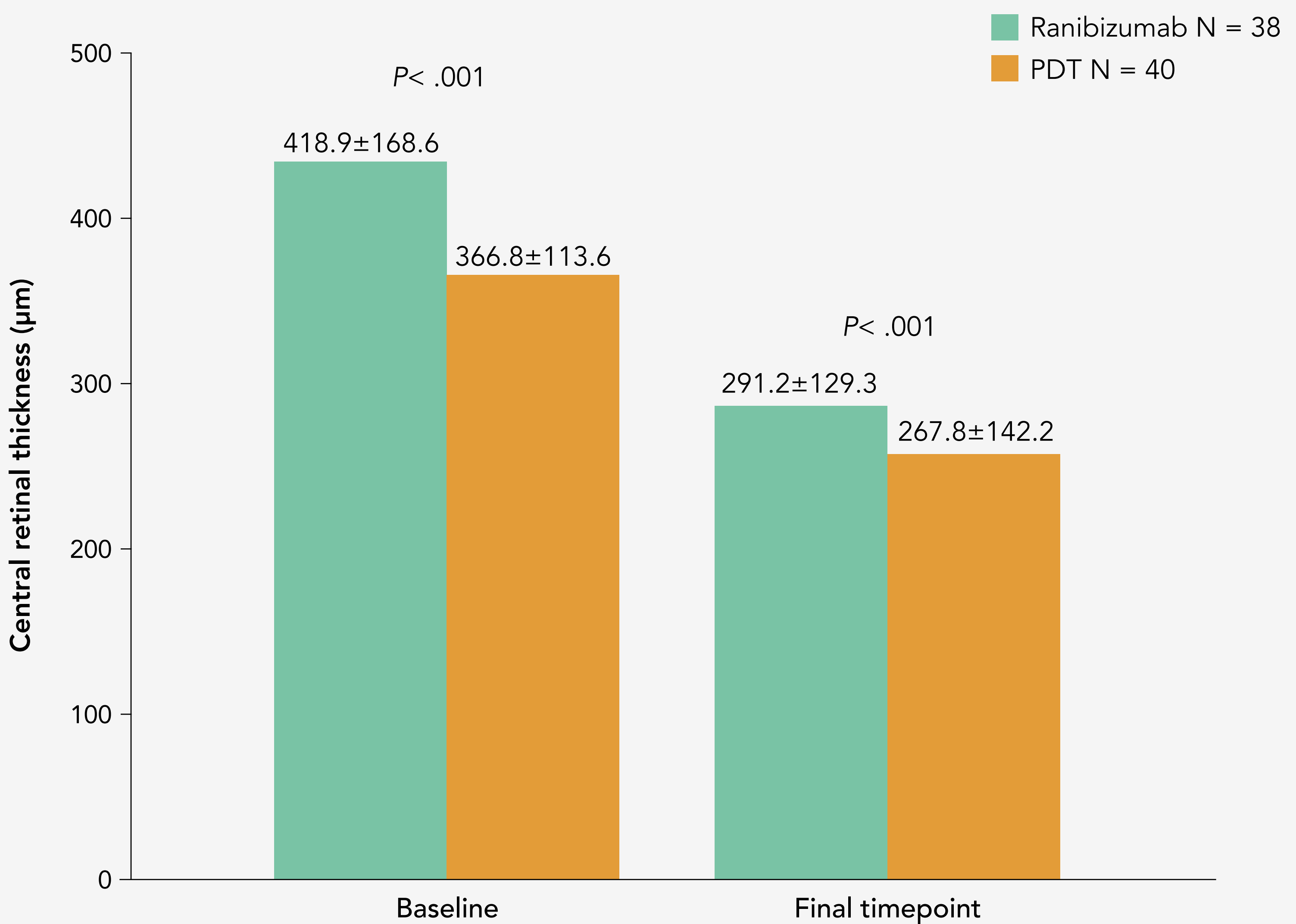


Patients in the ranibizumab arm showed visual gain from baseline while patients in both the ranibizumab and PDT arms showed reduced central retinal thickness (CRT).

The change in logMAR was significantly different between the 2 groups ($P = .004$).



To confirm the integrity of the results, the researchers also analyzed the difference of the treatment effect using the data of patients who completed the 24-month study. The change in baseline and final logMAR was still significantly different between the 2 groups (ranibizumab arm 0.48 ± 0.26 and 0.38 ± 0.39 , PDT 0.56 ± 0.31 and 0.58 ± 0.43 ; $P = .025$).



Conclusions

The results of this study in patients with PCV showed that 3 monthly injections followed by as-needed injections of ranibizumab can achieve better 24-month visual outcomes than PDT.